University of Alberta

The Language and Literacy Practices of English-Chinese Bilingual Students in Western Canada

by

Miao Sun

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Department of Elementary Education

©Miao Sun Fall 2011 Edmonton, Alberta

Permission is hereby granted to the University of Alberta Libraries to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only. Where the thesis is converted to, or otherwise made available in digital form, the University of Alberta will advise potential users of the thesis of these terms.

The author reserves all other publication and other rights in association with the copyright in the thesis and, except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatsoever without the author's prior written permission.

Examining Committee

Dr. Heather Blair, Supervisor, Department of Elementary Education
Dr. Julia Ellis, Committee Member, Department of Elementary Education
Dr. Jill McClay, Committee Member, Department of Elementary Education
Dr. Joe Wu, Committee Member, Department of Elementary Education
Dr. Olenka Bilash, Examiner, Department of Secondary Education
Dr. Lynne Wiltse, Examiner, Department of Elementary Education
Dr. Kelleen Toohey, External Examiner, Simon Fraser University

ABSTRACT

In a rapidly globalizing world, bilingualism and biliteracy become important assets. It is widely recognized that full and partial immersion (bilingual) education programs are emerging as successful routes to effective second language acquisition in many parts of the world. However, much of the research on language acquisition and program development in dual languages is focused on French immersion in Canada and Spanish bilingual education in the US. In Canada, despite the fact that Chinese bilingual programs have existed for almost 30 years, very little research has been done on how these language programs function or how effective they are in developing bilingualism and biliteracy (Wu & Bilash, 2000). There is reason to believe that current research on other bilingual programs such as Spanish bilingual education in the US or French immersion in Canada may not be completely applicable to English-Chinese bilingual students because of the distinct linguistic, social, cultural, political, and contextual differences.

This study was designed as an ethnographic case study to explore bilingual students' language and literacy practices at school and out of school in a city in Western Canada. The main participants in the study were three Grade 5 English-Chinese bilingual students. The ethnographic data were collected for a whole academic year at school, in students' homes, and at community events through participant observation; fieldnotes from the observation; semistructured interviews and open-ended conversations with children, teachers, the principal, and parents; audio- and videotaped student-student and student-teacher interactions; and literacy-artifact collection and analysis. Within-case and crosscase analyses were both conducted, and three main themes were identified as significant factors that support these bilingual students' successful language and literacy development and positive identities as language learners. The three themes include dialogue between languages, dialogue among peers, and dialogue across places.

This research has the potential to benefit the educational system in creating successful bilingual and biliterate English-Chinese programs. A deeper understanding of English-Chinese bilingual students' language and literacy practices will be central to assisting these students, as tomorrow's global citizens, with developing the highest possible degree of dual language proficiency, academic achievement, and intercultural competence.

ACKNOWLEDGEMENTS

I would like to thank a number of people to whom I feel greatly indebted for their support of my research in different ways.

First and foremost, I would like to express my sincere and hearty gratitude to my supervisor, Dr. Heather Blair: I couldn't imagine completing this work without you. Thank you for always being willing to offer me guidance, encouragement, and support throughout this challenging dissertation-writing process and many other academic endeavours. I greatly appreciate the enormous time and effort you have invested in helping me with this work. I also appreciate the opportunities to work on research projects with you and your encouragement to attend academic conferences. Thank you for "scaffolding" me through every stage of my PhD study and always having faith in me even when I felt doubtful.

Dr. Julia Ellis: Your course on qualitative research methodology provided me with the inspiration and strategies to conduct classroom-based, processoriented qualitative research. The research techniques that I learned from you helped me greatly in overcoming difficulties with the data collection. Thank you for your professional guidance and detailed feedback on this research, especially the valuable "place and identity" framework that I used to interpret my data.

Dr. Jill McClay: You helped me to learn how to write better and achieve my first Canadian publication in the course EDES 601. Thank you for always having faith in my writing and encouraging me to become a better writer. I also appreciate the constant support and help that you kindly offered me as a graduate coordinator and as a mentor in my PhD studies at the University of Alberta. Dr. Joe Wu: You provided me with the inspiration for my research in the field of English-Chinese bilingual education as well as numerous opportunities and resources to gain more knowledge on this research topic. Thank you for being a supportive mentor and an ideal role model. I also appreciate your detailed feedback and thoughtful comments, which challenged me to think more critically.

Dr. Lynne Wiltse: We shared a common interest in conducting classroombased research and using the community of practice framework. Thank you for your constant encouragement and the meaningful conversations on my research. My understanding of this framework would have been so much less thorough without you. I remember our first conversation about the community of practice framework over dinner on that pleasant summer evening; it was such an inspiration in my writing. (Thanks for treating me to that dinner too!) I also appreciate your invitations to talk about Halliday's language-learning theory and my research work in your class.

Dr. Olenka Bilash: Your research on bilingual education and website on language learning and teaching inspired me to think about my own research context. Thank you for the thought-provoking conversations, valuable feedback, and constant encouragement throughout my research process.

Linda Pasmore: You helped me to edit this paper, and I thank you for your careful and professional help; your work has made my writing look so much better.

I would also like to thank the academic community of professors, graduate students, and support staff in Elementary Education at the University of Alberta.

You have truly welcomed and supported me in my research journey. This was a precious experience in my life in Canada.

I am grateful to the students and staff at Riverbank School, especially the students, parents, teachers, principal, and community workers. Without your participation and contribution, I could not have conducted this research.

I would also like to express my gratitude for the financial support from the Social Sciences and Humanities Research Council of Canada (SSHRC) Fellowship, the Izaak Walton Killam Memorial Scholarships, the Queen Elizabeth II Graduate Scholarship, and the Provost Award.

I would like to express my gratitude to my family for your love and support throughout these years. I am grateful to my parents, my brother, my parents-in-law, my brother-in-law, and my lovely niece.

Last but not least, I am most grateful to my husband, Wei Zhao. You supported me unconditionally throughout this time. I thank you, more than anyone else, for your belief, patience, and love on my academic journey. I dedicate this dissertation to you and look forward to our "new" post-PhD life together. To my beloved husband Wei Zhao

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION	1
My Research Journey	1
Statement of the Problem	2
Research Purpose and Questions	3
Significance of the Study	4
Use of Terms	5
CHAPTER TWO: REVIEW OF THE LITERATURE	7
Theoretical and Conceptual Framework	7
A Social Constructivist Perspective	7
Vygotsky's Sociocultural Theory	8
Cummins' Language Development Theory	11
Literacy as a Sociocultural Construct	19
Community of Practice	22
Background for This Study	25
Bilingual Education	25
English-Chinese Bilingual Education in the Canadian Context	29
CHAPTER THREE: METHODOLOGY	
Methodological Framework	37
Methodological Details	
Gaining Access	40
Research Site	41
Participant Observation	
Fieldnotes	45
Participants	45
Interviews	47
Document and Artifact Collection	
The Role of the Researcher	48
Data Analysis and Interpretation	50
Limitations	51
Ethical Consideration	52
CHAPTER FOUR: KELLY: "I DON'T WANT TO SPEAK HALF-HALF	
CHINESE"	53
Personal Background	
Kelly's Language and Literacy Practices at School	
Kelly in English Classes	
An Enthusiastic Contributor	
Cross-Language Comparison	58
Written English	
An Attentive Helper	61
Kelly in Chinese Classes	
Contributing Through Code-Switching	66

Using Chinese to Express Feelings	69
Making Meaning of Chinese Vocabulary	
Expressing Complicated and Critical Ideas in Chinese	
Explaining English Bilingually	
Knowing About China	74
Interaction With Classmates in Chinese Classes	75
Written Chinese	
Kelly's Language and Literacy Practice out of School	78
Summary	
CHAPTER FIVE: JENNY: "MY CHINESE BOOK IS SO MUCH THICKER	
THAN MY ENGLISH ONE"	
Personal Background	
Jenny's Language and Literacy Practices at School	
Jenny in English Classes	
Receiving Help	
Progressing in Classroom Participation	
Requiring Information	
Self-Talk	
Written English	
Jenny in Chinese Classes	
An Expert and Helper	
Talking About Chinese Culture	
Learning Through Two Languages	
Written Chinese	
Jenny in School Clubs	
Jenny's Language and Literacy Practice out of School	
Summary	
CHAPTER SIX: ANTHONY: "MY MANDARIN AND ENGLISH ARE	
EQUALLY GOOD"	119
Personal Background	
Anthony's Language and Literacy Practice at School	
Anthony in English Classes	
An Active Contributor	
Raising Questions	
A Language Helper	
Self-Talk	
Written English	
Anthony in Chinese Classes	
A Chinese Language Expert	
Playing With Humour	
Revising Lyrics	
Name Giving and Translation	
A Language and Math Helper	
Written Chinese	
Transferring Knowledge Between English and Chinese Classes.	
	0

Anthony's Language and Literacy Practices out of School	142
Summary	144
CHAPTER SEVEN: INTERPRETATION	
Theme 1: Dialogue Between Languages	
Code-Switching	
Translation	
Cross-Language Knowledge Transfer	
Cross-Language Comparison	
Discussion	
The Central Sphere	155
The Three Focus Areas	157
Summary	160
Theme 2: Dialogue Among Peers	160
Helping	
Practicing	
Sharing	
Respecting	
Discussion	
Theme 3: Dialogue Across Places	
Connected by Language	
Connected by Knowledge	
Connected by Activity	
Connected by BEA	
Discussion	1/9
CHAPTER EIGHT: CONCLUDING REMARKS	
REFERENCES	190
APPENDIX A: SAMPLE PRE-INTERVIEW ACTIVITIES FOR THE CHILDREN	197
APPENDIX B: SAMPLE INTERVIEW QUESTIONS FOR THE CHIL	DREN198
APPENDIX C: SAMPLE INTERVIEW QUESTIONS FOR THE PARE	ENTS .199
APPENDIX D: SAMPLE INTERVIEW QUESTIONS FOR THE TEAC	CHERS200
APPENDIX E: KELLY'S ENGLISH WRITING	201
APPENDIX F: KELLY'S CHINESE WRITING	
APPENDIX G: KELLY'S ONLINE DICTIONARY	
APPENDIX H: KELLY'S BIRTHDAY CARD FOR HER FATHER	

APPENDIX I: JENNY'S DRAWING OF HER EXPERIENCE IN THE REGULAR ENGLISH PROGRAM	207
APPENDIX J: JENNY'S ENGLISH WRITING	208
APPENDIX K: JENNY'S CHINESE WRITING	210
APPENDIX L: JENNY'S WORD LIST ON THE WALL IN HER BEDRO	DOM212
APPENDIX M: ANTHONY'S ENGLISH WRITING	213
APPENDIX N: ANTHONY'S CHINESE WRITING	217
APPENDIX O: ANTHONY'S TEXTBOOK FROM CHINA	221

LIST OF TABLES

Table 1 Types of Education for Bilinguals	26
Table 2 The Three Participants' L1s and L2s	147
Table 3 Rules, Routines, Resources, and Relationships in Different Places	180

LIST OF FIGURES

<i>Figure 1</i> . SUP and CUP models of bilingual proficiency (Cummins, 1981, pp. 23-24)
<i>Figure 2</i> . The dual-iceberg representation of bilingual proficiency (Cummins, 1981, p. 24)
Figure 3. The development of academic expertise (Cummins, 2001, p. 125)16
Figure 4. Language in literate societies (Goodman, 1996, p. 27)
<i>Figure 5.</i> Legitimate peripheral participation24
Figure 6. Kelly's brainstorming web for her museum design
<i>Figure 7</i> . Kelly's birthday card for her father80
Figure 8. Jenny's brainstorming web for her museum design103
Figure 9. The participants and their most common interlocutors at school161
Figure 10. Structural formations of place (Ellis, 2005, p. 63)179
Figure 11. Rubik's cube

CHAPTER ONE: INTRODUCTION

My Research Journey

I was born in China, and Mandarin is my native tongue. I have been learning English since I was 13 in junior high school, where English was a required course. In 2003 I came to Canada as an international student and have been living and studying in this country ever since.

As a native speaker of Mandarin who has been learning English for about 20 years, I consider myself a Mandarin-English bilingual. Although I had been learning English for many years before I came to Canada, I encountered serious problems in daily communication with my Canadian classmates and professors, especially in the first few months. This frustrating experience had made me doubt my bilingual status, and I began to wonder about a better way for me to have learned English in China.

I also consider myself a bilingual educator because I used to work as an English teacher in China and as a Chinese teacher in an afterschool Chinese language program for immigrant children in Toronto. In China I taught a group of children whose parents encouraged them to learn English as the language with the highest status and power in the world. In Canada I taught another group of children whose parents were passionate about maintaining their Chinese language and culture heritage in the country to which they had immigrated.

My own language learning and teaching experience impacts my understanding of language and literacy practices and keeps me wanting to know more about questions such as How are children experiencing learning the two linguistically very different languages? What are teachers' roles in supporting children's learning? What are parents' roles in supporting children's learning? What role do the bigger societal discourses play in promoting the learning of these two languages that have different social statuses and power?

My research was inspired by the above concerns and my desire to know more about how to support the learning of these two languages. In doing this research, I continued my ongoing journey of exploration from the children's perspective of how to support the development of learners' bilingual and biliteracy abilities in this increasingly globalized world.

Statement of the Problem

In a rapidly globalizing world, bilingualism and biliteracy become important assets. Contemporary educational research increasingly demonstrates that additive bilingualism has beneficial effects for students in educational (Cummins, 2000), psycholinguistic (Cenoz & Genesee, 1998; Riches & Genesee, 2006), social psychological (Genesee, Paradis, & Crago, 2004; Lindholm-Leary & Borsato, 2006), and sociopolitical (Hornberger, 2006) realms.

The field of second language acquisition has grown immensely in the past 25 years, and Canadian researchers (Cummins, 1981, 2000; Genesee, 1987, 2003; Lyster, 2007; Swain & Lapkin, 1982) who have examined the bilingual and biliteracy outcomes of French immersion programs have contributed greatly. It is widely recognized that full and partial immersion (bilingual) education programs are emerging as successful routes to effective L2 acquisition in many parts of the

world. However, issues such as bilingual students' uneven use of their L1 and L2 and students' sustained development of the target language remain concerns in bilingual education (Swain, 1996; Tarone & Swain, 1995). In addition, very limited research has been conducted on the bilingual programs other than French or Spanish. Research has suggested that multiple paths to bilingualism and biliteracy and the systematic documentation of the complex nature of specific bilingual classrooms are essential in L2 research. Researchers such as Barton (1994b), Toohey (2000), and Verhoeven (1994) also indicated a growing awareness of the need to consider the role of sociocultural factors because linguistic factors alone are not the only influence on school achievement in bilingual contexts. To address some of the above concerns, many researchers (Genesee, 1991; Tarone & Swain, 1995; Tucker & Dubiner, 2008) have called for classroom-based, process-oriented research on bilingual students' language and literacy practices.

Research Purpose and Questions

To achieve a more thorough understanding of the English-Chinese bilingual students' language and literacy practices in sociocultural contexts, I designed this study as an ethnographic case study in an English-Chinese bilingual program in Western Canada. The main participants in the ethnographic case study were three English-Chinese bilingual students in Grade 5. I used ethnographic tools to collect data on the English-Chinese bilingual students' language and literacy practices at school and out of school over a period of one academic year. The research questions were as follows:

- 1. What are the bilingual and biliteracy practices of English-Chinese bilingual children in school?
- 2. What are the bilingual and biliteracy practices of English-Chinese bilingual children out of school?
- 3. What are the factors affecting the bilingual and biliteracy practices of these English-Chinese bilingual children?

Significance of the Study

Due to the increasingly high rates of Chinese immigration, issues such as heritage language maintenance, students' bilingual language learning, and identity formation become increasingly important in Canada. However, despite the fact that Chinese bilingual programs have existed in Western Canada for almost 30 years, very little research has been done on how these language programs function or how effective they are in developing bilingualism and biliteracy (Wu & Bilash, 2000). There is reason to believe that current research on other bilingual programs such as Spanish bilingual education in the US or French immersion in Canada may not be completely applicable to English-Chinese bilingual students because of the distinct linguistic, social, cultural, political, and contextual differences. The aim of this study was to achieve an in-depth understanding of English-Chinese bilingual students' language and literacy practices in one classroom in a Western Canadian city. The emerging concepts from this study may contribute to theory development in the current field of English-Chinese bilingual education. Pedagogically, this study helped to extend the thinking on how English-Chinese

bilingual children engage in language and literacy practices. The study also

provided insights into the challenges of conducting an ethnographic case study.

Use of Terms

Chinese: Mandarin Chinese unless otherwise specified.

Chinese characters: also known as Han characters, is a logogram used in writing Chinese .

Pinyin: the official system to transcribe Chinese characters in teaching Mandarin Chinese.

L1: The students' mother tongue or the language acquired first.

L2: The language the students know, are learning, or are acquiring in addition to their first languages.

Primary language: For students who speak more than one language, this is the language that they know better and use more frequently and more easily.

Dominant language: For a country or region where more than one language is used, this means the language that has more prestige, is favoured by the government, and/or has the largest number of speakers. In the context of my study, English is the dominant language.

Heritage language: A language acquired by individuals raised in homes where a dominant language, such as English in Canada, is not spoken or not exclusively spoken.

Majority language: A language spoken by a majority of the population of a territory. In this study a majority language in Canada refers to English, one of the official languages of this country.

Minority language: A language spoken by a minority of the population of a territory. In this study the minority languages in Canada refer to languages such as Chinese, Cantonese, Vietnamese, and Japanese.

CHAPTER TWO: REVIEW OF THE LITERATURE

Theoretical and Conceptual Framework

A Social Constructivist Perspective

For this research I examined English-Chinese bilingual and biliteracy language acquisition based on a social constructivist perspective. Guba and Lincoln (1994) summarized the features of a constructivist paradigm in terms of ontology, epistemology, and methodology. Ontologically in a constructivist paradigm, knowledge is viewed as constructed through social interaction rather than merely transmitted or discovered by learners. As Guba and Lincoln stated, "Realities are apprehendable in the form of multiple, intangible mental constructions, socially and experientially based, local and specific in nature, and dependent for their form and content on the individual persons or group holding the constructions" (pp. 110-111). Epistemologically, constructivism is transactional and subjectivist: "The investigator and the object of investigation are assumed to be interactively linked so that the 'findings' are literally created as the investigation proceeds" (p. 111). Methodologically, constructivism is hermeneutical and dialectical: "Individual constructions can be elicited and refined only through interaction between and among investigator and respondents The final aim is to distill a consensus construction that is more informed and sophisticated than any of the predecessor constructions" (p. 111). From a social constructivist perspective, there is no single, absolute reality to be studied. The aim of the study was not to gain the "absolutely true" and objective

reality, but to understand the constructions that people hold in a social and contextual setting. It should be noted that these constructions are not stable and may undergo revision and reconstruction when new information emerges. Under this social constructivist perspective, my study was informed by Vygotsky's sociocultural theory, Cummins' language development theory, the current notions of literacy, and the community of practice (C of P) framework.

Vygotsky's Sociocultural Theory

In the field of education, Vygotsky (1978), a Russian psychologist, has explored the situated nature of human learning and cognitive development and considers cognition "socially shared" or "socially distributed" rather than an attribute of individuals. Vygotsky asserted that knowledge is constructed through social interaction rather than discovered only by the individual knower, and language acquisition is developed from the social engagements of a community; at the same time, humans use tools such as "sign systems (language, writing, number systems)" (p. 7) to mediate their social environment and facilitate their cultural and societal development.

Halliday (1975) shared a similar idea and argued that children are motivated to acquire language because it serves certain purposes or functions for them in their social surroundings. Halliday identified seven functions of language for children in their early years: instrumental, regulatory, interactional, personal, heuristic, imaginative, and representational. In other words, from a sociocultural perspective, language and literacy practices cannot be studied separately from the milieu such as classroom, school, community, and society in which they are carried out.

Vygotskian sociocultural theory focuses on the process by which knowledge is distributed among group members, the tools and methods they use in this process, and the practices that they use to participate in this process. According to Vygotsky (1978), learners construct knowledge in a sociocultural context. To be more specific, knowledge is not just transmitted, but also created in the minds of the learners through using language in interaction with others. Vygotsky noted that "every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (*interpsychological*) and then *inside* the child (*intrapsychological*)" (p. 57). In other words, children's learning through social interaction comes before their mental internalization. In this way, Vygotsky considered learning a social behaviour and emphasized the important roles of parents, teachers, peers, and the community in children's learning process. Vygotsky also suggested that, to move from an interpersonal (social) plane to an intrapersonal (internalized) plane, children need the help of more knowledgeable others, and the transition from the social to the internalized plane takes place in the zone of proximal development (ZPD).

According to Vygotsky (1978), "An essential feature of learning is that it creates the zone of proximal development" (p. 90). The theory identifies two developmental levels, the actual and the potential. A child's actual development level refers to "the level of development of a child's mental functions that has been established as a result of certain already completed developmental cycles" (p. 85). The potential development level refers to the level that a child might reach with the assistance of more capable others. The distance between the actual the and potential levels is the ZPD, which "defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state" (p. 86). Vygotsky (1986) suggested that "the only good kind of instruction is that which marches ahead of development and leads it; it must be aimed not so much at the ripe as at the ripening functions" (p. 188). By working with more capable peers or adults, children can perform a task just beyond their level of ability and eventually learn to be capable of completing the task independently. In Vygotsky's words, "What the child can do in cooperation today, he can do alone tomorrow" (p. 188).

In discussing word meanings and the development of concepts, Vygotsky (1986) proposed that concepts can be categorized into two groups: spontaneous and scientific. Spontaneous concepts, which are unconscious and nonsystematic, come from children's immediate, everyday experience. Scientific concepts, which are formal, logical, and abstract in nature, arise from the structured activity of the classroom and "evolve under the conditions of systematic cooperation between the child and the teacher" (p. 148). This cooperation helps a child to develop higher mental functions and move from the development of spontaneous concepts to the development of scientific concepts. Vygotsky also pointed out the relationship between the two types of concepts: "We believe that the two processes—the development of spontaneous and of nonspontaneous concepts—

are related and constantly influence each other. They are parts of a single process: the development of concept formation" (p. 157).

Toohey (2000) drew a connection between the sociocultural theories of Vygotsky and Bakhtin, a literacy theorist: "Like Vygotsky, Bakhtin (1981) believed in the importance of studying action situated in specific sociocultural contexts" (p. 12). Furthermore, both Vygotsky (1978) and Bakhtin (1981) emphasized dialogue and the important role of language in the social process of learning. Both believed that social interaction is fundamental to cognitive development. As Nystrand (1997) suggested:

This new focus on teacher-student and peer interaction has coincided with new conceptions of language and learning, especially viewing language not as a vehicle for the one-way transmission of knowledge from teacher to student but rather as a dynamic social and epistemic process of constructing and negotiating knowledge. The work of Russians Lev Vygotsky and Mikhail Bakhtin on discourse as a dialogic, sociocultural process has been seminal in these new conceptions. (p. xiv)

Cummins' Language Development Theory

This study was also informed by Cummins' language development theory. Influenced by Vygotsky's sociocultural theory, Cummins' theory on language development emphasizes the social and cultural experiences of bilingual and L2 learners in acquiring languages.

Based on research conducted in French-English immersion programs,

James Cummins, a Canadian language learning theorist, has contributed greatly to the field of bilingual education and second language acquisition. Cummins (1981) discussed two alternative conceptions of bilingual's proficiency in L1 and L2: the Separate Underlying Proficiency (SUP) and Common Underlying Proficiency (CUP) models as shown in Figure 1.



Figure 1. SUP and CUP models of bilingual proficiency (Cummins, 1981, pp. 23-24).

The SUP model indicates that bilinguals' L1 and L2 proficiencies are separate and that the content and skills that bilingual students learn in one language cannot transfer to another. Cummins (2007) pointed out that there are three interrelated false assumptions associated with the SUP model that continue to dominate bilingual education: "direct method" assumption, "no translation" assumption, and "two solitudes" assumption, which are explained as follows:

- "Direct method" assumption: Instruction should be carried out exclusively in the target language without recourse to students' L1.
- 2. "No translation" assumption: Translation between L1 and L2 has no place in the teaching of language or literacy.

"Two solitudes" assumption: Within immersion and bilingual programs, the two languages should be kept rigidly separate.
 (pp. 222-223)

Opposed to the SUP model, Cummins (1981) posited a CUP model, in which "the literacy-related aspects of a bilingual's proficiency in L1 and L2 are seen as common or interdependent across language" (pp. 23-24). Another way to illustrate the CUP model is shown in Figure 2 and in Cummins' interdependence hypothesis:

To the extent that instruction in Lx is effective in promoting proficiency in Lx, transfer of this proficiency to Ly will occur provided there is adequate exposure to Ly (either in school or environment) and adequate motivation to learn Ly. (p. 29)



Figure 2. The dual-iceberg representation of bilingual proficiency (Cummins, 1981, p. 24).

If we apply Cummins' (1981) interdependence hypothesis to the English-

Chinese bilingual education program, although the surface aspects (e.g.,

pronunciation, fluency, etc.) of English and Chinese are clearly separate, the common underlying proficiency makes it possible to transfer the cognitive/academic or literacy-related proficiency from English to Chinese and vice versa. Therefore, the instruction that develops Chinese reading and writing skills, for example, is not just developing the Chinese language, but also developing the literacy-related proficiency in English.

Another important contribution that Cummins (1981) made in the field of

bilingual education was the two dimensions of language proficiency:

conversational and academic. The terms that Cummins used to describe these

dimensions are basic interpersonal communication skills (BICS) and cognitive

academic language proficiency (CALP). Baker (2006) explained in detail the

distinction between BICS and CALP:

BICS is said to occur when there are contextual supports and props for language delivery. Face-to-face **'context embedded'** [boldface in original] situations provide, for example, non-verbal support to secure understanding. Actions with eyes and hands, instant feedback, cues and clues support verbal language. CALP, on the other hand, is said to occur in **context reduced** [boldface in original] academic situations. Where higher order thinking skills (e.g. analysis, synthesis, evaluation) are required in the curriculum, language is **'disembedded'** [boldface in original] from a meaningful, supportive context. Where language is 'disembedded' the situation is often referred to as **'context reduced'** [boldface in original]. (p. 174)

Cummins used the image of an iceberg to explain the distinction between BICS and CALP. The portion of the iceberg above the surface or the tip of the iceberg, the part that we can see, is BICS, the conversational language. The portion of the iceberg underneath the surface, the part that we cannot see, is CALP, the academic language. Cummins' (1981) concepts of BICS and CALP were influenced by

Vygotsky's (1986) ideas about word meanings and the development of spontaneous and scientific concepts. Cummins' theory of language development also emphasizes that learning is a social act; he argued for the establishment of positive interactions between the child and the teacher. Cummins (1996) further emphasized the idea of interpersonal interactions in the following firm and passionate argument:

Human relationships are at the heart of schooling. The interactions that take place between students and teachers and among students are more central to student success than any method for teaching literacy, or science or math. When powerful relationships are established between teachers and students, these relationships frequently can transcend the economic and social disadvantages that afflict communities and schools alike in inner city and rural areas. (pp. 11-12)

Cummins (2001) presented an instructional framework (Figure 3) for the development of CALP or the academic language and literacy for L2 learners and suggested that CALP can be developed through a focus on meaning, a focus on language, and a focus on use. At the center of this framework is the teacher-student interaction.

The focus on meaning in Cummins' framework suggests that L2 learners should be helped to go beyond literal comprehension and reach deeper levels of cognitive and linguistic processing to develop critical literacy. Cummins identified five phases of teacher-student interaction to achieve a focus on meaning: (a) the experiential (activating students' prior knowledge), (b) the literal (focusing on information contained in the text), (c) the personal (relating the text to



THE DEVELOPMENT OF ACADEMIC EXPERTISE

Figure 3. The development of academic expertise (Cummins, 2001, p. 125).

students' own experiences and feelings), (d) the critical (critically analyzing information in the text), and (e) the creative (moving from the text to concrete action).

The focus on language refers to understanding how academic language works and developing an awareness and critical analysis of language. Cummins (2001) suggested that the focus on language can be accomplished through vocabulary instruction and raising students' awareness of how language is used in particular social situations and particular texts.

The focus on use refers to the notion that students need to use the language they learned in the classroom in authentic ways to prevent the situation that "L2 acquisition will remain abstract and classroom-bound" (Cummins, 2001, p. 144). In addition, Cummins stressed that "language use can stimulate linguistic growth, cognitive development, and affirmation of identity" (p. 144). The content-based L2 instruction in immersion education is a great example of a focus on use because students are required to use the language that they are learning in authentic, meaningful, and holistic ways.

At the center of this framework is the teacher-student interaction. Cummins (2001), like Vygotsky, emphasized that learning is a social process and that students acquire meaning through social interaction, whereas instruction support comes from knowledgeable others. The teacher-student interactions, according to Cummins, are never neutral, but reinforce or challenge the power relations of the wider society. Cummins argued that "a starting point in the framework is the assertion that the learning process must be observed through the twin lens of cognitive engagement and identity investment" (p. 126). In other words, as Cummins asserted, when students' cultural, linguistic, and personal identities are affirmed, they will engage in the learning process.

The three components (a focus on meaning, a focus on language, and a focus on use) of Cummins' (2001) language development framework were influenced by Halliday's (1979/1980) language and learning triptych: learning language, learning through language, and learning about language. First, 'learning language' is similar to the first component of Cummins' framework, a focus on meaning, and emphasizes children's construction of language meaning. Second, 'learning through language,' like Cummins' focus on use, "refers to language in the construction of reality: how we use language to build up a picture of the world in which we live" (p. 13). Last, 'learning about language,' similar to Cummins'

focus on language, emphasizes understanding "the nature and function of language itself" (p. 16).

Halliday (1979/1980) argued that "language learning is an intersubjective, inherently social phenomenon" (p. 8). In response to behaviourist and nativist views of language acquisition, which consider the language learner an island and language a commodity, Halliday contended that a child has to construct language in the learning process through social interaction with others: "a child is not an isolated individual, and learning language is not a process of acquiring some commodity that is already there. Learning language is a process of construction." (p. 8)

Based on Vygotsky's (1986) and Halliday's (1979/1980) tenets, Goodman (1996) made the case that both written and oral forms of language are authentic only in the sociocultural contexts in which they are embedded: "Every authentic literacy event or speech act take place within a genre, a social pattern created to serve a particular function and a set of purposes" (p. 27). As Figure 4 illustrates, oral language with a system of sounds and written language with a system of characters or letters share the basic functions, purposes, and structure of language. Goodman delineated oral and written language systems as parallel yet distinct.

Influenced by Vygotsky's (1986) social constructivist theory, theorists such as Cummins, Halliday, and Goodman, all stressed the social and interactive nature of language and literacy learning. The closely related notions of Cummins' (2001) language development framework and Halliday's (1979/1980) language



Language in Literate Societies

Figure 4. Language in literate societies (Goodman, 1996, p. 27).

and learning triptych guided this research on socially and contextually situated

language and literacy practices.

Literacy as a Sociocultural Construct

In her discussion of literacy as a social and cultural construct, Willis (1997)

stated that the notion of literacy has been reshaped as a socially constructed

phenomenon. She reminded us that

There is no singular history of literacy, nor is there a singular definition of literacy for there have been multiple definitions of literacy, multiple histories of literacy, and multiple paths to literacy (Graff, 1995). The point I want to make here is that race, class, ethnicity, gender, language, and geographical location have been largely avoided, ignored, marginalized, or misrepresented in literacy studies. (p. 388)

These are very important considerations in current times when school and

communities become more and more diverse. More recently, Lankshear and

Knobel (2006) defined literacy as "socially recognized ways of generating, communicating and negotiating meaningful content through the medium of encoded texts within contexts of participation in Discourses" (p. 64). The "socially recognized ways" in their definition puts great emphasis on social practices in understanding literacy. Lankshear and Knobel (2007) also explained the concept of *practice* in relation to literacy: Practices "comprise technology, knowledge, and skills organized in ways that participants recognize, follow, and modify as changes emerge in tasks and purposes as well as technology and knowledge" (p. 2).

Literacy events and literacy practices are keys to understand literacy "as a social and cultural construct." A literacy event is defined as an occasion on which a person "attempts to comprehend or produce graphic signs, either alone or with others" (Barton, 1994a, p. 36). Literacy practices are the "general cultural ways of utilizing literacy which people draw upon in a literacy event" (p. 37).

For example, a group of students preparing for a debate in Chinese language arts class is a literacy event. In talking about their resources, ideas, arguments, and debating strategies, they make use of their literacy practices. Barton and Hamilton (2000) pointed out that when people interact with the text in literacy practices, they bring their assumptions, value, feelings, and social processes. From this perspective, literacy practices involve not only construction of the meaning from print, but also the "ways of acting, interacting, feeling, valuing, thinking, and behaving" (Gee, 1999, p. 356). In addition, As Street (1993) argued, literacy practices including their functions, meanings, and methods of transmission and instruction, vary from one cultural group to another. In the cross-cultural context, such as the bilingual classroom in which I conducted my research, the meaning of literacy practices is continually negotiated between individuals and groups from different cultural backgrounds (Spradley & McCurdy 1990).

Identities are constructed and negotiated in language use and literacy practices. Gee (2001) proposed that we have a sort of "identity kit which comes complete with instructions on how to act, talk, and often write, so as to take on a particular role that others will recognize" (p. 526). It worth noting that identity is not often fixed and unified. As Hall (1996) argued:

Identities are about questions of using the resources of history, language and culture in the process of becoming rather than being: not "who we are" or "where we came from" so much as what we might become, how we have been represented and how that bears on how we might represent ourselves. (p. 4)

In this study I viewed literacy as a sociocultural construct in which language and literacy are embedded in and reflect the social and cultural contexts of children and, in the social and cultural contexts, I carefully studied factors such as "race, class, ethnicity, gender, language, and geographical location" (Willis, 1997, p. 388) in relation to children's language and literacy practices. This also included paying attention to the bilingual students' practices of multimodalities and digital technologies such as online reading and writing as "socially recognized ways" (Lankshear & Knobel, 2006, p. 64). The holistic perspective of language and literacy as a sociocultural construct allowed me to explore the different sociocultural factors that influence language learning and development in different contexts. In addition, special attention was paid to the identity

construction of these bilingual students in their language and literacy practices.

Community of Practice

The conceptual framework for this study was also informed by Lave and

Wenger's (1991) notions of community of practice (C of P) and legitimate

peripheral participation (LPP). C of P and LPP relate well to Vygotsky's theory of

the social process of learning. Wells (1999) drew a connection between Vygotsky

and Lave and Wenger:

For Vygotsky, and for those who have extended and developed his ideas, learning is not a separate activity undertaken for its own sake, but an integral aspect of engaging in the ongoing activities of one's community and, in the process, gradually mastering the purposes of those activities and the means by which they are achieved. (p. 294)

Lave and Wenger identified learning as a dynamic, social, and holistic process in

which knowledge is co-constructed by group members within a C of P. They

defined a C of P as

a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice. . . . The social structure of this practice, its power relations, and its conditions for legitimacy define possibilities for learning. (p. 98)

Lave and Wenger (1991) proposed that learning can occur only within a

social and cultural context and emphasized "the relationship between learning and

the social situation in which it occurs" (as cited in Hanks, 1991, p. 24). Haneda

(1997) summarized two ideas that C of P perspectives bring to an understanding

of learning processes:
a shift away from the notion of learning as the simple acquisition of knowledge in isolation to the idea of learning as a mode of participation in the social world; and a shift from the traditional focus on individual learners to an emphasis on their shared membership in the community. (p. 14)

Lave and Wenger (1991) considered learners apprentices as they participate in a C of P and learn how to become full members of the community. Newcomers in the community are viewed as LPPs, and they move towards full participation in the community (Figure 5) through learning the specific sociocultural practices and interacting with the old-timers in the community (Lave & Wenger, 1991). Lave and Wenger's theory of LPP draws on Vygotsky's (1986) conception of ZPD. Compared to the emphasis on teaching from more capable others in ZPD, in LPP emphasis is placed more on the learning process as engaging in the C of P. Lave and Wenger indicated that in LPP there may be "very little observable teaching; the more basic phenomenon is learning" (p. 92). In Wiltse's (2005) words, "Lave and Wenger (1996) tend to agree with the societal interpretations of the concept of the zone of proximal development, extending the study of learning beyond the context of pedagogical structuring" (p. 19). According to Lave and Wenger, the degree of participation within the C of P is on a continuum from nonparticipation to full participation, and learning, as a situated activity, may be hampered by the lack of legitimacy in a community.

Lave and Wenger (1991) recommended examining a literate environment as a C of P and emphasizing the relationship between learning and the social community in which it occurs. In a dual language learning context, little is known about how bilingual children, as members of Cs of P, participate in bilingual and



Figure 5. Legitimate peripheral participation.

biliteracy practices and what the relationship is between language and literacy learning and the social situation in which the learning occurs. In my study, I paid special attention to how children participate differently in different communities such as English and Chinese classes at school, at home, and in larger societal discourses in two languages and how these communities empower or discourage bilingual children's legitimate participation in dual language and literacy development.

To sum up, Vygotsky's (1978) sociocultural theories, Cummins' (2001) language development framework, the current notions of literacy, and Lave and Wenger's (1991) C of P contributed to the framework for this study. The conceptions of these theories were significant in conducting this research in the socially and contextually situated English-Chinese bilingual setting in Western Canada.

Background for This Study

Bilingual Education

This study is about language learning in a bilingual education program. The term *bilingual education* has been used ambiguously and imprecisely as an umbrella term to refer to many different educational situations (Baker, 2006): "Bilingual education is a simplistic label for a complex phenomenon" (p. 213). In conceptualizing this study, I used Baker's typology of current bilingual education, which summarizes different kinds of bilingual education into 3 broad categories and 10 specific subcategories as presented in Table 1.

Baker's categories are monolingual forms of education for bilinguals, weak forms of bilingual education for bilinguals, and strong forms of bilingual education for bilingualism and biliteracy. The first category refers to two types of monolingual forms of education for bilinguals. One is subtractive bilingual education, as in a submersion program and submersion with pull-out classes, in which minority students are instructed in the majority language with no or limited adjustments to their special language and cultural needs. In this language learning environment, bilingual children often lose their mother tongue as a result of their acquisition of the mainstream language. The other type in this framework is segregationist education, in which minority children are forced to learn the minority language only, such as educating a colonial people only in their native language. In both of these programs bilingual children are present, but the curriculum does not promote bilingualism and biliteracy, and the students usually achieve monolingual proficiency in either majority language or minority language.

Table 1

	Typical			
Type of program	type of child	Language of the classroom	Societal and educational aim	Aim in language outcome
Monolingual forms	of education f	for bilinguals		
Mainstreaming/ submersion (structured immersion)	Language minority	Majority language	Assimilation/	Monolingualism
Mainstreaming/ submersion with withdrawal classes/ sheltered English/ content- based ESL	Language minority	Majority language with 'pull-out' L2 lessons	Assimilation/ subtractive	Monolingualism
Segregationist	Language minority	Minority language (forced, no choice)	Apartheid	Monolingualism
Weak forms of bilin	gual educatio	n for bilinguals		
Transitional	Language minority	Moves from minority to majority language	Assimilation/ subtractive	Relative monolingualism
Mainstream with	Language	Majority	Limited	Limited
foreign language teaching	majority	language with L2/ FL lessons	enrichment	bilingualism
Separatist	Language minority	Minority language (out of choice)	Detachment/ autonomy	Limited bilingualism
Strong forms of bilin	ngual education	on for bilingualism	n and biliteracy	
Immersion	Language majority	Bilingual with initial emphasis on L2	Pluralism and enrichment Additive	Bilingualism & biliteracy
Maintenance/ heritage language	Language minority	Bilingual with emphasis on L1	Maintenance, pluralism and enrichment Additive	Bilingualism & biliteracy
Two-way/dual language	Mixed language minority & majority	Minority and majority	Maintenance, pluralism and enrichment Additive	Bilingualism & biliteracy
Mainstream bilingual	Language majority	Two majority languages pluralism	Maintenance, & biliteracy and enrichment Additive	Bilingualism

Types of Education for Bilinguals

(Baker, 2006, pp. 215-216)

The second category, weak forms of bilingual education, refers to the programs that promote either relative monolingualism or limited bilingualism. The most common program for bilingual students in this category is a transitional bilingual program, which allows language minority children to use their home language or mother tongue temporarily for academic subject learning to prepare them to move to mainstream classes in which all instruction is in the majority language. The nature of the program is still subtractive bilingual education, and the final aim is to develop students' majority language proficiency. Transitional bilingual programs can be divided into two major types by length: early-exit and late-exit. Early-exit programs provide two years' maximum instruction in the children's mother tongues, and late-exit programs provide around 40% of instruction in the children's mother tongues until the Grade 6 (Baker, 2006, p. 221). Transitional bilingual education has been commonly used in the Spanish bilingual programs in the United States.

Many researchers and educators currently advocate the third category, strong forms of bilingual education, the nature of which is additive bilingual education, in which the aim of the program is to promote bilingualism and biliteracy. Contemporary educational research has increasingly demonstrated that additive bilingualism has beneficial effects for students in educational (Cummins, 2000), psycholinguistic (Cenoz & Genesee, 1998; Riches & Genesee, 2006), social psychological (Genesee et al., 2004; Lindholm-Leary & Borsato, 2006), and sociopolitical (Hornberger, 2006) realms. Four main types of bilingual programs are included in this category: one-way immersion, two-way immersion, heritage language, and mainstream bilingual programs.

One of the basic tenets of immersion programs is that students are educated by learning subject matter through a second language. The aim of immersion education is to help students concurrently develop dual language proficiency, academic achievement, and intercultural competence. Research over the past several decades has shown that immersion education has emerged as a successful approach to effective L2 acquisition at no expense to academic achievement or language majority learners' L1 proficiency (Cummins, 2000; Genesee, 1987; Lambert & Tucker, 1972; Swain & Lapkin, 1982).

The difference between one-way immersion (generally called immersion) and two-way immersion (known as dual language program) in this category is considered mainly in the nature of the student population. In a one-way immersion program the learners are typically speakers of the majority language, and they are instructed between 50% and 100% of the time in an immersion language other than that majority language. French Immersion in Canada is a typical example of one-way immersion program in which English-speaking children from English-speaking homes are immersed in French daily in the classroom, and the teacher provides most of the language input. In a two-way immersion or dual language program, the learners include both language majority and language minority speakers. The ideal ratio between the two groups of students is 1:1. The goal of these programs is for half of the students to acquire proficiency in the majority language, and the other half to acquire proficiency in

the minority language. Students are instructed between 50% and 100% of the time in an immersion language other than that majority language. In two-way immersion programs, native speakers of two languages are brought together, and the learners have a chance to learn the language from both their teachers and their peers. For example, children from Spanish-speaking homes and children from English-speaking homes are immersed in both languages and literacies. Currently, the research on two-way immersion programs is limited and has mainly been done on Spanish immersion programs in the United States (Carranza, 1995; Genesee, 1985; McCollum, 1994; Potowski, 2004).

In the maintenance or heritage language program, the learners are typically language minority speakers and are instructed partly through their "native, ethnic, home or heritage language" (Baker, 2006, p. 238) at school. Indigenous language programs in many countries such as the United States, Australia, and New Zealand are examples of this type of bilingual education.

The last type of program under this category, mainstream bilingual program, is one in which "much of the population is already bilingual or multilingual (e.g. Singapore, Luxembourg) or where there are significant numbers of natives or expatriates wanting to become bilingual (e.g. learning through English and Japanese in Japan" (Baker, 2006, p. 250).

English-Chinese Bilingual Education in the Canadian Context

Canada's population has grown steadily in the past several decades, and according to Chui, Tran, Maheux, and Social and Aboriginal Statistics Division, Statistics Canada (2009), demographic growth in the population remained higher in Western Canada, especially in the province of Alberta. The growth in population has been greatly supported by the increase in immigration. Chui et al. reported that the People's Republic of China has been the leading source country of newcomers to Canada since the 1990s. The latest census from 2006 indicates that among the more than 1.1 million recent immigrants who arrived between 2001 and 2006, 14% were born in the People's Republic of China. Accordingly, among the 70.2% of the foreign-born population who reported mother tongue(s) other than English or French, the largest proportion, one in five (18.6%), reported Chinese, including the various dialects, such as Cantonese and Mandarin. Because of the increasingly high rates of Chinese immigration, issues such as heritage language maintenance, students' bilingual language learning, and identity formation have become increasingly important in Canada.

Canada has had a national bilingual language policy since the Official Language Act's establishment of French and English as official languages in the 1960s. This act laid the foundation for the development of French-English bilingual programs (French immersion) in this country. According to Tavares (2000), throughout the 1970s and 1980s, to respond to the increasing diversity in the population and assert multicultural rights, the Canadian government included heritage language programming in public school systems. In 1971 a federal policy of multiculturalism was introduced in Canada within the previous French-English bilingual framework. In 1988 Canada's Multiculturalism Act was formally introduced. One of the aims of the act was to "preserve and enhance the use of languages other than English or French, while strengthening the status and use of the official languages of Canada" (Tavares, 2000, p.159). In 1974, under the influence of the government's multiculturalism policies, a Ukrainian bilingual program was established as the first minority language bilingual program in the province of Alberta. Following suit, other bilingual programs such as German, Hebrew, Arabic, Spanish, and Mandarin were developed in Western Canada. In 1993 a shift in the terminology to describe these minority-language bilingual programs was introduced, and *international languages* replaced what were previously called *heritage languages*. Tavares stated that "the shift in terminology from heritage to international languages reflects the impact of globalism on education systems in Canada, as well as significant shifts in multicultural policies and perspectives" (p.156).

Established in 1982, the English-Chinese bilingual program in Edmonton Public School Board is the largest of its kind in North America. In 1982, the Chinese bilingual program started as an experimental pilot project in two schools with an enrolment of 40 students in Edmonton, Alberta. Although at that time, most Chinese immigrants in the city spoke Cantonese or Toishanese dialect, Mandarin was selected to be taught in the bilingual programs for the following reasons:

- 1. Mandarin is the official national dialect of China and spoken by the majority of Chinese people in the world.
- 2. Mandarin is used in many undergraduate level Chinese courses at international institutions and universities. Mandarin instruction can give students opportunities to continue their learning for higher level education.
- 3. Learning Mandarin can help students establish connections with China in the future (Edmonton Public School Board, 2009).

Because of the success of the pilot project, the program was adopted by the Edmonton public school board in the second year. In more than two decades, the Chinese bilingual program has developed into one of the biggest bilingual programs in the city, with five elementary schools, four junior high schools, and three senior high schools enrolling over 1,800 students from kindergarten to Grade 12 (Edmonton Public School Board, 2009).

At the elementary level, 50% of the instruction is done in Mandarin and the other 50% in English. The Chinese bilingual program uses the same curriculum as offered in any other public funded schools in the province. Each class is instructed by at least two teachers. The Chinese part of the school day is usually instructed by a native speaker of Chinese who is also proficient in English, and the English part of the school day is instructed by English speakers often with little or no knowledge of Chinese. The students in these Chinese bilingual program vary in terms of their native languages: some of them speak Mandarin as their L1 at home; some of them speak other dialects of Chinese such as Cantonese and Toishanese at home; a small but recently increasing number of students are native speakers of English who are either from other cultural backgrounds or second or third generation Chinese immigrants who speak English at home. Due to the difference in students' cultural and language backgrounds, it is hard to categorize this program into one single type of bilingual education by using Baker's (2006) typology. Wu and Bilash (2000) identified three functions of Chinese bilingual program in Western Canada.

It is, firstly, a maintenance program for Chinese minorities to keep their language and cultural heritage. Secondly, it functions as a two way bilingual program with both native Chinese and English speakers in the same class. Finally, it also serves as a transitional program for new immigrant children to learn English as a second language and to adapt to the Canadian school system. For many, it is an immersion program for learning two new languages at the same time. In general, it is a versatile language program whose multiple functions meet the needs of different students. (p. 11)

The English-Chinese bilingual programs in the city work closely with an organization named Bilingual Education Association (BEA, a pseudonym). Established in 1982, BEA is a non-profit association run by volunteer parents of English-Chinese bilingual children, aiming to promote and ensure the long-term success of Chinese bilingual education. All the parents of children registered in Chinese bilingual programs in the city are automatically members of BEA, which has representatives in each of the bilingual schools in the city. As BEA members, the parents have the chance to meet the principals or school representatives once every month at different schools to discuss their concerns that may affect the bilingual program. BEA has arranged many fund-raising activities to enhance Chinese language and cultural resources such as setting up Chinese libraries, collecting Chinese books, software, musical instruments, and other teaching materials, and purchasing teaching equipment such as computers and smart boards for the bilingual programs. Other activities organized by BEA includes setting up awards and scholarships to recognize excellent English-Chinese bilingual students, arranging language contests for bilingual students, and promoting public awareness of the bilingual program. BEA also has cooperation

with many communities in Canada and in China to promote language and cultural education and international cooperation.

Despite the fact that Chinese bilingual programs have existed in Western Canada for more than 25 years, very little research has been done on how these language programs function or how effective they are in developing bilingualism and biliteracy (Wu & Bilash, 2000). Much of the research on language acquisition and program development in dual languages is on Spanish bilingual education in the US and French immersion in Canada and the research findings may not be completely applicable to a Chinese bilingual program considering the significant linguistic, cultural, and contextual differences. Many aspects of English and Chinese dual language learning yet need to be explored.

Wu and Bilash (2000) reminded us that even in the same Canadian city and school jurisdiction, one bilingual program can be very different from others. Bilash and Wu (1998) compared Chinese and Ukrainian bilingual programs in the same Western Canadian city and investigated students' perceptions of language learning and cultural and self-identity. The students in the Ukrainian bilingual program were at least third- or fourth-generation immigrants to Canada, whereas the students in the Chinese bilingual program were often first- or secondgeneration immigrants. Bilash and Wu revealed that, although students from both programs reported positive influences of the bilingual programs, the overall responses from Ukrainian bilingual students were more positive than those from Chinese bilingual students. To further investigate the influence of Chinese bilingual programs on students' language learning, cultural identity, and selfesteem, Wu and Bilash conducted a follow-up study in 2000 in which they conducted semistructured interviews with 14 Grade 6 children in one Chinese bilingual program. Seven themes emerged from the data, including "perceived L2 ability, negative and positive experience of speaking Chinese, understanding of Multiculturalism, feelings of belonging, feelings of ethnic identity, the role of bilingual education in forming their thinking and reasons for being enrolled in the program" (p. 1). The findings of this study reveal that bilingual students "experienced positive self-esteem in the Chinese Bilingual Program and a sense of fitting in with children from dominant culture" (p. 21). The authors suggested that the Chinese bilingual program empowered these minority language students. Their comments on language learning also indicated that linguistic and cultural dissimilarities make it difficult to learn Chinese in the Canadian context. Outside of school their exposure to Chinese language varied, and in the general Canadian society, Chinese is not necessarily highly valued. These children live this uncertainty.

In addition to the research on students' perspectives on Chinese bilingual education, studies have also investigated parents' perspectives. Lee (1984) interviewed 40 Chinese Canadian families in Western Canada to investigate parental attitudes towards culture and language preservation and towards a recently established Chinese bilingual program. Lee conducted the personal openended interviews in Cantonese, and the findings therefore reflected the perspectives of the parents, whose native tongue is Cantonese rather than Mandarin. Lee found that the parents from different socioeconomic and religious backgrounds all supported the establishment of the Chinese bilingual program; however, the parents also encountered some dilemmas and problems such as the chosen language/of instruction (Mandarin or Cantonese), the linguistic formality preference (elitist language or vernacular language), and the concern about students' overall academic progress.

Li (2006, a) conducted an ethnographic study on the role of parents in Chinese language maintenance and development in Canada. He studied the home literacy practices of Chinese immigrant families in Vancouver and Saskatoon, Canada, and used a cross-case analysis of the data from the two sites. In interviews and through participant observation, the author explored the issue of heritage language loss and the roles of parents in facilitating their children's heritage language maintenance. The findings indicate that parents can play a significant role in children's Chinese language maintenance; however, parents alone cannot help immigrant children to become bicultural and biliterate, and more institutional support such as bilingual schools and societal support is needed.

To sum up, very little research has been done in the Canadian context on English-Chinese bilingual children's language and literacy practices. The few studies that have been conducted investigated students' and parents' perspectives on bilingual education and heritage language maintenance. More classroom-based research is needed to explore what is actually happening in Chinese bilingual classrooms and what children's language and literacy practices are in different settings such as school, home, and community, as well as a more in-depth examination of the factors that promote or restrict their dual language acquisition.

CHAPTER THREE: METHODOLOGY

Methodological Framework

I designed this study as an ethnographic case study to explore bilingual students' language and literacy practices at school and out of school in a city in Western Canada. Ethnography is considered an approach or qualitative research method that focuses on "learning about the social and cultural life of communities, institutions, and other settings" (LeCompte & Schensul, 1999, p. 1). Erickson (1984) defined an ethnographic case study as "a deliberate inquiry process guided by a point of view, rather than a reporting process guided by a standard technique or set of techniques, or a totally intuitive process that does not involve reflection" (p. 51). LeCompte and Schensul recommended case studies and ethnographies for complex research in which the problem, context, or phenomenon is unclear, unknown, or unexplored. I chose to use an ethnographic case study to help me to gain a contextually situated understanding of the phenomenon of English-Chinese bilingual children's language and literacy practices, which has been relatively unexplored.

Ethnographic research was an appropriate choice for me because, when language and literacy practices are viewed as social processes within a socially constructed environment, ethnography allows the researcher to describe and analyze people's behaviours in naturally occurring, ongoing settings, with a focus on cultural interpretation (LeCompte & Schensul, 1999). This research aimed to 37

explore the sociocultural construction of bilingual and biliteracy learning mainly from the children's perspective, as Erickson (1984) recommended:

What makes a study ethnographic is that it not only treats a social unit of any size as a whole but that the ethnography portrays events, at least in part, from the points of view of the actors involved in the events. (p. 52)

According to Merriam (1998), an ethnographic study "uncovers and describes belief, values, and attitudes that structure the behavior of a group" (p. 13). I aimed to conduct an ethnographic case study to describe and interpret English-Chinese bilingual students' behaviour and experience in specific sociocultural contexts, especially their language and literacy practices in one bilingual program. To be more specific, the study addressed the "beliefs, attitudes, perceptions, emotions, verbal and nonverbal means of communication, social networks, behaviors of the group of individuals with friends, family and associates" (LeCompte & Schensul, 1999, p. 4) in the lives of these emergent English-Chinese bilinguals.

Heath and Street (2008) discussed the work of Robinson-Pant (2004) and Rogers (2005) and asserted that an ethnographic perspective, rather than an experimental or an individualistic perspective, is more effective in researching literacy as social practice because it "focuses on the everyday meanings and uses of literacy in specific cultural contexts and links directly with how we understand the work of literacy programs, which themselves then become subject to ethnographic enquiry" (pp. 103-104). This study examined language and literacy from an ethnographic perspective, and I collected data that focused on students' everyday meanings and uses of language and literacy. As LeCompte and Schensul (1999) suggested, ethnography is often used in connection with case studies. This research was a classroom-based, processoriented case study in an English-Chinese bilingual program. A qualitative ethnographic case study is descriptive because "the end product of a case study is a rich, 'thick' description of the phenomenon under study" (Merriam, 1998, p. 29). Considering my research questions and the research focus, I deemed a case study approach a suitable design because of Yin's (1994; as cited in Merriam, 1998, p. 32) and Merriam's opinions that a case study has a distinct advantage if the research focuses on process and aims to answer "how" and "why" questions.

A case study may include multiple cases to become a collective case study (Stake, 2006), in which multiple cases are described and compared to "provide insight into an issue" (Creswell, 2005, p. 439). To gain an enhanced understanding of bilingual children's language and literacy practice, I decided to conduct multiple case studies of three students and use a cross-case analysis. Miles and Huberman (1994; as cited in Merriam, 1998) stated looking at multiple cases helps researchers to "understand a single-case finding, grounding it by specifying how and where and if possible, why it carries on as it does" (p. 40). In the cross-case analysis I aggregated multiple data sets to gain a better understanding of the important roles of different sociocultural factors in bilingual education.

LeCompte and Schensul (1999) noted that ethnographers and case study researchers typically live with the research participants for extended periods of time, because "it takes considerable time to become acquainted with the participants; understand the dynamics of their interaction; understand how they relate to the physical and material environment; and elicit the meanings, goals, and objectives that are important to the participants" (p. 85). In this research I collected ethnographic data for a whole academic year, which included attending selected classrooms, visiting selected students in their homes, and participating in community events. I collected the data through participant observation in the classrooms, school, and community; fieldnotes from the observation; semistructured interviews and open-ended conversations with children, teachers, and parents; audio- and video-taped student-student and student-teacher interactions; and a collection of literacy artifacts and school documents. I will discuss these further in this chapter.

Methodological Details

Gaining Access

Before I began my research, I had been volunteering at Riverbank School (a pseudonym) for about six months. Riverbank School is one of the five public elementary schools with an English-Mandarin bilingual program in one city in Western Canada. I discussed with the principal the possibility of conducting my research in the school. I also chose as my research site a Grade 5 classroom out of the three classes in which I volunteered and discussed the possibility with the teachers. The principal expressed his interest in my research topic and encouraged me to apply to the school board to conduct my research at Riverbank School. The Grade 5 teachers also agreed to allow me to do my research in their classrooms. With the principal's and teachers' support and the school board's approval, I conducted my research in the same school and classroom in which I volunteered. Because of my volunteering experience, I had become familiar with the participating teachers and students and developed rapport with them before I began to conduct my research.

Research Site

I conducted my research in a Grade 5 English-Mandarin bilingual class at Riverbank School. As one of the public elementary schools in the city, Riverbank School offers regular English program from Kindergarten to Grade 6 and has had the English-Chinese bilingual program since 1992. Both the regular and the bilingual program at Riverbank School follow the provincial curriculum. The English-Chinese bilingual program would be, according to Baker's (2006) framework, a strong form of bilingual education aiming to promote bilingualism and biliteracy. The bilingual classroom is in reality both a maintenance program for Chinese as a heritage language and a two-way immersion education with native speakers of both English and Chinese. According to the principal, approximately one third of the students that enrolled in the English-Chinese bilingual program are children of the immigrants from mainland China, one third are children of immigrant families from Hong Kong, Taiwan and the other East Asian countries such as Vietnam and Malaysia, while the other one third are Caucasian children and children of mixed marriages.

In this Grade 5 bilingual class, there were 24 students, 16 boys and 8 girls. Ten of them were immigrants from Mainland China, ten were children of immigrants from Hong Kong, Taiwan and the other East Asian countries, and the other four were Caucasian children and children of mixed marriages. The students' mother tongues varied: about one third of them spoke Mandarin as their L1 at home; one third spoke other dialects of Chinese such as Cantonese and Toishanese at home; the other one third were native speakers of English who are either children of mixed marriage or second or third generation Chinese immigrants who speak English at home.

In this bilingual classroom, 50% of the instruction is done in Mandarin and the other 50% in English. The subjects taught in Mandarin are: Chinese language arts, mathematics, health, and physical education, and the subjects taught in English are: English language arts, science, social studies, art, and music. The Grade 5 students have two main teachers, Mr. Peterson, who teaches English classes 3 mornings a week including English language arts and social science, and Ms. Meng, who teaches Chinese classes every afternoon including Chinese language arts, mathematics, health education, and physical education. Ms. Mackey is another teacher who meets the students 2 mornings a week and teaches science, art, and French. The students also have Ms. Oster's music class once a week for 30 minutes. Ms. Meng is a native speaker of Chinese who is also proficient in English. Mr. Peterson, Ms. Mackey, and Ms. Oster are all native English speakers with little or no knowledge of Chinese.

Each class of students in the bilingual program has two classrooms, an English one and a Chinese one. In the case of the Grade 5 bilingual students I worked with, they have the morning classes in English in one classroom, and in the afternoon, they have the Chinese classes in another classroom. Each student has an English name and a Chinese name. In this study, for the sake of convenience, I only used English pseudonyms to refer to the participants.

Participant Observation

I visited the class at least twice each week for one academic year. Every Monday morning I visited Mr. Peterson's English classes, including English language arts and social science, and on Monday afternoon I visited Ms. Meng's Chinese classes, including Chinese language arts, mathematics, health education, and physical education. Every Wednesday morning I visited Ms. Mackey's science class and French class. I also visited Ms. Oster's music class twice. When I was in the classrooms, I usually sat at a table at the back of the classroom and took fieldnotes. I walked around to observe the focal students when they were doing in-class assignments or group work. I worked as a participant observer and was involved with the classroom activities when the teachers invited me or the students asked me for help. I audio- and video-recorded the children's interactions with their peers and teachers to explore the meaning of these interactions in their language and literacy practices.

My perspectives in the observation changed as I interacted with my research participants during the research process (Boostrom, 1994). Initially, I took the positions of "observer as video camera" and "observer as playgoer" to absorb whatever I observed in the classroom and begin to develop an understanding of what it is like for the children to experience language and literacy practices in these classrooms. Then I moved into the stages of "observer as evaluator" and "observer as subjective inquirer". I was observant of the classroom practices, and when my research questions led to an exploration of the significant meaning behind the phenomenon that I was observing, I began to interpret the phenomenon. Boostrom noted that "classroom moral life (perhaps classroom life in general) is not something objective and measurable, not something 'out there.' Rather, it exists in the observer's formulations of it" (p. 58). I began to interpret data from the moment I entered the classroom, and as my perspectives changed, the data changed in response. Finally, I worked as an "insider" and a "reflective interpreter" in that I moved inside the classroom and tried to view it from the perspective of a class member to gain a deeper understanding of the things that I might not have seen initially. However, I did not stop being a reflective interpreter in my observation. According to Boostrom, becoming an insider does not mean sacrificing the ability to think critically about the observed:

We can sensibly judge a story only on its own terms. If we do not play along, if we do not enter it, we miss it altogether. Once inside, we can bring to bear all our personal experience and judgment. The way we accomplish this playing along, this moving inside, is by learning what things to pay attention to. (p. 61)

I also extended my observation to outside of the classroom. I visited the school's Chinese calligraphy and running clubs, I volunteered in and attended the school Christmas and Chinese New Year celebrations, and I visited the students' homes and attended some activities organized by BEA in the larger Chinese community.

Fieldnotes

As an ethnographer doing fieldwork, I recorded my observation and

descriptions of interactions as fieldnotes. According to Lederman (1990):

Fieldnotes are hard to think and write about: they are a bizarre genre. Simultaneously part of the 'doing' of fieldwork and of the 'writing' of ethnography, fieldnotes are shaped by two movements: a turning away from academic discourse to join conversations in unfamiliar settings, and a turning back again. (p. 72)

I continued to think about these movements as I progressed. As Heath and Street

(2008) recommended, my fieldnotes included the following:

- 1. Running account of events in real time
- 2. Notable short phrases uttered by interlocutors so that audio or video recordings can more easily be coordinated with field notes
- 3. Changes in audience, routines, rituals, and features of context that co-occur with shifts in language and modes. (p. 77)

I reviewed my notes after each fieldwork day and wrote expanded

fieldnotes to include more details and my reflections. Each week I wrote conceptual memos based on my expanded fieldnotes. A conceptual memo is "a memo to the ethnographer about generic ideas that come from particular events, along with queries raised in the reflections column of fieldnotes" (Heath & Street, 2008, p. 79). I then used these memos to find themes, trends, and insights when I conducted my data analysis.

Participants

The focal participants in this ethnographic case study were three Grade 5 English-Chinese bilingual students, Kelly, Jenny, and Anthony. These three children spoke different mother tongues and had distinctly different background experiences before and during their time in this program. Kelly is a child of a mixed marriage. She is a native English speaker and a Mandarin learner. Jenny came to Canada from Mainland China almost the same time I began my research project. She is a Mandarin speaker and a new ESL learner in this Canadian school. Anthony came to Canada with his parents when he was four years old. He is a Cantonese speaker learning both Mandarin and English.

I chose to focus on Grade 5 children for two main reasons. First, following Cummins' (1981) concepts of BICS and CALP, most of these Grade 5 children will have had at least five years to develop both BICS and CALP in their L2. Second, researchers on Spanish and French immersion pointed out the tendency for immersion students, as they get older, to use the immersion language less and the socioculturally dominant language more, particularly when they speak with peers, and Grade 5 seems to be the "magic" level at which the switch begins (Tarone & Swain, 1995, p. 166). In this study I explored whether this tendency is also true in English-Chinese children's language and literacy practices.

I used Lave and Wenger's (1991) notion of Cs of P to explore how these children, as members of different communities, participate in bilingual and biliteracy practices. Therefore, I also included other participants in the study, such as the other children in the Grade 5 classroom, the Grade 5 teachers, the school principal, and the parents of the Grade 5 students, to look at the relationship building that occurs among these bilingual children, their teachers and peers, and their parents in the process of language and literacy practices.

Interviews

Before a first interview with the children, I conducted a pre-interview activity (Appendix A), as Ellis (2006) suggested, to "support getting-to-know-you conversations with a child, enable the child to teach the researcher about the context of interest, [and] provide the child with the opportunity to recall and select memories to share" (p. 118). For the pre-interview activity I invited the children to share their stories and memories with me; it helped me to gain a fuller appreciation of their experiences in language and literacy practices. I designed the pre-interview activity based on Ellis's samples, such as the creation of "all about me" posters before I began to interview the children about their language and literacy practices. I then conducted semistructured interviews with the children, the teachers, the principal, and the parents (see Appendixes B, C and D for sample interview questions).

I received consent forms for general participation (agreement to be observed in the classroom) from the parents or guardians of 20 out of the 24 children in the Grade 5 class and for in-depth participation from the parents or guardians of 15 students. I pre-interviewed and interviewed the 15 students and then selected 3 focal children, whom I interviewed at least two more times. I also interviewed the principal and the two main Grade 5 teachers (Mr. Peterson and Ms. Meng) two or three times and conducted informal conversations with all of the Grade 5 teachers several times throughout the year. In addition, I visited 7 families and interviewed the parents. Before the home visits, I gave the children a digital camera and asked them to take some pictures at home of the things that they regarded as "language and literacy." I then talked with the children in our interviews about the pictures that they had taken before I visited their homes and conducted parent interview. After I selected the three focal children, I conducted informal conversations with the parents of these children several more times at school or in community activities, and I phoned their homes two or three times to ask further questions. I conducted all of the interviews in the participants' language of choice (either Mandarin or English).

Document and Artifact Collection

During the course of the school year I collected many school documents such as school newsletters, letters and notices to parents, and pedagogical materials. I also collected students' language and literacy artifacts, such as narrative and functional writing for school assignments and some personal texts such as the Christmas cards and New Year cards that they had made.

The Role of the Researcher

Guba and Lincoln (1981) explained that

in situations where motives, attitudes, beliefs, and values direct much, if not most of human activity, the most sophisticated instrumentation we possess is still the careful observer—the human being who can watch, see, listen, question, probe, and finally analyze and organize his direct experience. (p. 13)

As an ethnographer, I worked as the main instrument of the fieldwork to actively

"watch, see, listen, question, probe, ... analyze and organize" (p. 13) the

bilingual children's language and literacy practices at school and out of school.

In addition, as a Mandarin-English bilingual teacher, university student,

and researcher, I brought my biases, opinions, and experiences into the study. As

Agar (1980/1996) cautioned that, "whether it is your personality, your rules of social interaction, your cultural bias toward significant topics, your professional training, or something else, you do not go into the field as a passive recorder of objective data" (p. 48). Heath and Street (2008) also discussed the etic and emic perspectives on conducting ethnographic research:

An etic or constant-comparative perspective enables us to understand underlying actions and their co-occurring patterns and contextual features. The emic or locally held perspective of an individual, group, or institution, such as a school, can bring into its knowledge system that which has been established from an etic or comparative analysis. (pp. 43-44)

In this study the etic and emic perspectives were intertwined, and there was a blend of "assumptions about perceptions or intent on the part of group members" (Ager, 1980/1996, pp. 239-240) in the research settings and my own background knowledge of bilingual education and language and literacy practices. Ager asserted that the original sense of emic and etic "captures this blending and calls our attention to it" (pp. 239-240). As a native Chinese speaker, I had "insider" knowledge; yet, as an adult scholar, I was an outsider to these children's world.

Heath and Street (2008) summarized the necessary qualities of a good ethnographer: "visual acuity, keen listening skills, tolerance for detail and capacity to integrate innumerable parts into shifting wholes" (p. 57). As an ethnographer I also considered my participants' level of comfort with the data collection, and I allowed them to choose the language with which they were most comfortable for the interviews. As a good communicator, I empathized with the respondents, established rapport, asked good questions, and listened intently, as Merriam (1998) advised.

Data Analysis and Interpretation

As Merriam (1998) suggested, I conducted a within-case analysis first to determine whether the cases of the three children demonstrated both the uniqueness and the commonality of the participants' experiences to be combined for a fresh analysis. Chapter 4, 5 and 6 provide descriptions of the language and literacy practices of the three participating English-Chinese bilingual children. The descriptions of each child include their personal backgrounds, their language and literacy practices at school in English and Chinese classes, and their language and literacy practices out of school. I then conducted a cross-case analysis in Chapter 7 to generate new insights and indentify the important factors that affect these bilingual children's language and literacy practices in these sociocultural contexts. Ethnography is a sociocultural interpretation of data (p. 14), and this study involved a sociocultural analysis of the data, with a special focus on the contextualized circumstances of each the participants.

Schwandt (2007) noted that "analysis in qualitative inquiry is recursive and begins almost at the outset of generating data" (p. 7). I began to interpret the data with my first entry into the community, school, and classroom and continued it throughout the data-collection process. The ethnographic research began with an idea base, but, as Boostrom (1994) advised, I changed my questions and perspectives on the topic of study as I interacted with my research participants in the research process. This process is complicated because, as Geertz (1995) observed, "For an ethnographer everything is a matter of one thing leading to another, that to a third, and that to one hardly knows what" (p. 20). The moving back and forth between the micro (the specific) and the macro (the general) perspective (Ellis, 1998) is significant in the process of data interpretation. I analyzed the ethnographic data in this study for themes, patterns, and insights to explore "what happens, how and why" (Ellis, in press, p. 3).

Limitations

Guba and Lincoln (1981) pointed out that "case studies can oversimplify or exaggerate a situation, leading the reader to erroneous conclusions about the actual state of affairs" (p. 377). In addition, readers may consider the case studies as the whole picture, "when in fact they are but a part—a slice of life" (p. 377). As a case study, my research was one account of "a slice of life" of these English-Chinese bilingual children. However, there is always the risk of oversimplifying or exaggerating the situation of bilingual and biliteracy practices of these children and leading the reader to erroneous conclusions about the phenomenon.

My use of a case study also presented certain limitations. As an ethnographer, I had to devote more time and resources to conducting this case study as compared to some other types of research. That being said I still felt I could have done more at the end of the year. In addition, although a thick and rich (Merriam, 1998) description of the phenomenon of bilingual students' language and literacy practices produced by ethnography was necessary, I worried that "the product may be too lengthy, too detailed, or too involved for busy policy makers and educators to read and use" (p. 42). To counter this limitation, I hope to have opportunities to present my findings in ways that are accessible to all participants and will be useful in the field of bilingual education.

Ethical Consideration

I conducted the study within the ethical guidelines of the Faculties of Education and Extension, Augustana, and Saint-Jean Research Ethics Boards at the University of Alberta. I explained the nature and purpose of my research to each potential participant both orally and through detailed letters. Participation was voluntary, and I informed the participants that they had the right to opt out of the research at any stage. I also detailed the information in the consent form and explained to the school, the participants, and their families that I would maintain the privacy, anonymity, confidentiality, and security of the data.

CHAPTER FOUR: KELLY: "I DON'T WANT TO SPEAK HALF-HALF CHINESE"

Personal Background

Kelly was born and raised in Western Canada. At the time of the study, Kelly was 10 years old. She is a native speaker of English, and the family language is also English. Kelly's mother is of British heritage, and her father stated that he is a second-generation Chinese who was born in the US, received his education in English-only schools, and probably lost most of his Chinese in kindergarten. Both of Kelly's parents are doctors who work in the city, and they have two girls and one boy. Kelly is the eldest daughter. All three children were enrolled in Riverbank School.

Kelly has been enrolled in the English-Chinese bilingual program at Riverbank School since kindergarten, and she has been learning Mandarin as a L2 for six years. Kelly's mother reported that Kelly struggled with learning Chinese in the early grades, but she gradually became more and more confident and received her first A in Chinese language arts in Grade 4. According to her current teachers, Kelly was doing very well in all subjects. Since Grade 4, Kelly has been attending the Academic Challenge (AC) program at Riverbank School. The AC program was recommended for students with exceptional academic achievement, and the AC instructor tutored these students once a week to help them to develop high-level problem solving, thinking, inquiry, and research skills. When I asked Kelly to choose either English or Chinese for our interviews, she said that she would like to use "half-half." In the interviews she tried very hard to speak as much Chinese as possible and used English only when she could not find the Chinese vocabulary to convey her meaning. I asked Kelly to tell me what she thought about her proficiency in the three languages she was learning (English, Chinese, and French), and she said that it was the best in English, then Chinese, and then French. When I asked her what her long-term goal was for her Chinese learning, she said, "我 graduate 的时候要讲中文 fluently, 不是这样 half-half 的中文 [I want to speak Chinese fluently when I graduate, not this half-half Chinese]." In other words, Kelly wanted to be able to converse only in Chinese without having to switch back to English. This suggests that she sees value in being a competent Chinese speaker and wants to see her Chinese self. She appears to want to be more Chinese than "half-half."

Kelly was very easy to notice in this Grade 5 class. Many other students tended to speak English to me once they found out I could speak English. Kelly, however, had tried to speak as much Mandarin as possible with me even when we were in her English classes. Even for the most common English words such as "Sorry," "Excuse me," "Thank you," "Hello" and "Bye" that were used by most of the children at school including the newly landed immigrant ESL children, Kelly would prefer to say them in Chinese with me. In the hallway, she always used "你好" ["Hello"] to greet me instead of "Hello." One time in the classroom, Kelly was going to use the sink, and I was standing in her way, she said "对不起" ["sorry"] to me. Although the Chinese word she used has a little more serious

meaning than "Excuse me," and it took me a minute to realize that she meant "Excuse me," I was a little surprised by Kelly's language choice for such a commonly used word. I remember when I helped with distributing snacks at their Halloween party in the classroom, the children said "thank you" to me either in English or Chinese when they got the snacks. When I passed the snack to Kelly, she said "谢谢孙老师, 孙老师万圣节快乐! [Thank you, Ms. Sun! Happy] Halloween, Ms. Sun!]" She used the Chinese words that she had just learned to mention "Halloween," a favourite festival for Western children. Kelly was not the only child in this class who chose to speak in Chinese with me in both their English and Chinese classes, but she is certainly the most endeavoured and the most insistent one. I noticed sometimes when we were talking, Kelly was just about to speak out the English words, but when she realized it, she quickly switched back to Chinese. Kelly was obviously trying very hard to use as much Chinese as possible when speaking with me. When I asked Kelly's teachers and parents about this in later interviews, they told me that Kelly was a very passionate language learner, and it was quite possible that she was using me as a native Chinese speaker to practice her own Chinese.

Kelly's Language and Literacy Practices at School

Kelly in English Classes

An Enthusiastic Contributor

Kelly talked a great deal in her English classes. She was so eager to participate that she often spoke out even when it was other children's turn. Mr. Peterson, Kelly's English teacher, had to frequently remind her to put up her hand before she spoke in class and give her classmates a chance to speak. Sometimes Mr. Peterson's ways of reminding Kelly were very humorous. For example, when she began to talk without putting up her hand, he would sometimes say, "Thank you for putting up your hand, Kelly. I love your contribution; just put up your hand first"; "Sorry, I heard something, but who's saying?" or "Feel free to raise your hand at any time, Kelly." Kelly once interrupted a boy named James when he was talking, and Mr. Peterson said, "James, it is amazing that you sound exactly like Kelly." Mr. Peterson indicated that even though Kelly often makes excellent contributions to the discussion, he has to give the other students chances to speak in class. Most of the times she did not seem to be discouraged when Mr. Peterson reminded her to stop talking and put up her hand first. She often smiled at his humour, then put up her hand and waited for her turn to speak.

Mr. Peterson discussed current news with his students every Monday. He would ask them to share the news from the past week and lead a discussion of the news. Kelly was usually very verbal in this activity and not only described the news of the day, but also made many comments about the news being discussed. For example, on November 20, 2009, the class was talking about the H1N1 flu immunization shot. One girl in the class said that a doctor on YouTube suggested that people not get the shot. Kelly's response was, "Any people can post anything on YouTube. The one on the Internet might not be a real doctor. My dad is a real doctor, and he said it is good. It should be okay." Mr. Peterson affirmed Kelly's idea and emphasized that it is important to always consider the source of the

information that they receive. On December 7, 2009, Mr. Peterson was talking with the students about the latest news on the tornado in the US. One student asked why people gave names to tornados. Before Mr. Peterson answered, Kelly said, "So that we know what we are talking about. The names have to go alphabetically, and each year they change it." In February Kelly even more actively talked about the news because she had been to the Vancouver Winter Olympic Games with her family and had made an I-movie about her experience, which Mr. Peterson played in class. Kelly was very proud of her film and her opportunity to have been at this major world event. One of the topics that they discussed was the stereotyping of Canada in the closing ceremony. Mr. Peterson asked, "Was there anything in the closing ceremony you found embarrassing as a Canadian? They want to make it interesting, and they use every stereotype of Canada. Do you know the meaning of stereotype?" A few students shook their heads, and Kelly said, "Like blondes are stupid, but I never saw Moose. I see hockey on TV, and that's it. I don't even skate." Mr. Peterson smiled and explained the meaning of stereotype to the class by using Kelly's examples. He also warned that they need to be careful about stereotyping because, as Kelly said, a stereotype is not always right. The above examples show Kelly's ability to check information online and her knowledge about the naming of tornados and the meaning of stereotype. She is digitally competent and likes to be specific about details. Kelly's contribution also indicates her critical thinking, because she verified information, knew about naming tornados, and was well informed on what a stereotype is.

Cross-Language Comparison

Kelly was very talkative when Mr. Peterson compared English and Chinese. For example, when he talked about subject-verb agreement on December 7, 2009, he used two sentences as examples: "The lake is full of fresh water" and "The lakes are full of fresh water." He then asked the class, "Do you have a plural form in Mandarin?" Kelly replied quickly, "Not really. We say 'one cat,' 'two cat."" Mr. Peterson said, "Oh, so it doesn't matter in Mandarin, but in English we say one cat, two cats; one child, two children." Kelly's meta-linguistic awareness in her thinking about the two languages seemed to be very good.

In addition to the grammatical differences between the two languages, Kelly also seemed aware of and interested in the similarities between English and Chinese. On November 9, 2009, Mr. Peterson was explaining how to use descriptive language in writing a narrative story. He encouraged the students to think of different words to describe the action of walking. The class discussed words such as *stroll, prance, creep, march, tumble, mince, sneak, shuffle*, and so on. Mr. Peterson then raised a question: "This must happen in Chinese. Do you have different words for walking?" Kelly and a few other students immediately replied, "Yes, we have!" and they gave several examples of different Chinese words that have the meaning of *walking* such as 快走 [walk fast], 慢走 [walk slowly], 跑 [run], 跳 [jump]. When she and her classmates spoke a word in Chinese, Kelly also translated it for Mr. Peterson in English, such as "This means *walking very slowly*." Mr. Peterson said that he did not know Chinese, but Ms. Meng had told him that there were so many different ways to convey a
certain meaning in Chinese and that, by comparison, she felt that the English language is more limited.

Written English.

Observing Kelly in her English class and examining her English assignments revealed that she has acquired a very large and complex English academic vocabulary, many literary expressions, and the techniques involved to use English in her writing skilfully. For example, for a Grade 5 English project Mr. Peterson asked the students to think of a certain type of museum that they would like to design, use a brainstorm web to illustrate an exhibit in that museum, and, finally, write a description of the museum exhibit that they had designed. Kelly designed a museum of the Timeline of the World. Figure 6 is the web that illustrates the exhibit in her museum.



Figure 6. Kelly's brainstorming web for her museum design.

Kelly told me that she had not learned words such as *sabre-tooth cat, mammoth*, *T-Rex*, and *archeopteryx* at school; she had learned them from her own reading and her visits to local museums. It was evident that she draws broadly on her experiences in English and brings that to her classroom tasks.

For another project, Mr. Peterson asked Kelly and her group members to write a classroom newsletter on the topic of whether students should be allowed to chew gum at school. Kelly designed the title for their newsletter: "The Sticky Situation: To Chew or Not to Chew?" This title indicates that she skilfully used Shakespeare's "To be or not to be" to describe the stickiness of chewing gum. I asked Kelly how she had arrived at the idea for the title, and she told me that she knew it was from Shakespeare and simply designed it based on this quotation. This kind of intertextual referencing indicates how well versed she was, not just in language, but also in literacy texts.

Functional writing is a writing task that Mr. Peterson emphasized in his class this year, and in June the students learned about writing a news story. Mr. Peterson asked the students to rewrite the fairy tale "Goldilocks and the Three Bears" and change their style to a news story. He recommended Kelly's story to me as one the best in the class (her original writing is included in Appendix E).

BEAR HOUSE BREAK-IN

13 Year-Old Sentenced to Community Service and Counseling BY Kelly Riverbank Amateur Reporting Team

This Sunday afternoon, 13 year-old Goldilocks Smith was caught uninvited sleeping in the Bear Family House. She was charged with breaking and entering along with eating the bear's food and damaging some furniture and windows.

"Like, I am totally surprised at Goldie, I didn't think she would do such a thing!" says Red Riding Hood, Smith's best friend. "I was just on my way home from like, Grandma's when I spy her totally creeping into the poor bear's house. I headed straightaway for the police, I knew for a fact they just hadn't invited her, the bear's were just taking a stroll in Riverbank Forest before breakfast. I like, met Imelda just as they were leaving."

It turn out Goldilocks was taking a hike through the forest when she grew tired and decided to take a rest. She pleads that she wasn't planning on breaking-in; it was just that she was "so dreadfully tired" and they weren't there. When she came in she saw the three bears' bowls of porridge lying on the kitchen table, she tasted two but finished the third. After devouring their breakfast, Goldilocks Smith swept into the parlour and began to sit on all of the chairs. She broke Teddy Bear's chair but the court is unsure why. Goldilocks protest that it was an accident but Teddy thinks her procedure was quite violent. The bears then caught her sleeping in one of their beds. She woke up startled and then promptly broke the window by jumping through it. Smith broke her arm in the fall.

Goldilocks is sentenced to community services for a year and will be enrolled in heavy counseling.

Kelly's news story demonstrates her skilful use of the English language. In the second paragraph, for example, she included Red Riding Hood in her story as a witness to the news event and constructed the teen witness by using teen speech. For example, she used the word *like* several times to portray Red Riding Hood's way of speaking as a teenage girl. In her story, Goldilocks and Red Riding Hood are best friends, and Red Riding Hood used the nickname *Goldie* to address her friend Goldilocks. Kelly wrote what she understood about friendship. Her portrait of Red Riding Hood was so vivid that it reflects some features of girls' talk, or "genderlects" (Blair, 2000).

An Attentive Helper

In English classes Kelly was assigned to sit beside Eddie as one of his "official" English language helpers. Eddie was one of the four ESL children in the class, and he was a Cantonese speaker who came to Canada from China in 2008. Kelly was very attentive to Eddie and tried very hard to explain the English words and concepts in Chinese for him. She was a language and culture broker for him. Sometimes when Kelly could not find the correct Chinese words to explain a meaning to Eddie, she often asked for help from Anthony, another focal child in this study and also a Cantonese speaker. When Kelly asked for help, Anthony often used Cantonese to explain concepts to Eddie. For example, on October 22, 2009, Mr. Peterson told the students that they would use a brand new way to take the social science quiz that day. He prepared 20 true or false questions, but instead of using paper and pencil, he distributed a smart clicker to each student, and the students could click T or F to indicate whether a statement on the smart board was right or wrong. The software also offered instant feedback on how well the students had done on the quiz. They were very excited about having responded to the quiz questions in this way. Although Kelly was also excited, she remembered to tell Eddie in Mandarin, "T 是对, F 是不对 [T is for right, and F is for wrong]."

On another occasion in language arts class on March 1, the class was talking about the Winter Olympic Games in Vancouver. Mr. Peterson asked the students to write a journal entry on whether they thought that spending \$6 billion on the Olympics was a good idea. Using English-Chinese code-switching, Kelly asked Eddie whether he understood the question: "你懂不懂这个 ... ? good idea ... ? 就是 spending 6 billion 好不好? [Do you understand this? Good idea ... ? It's like, is it good to spend 6 million?]" Eddie still seemed confused after Kelly's explanation, in which she had code-switched between the two

languages. She then asked, "Anthony, could you help me here? How to say this . . . ? Could you explain this to Eddie?" Anthony used Cantonese to explain the task to Eddie, and this time Eddie understood and began to write his journal entry. The above examples show that Kelly tried to use Chinese as a tool to help Eddie and used another Cantonese speaker as a linguistic resource for Eddie in English classes. Kelly was brokering the knowledge for Eddie between two languages.

Another student with whom Kelly often chose to speak Chinese in English classes was Jenny. Jenny, a new ESL student who came from China to Riverbank School in October 2009, was another focal participant in this study. Although she had an "official" helper whom the teachers had assigned, Kelly was very willing to offer her help to this new community member. During Jenny's first few days at school Kelly introduced her to the school regulations and routines to help her adjust to the new environment. For example, on Jenny's third day at school, during the recess time of English language arts class, she seemed not sure about where to put her workbook. She asked Kelly, "Kelly, 这个放哪? [Kelly, Where to put this?]" Kelly replied, "来 [Come with me]," and she walked Jenny to the appropriate place to put her workbook.

On December 9, 2009, after the science class the students returned to their English classroom. The door was locked, and they waited outside. One teacher passed by, and all of the students except Jenny greeted her by saying, "Hi, Mrs. G.!" Kelly realized that Jenny did not know this teacher and said to her, "这 是我们的英文老师在四年级 [This is our Grade 4 English teacher]." Jenny then nodded and said, "哦! [Oh!]."

In addition to introducing school rules and teachers to the newcomer, Kelly often worked with Jenny in group work in English classes and tried to use Chinese to help her to understand better. On November 2, 2009, Ms. Oster, the music teacher, was teaching the students about conducting. After she explained the basic rules of conducting, she asked them to work in groups to practice. The children kept the beat by saying "One, two, three, four" as Ms. Oster had taught them. Kelly, however, chose to use Chinese to keep the beat by saying "-, \equiv , \equiv , \square [One, two, three, four]." since she was working with the newcomer Jenny. Kelly seemed very much at ease as she made herself understood in Chinese.

I also observed Kelly sometimes reminding the teacher to pay special attention to Jenny or explaining the teacher's instructions to her, especially during the first few weeks. For example, on November 9, 2009, after taking the attendance, Mr. Peterson reminded the students to hand in the forms that they were supposed to have filled in the previous week. He explained that it was an important form and that everyone should remember to hand it in. Kelly seemed to be very concerned about whether Jenny understood Mr. Peterson, and she used Chinese to remind her: "Jenny, 要交那表格,你交了吗? [Jenny, we need to hand in the form. Have you done that?]" Mr. Peterson thanked Kelly for her translation. Kelly seemed to know how to use Chinese to get things done and used a great deal of functional talk in her role of translator.

Another example occurred in Ms. Mackey's French class on December 2, 2009. Ms. Mackey pointed to different objects in the classroom and asked, "What is this?" in French. The students answered the question in French and added *le* or *la* before the nouns to indicate their masculinity or femininity. Jenny seemed confused, and she asked Ms. Mackey, "Why sometimes la, sometimes le?" Ms. Mackey answered, "Good question! We use la for feminine and le for masculine." Kelly explained this to Jenny in English in another way: "Jenny, think this way: La is for girls, and le is for boys." Ms. Mackey seemed worried about Kelly's simplification of this French grammar rule and said, "Well, not necessarily." Kelly replied, "Yeah, . . . but I don't think Jenny knows the words feminine and masculine." Ms. Mackey realized Kelly's intention and said, "Okay! You can think this way just for now. But remember, a table is neither a boy nor a girl." This example shows Kelly's simplification of the grammar rules for Jenny because of her limited English vocabulary. In Krashen's (1981) words, Kelly was modifying the input so as to make it more "comprehensible" for Jenny. This also shows Kelly's cross-linguistic awareness of the importance of understanding the meaning.

Both Eddie and Jenny believed that Kelly's help was very important to their study of English. When I mentioned this to Kelly in her interview, she said, "我帮他们,他们也帮我 [I helped them, and they helped me too]." She told me that in a Chinese language arts project Jenny was her partner and helped her a great deal too. It was evident that, with their language expertise, the two girls were helping each other. It is interesting that later in the academic year when

Jenny's English had improved greatly, sometimes the girls would speak to each other in their L2s. That is, in their conversations Jenny spoke English, and Kelly spoke Chinese. It is possible that they were using each other's language expertise to practice their own comparatively weaker language. Genesee (1985) argued that "combining students from different language backgrounds does not guarantee that they will interact, nor that they will use the minority language" (p. 554). In other words, we cannot simply assume that in peer collaboration students from two different linguistic and cultural backgrounds will consider their own and each other's language expertise. However, Kelly and Jenny clearly showed that they were working together and using each other's language expertise to strengthen their weaker languages.

Kelly in Chinese Classes

Contributing Through Code-Switching

In the Chinese classroom Kelly very actively contributed to both the whole class and the small group discussions. She tried very hard to speak as much Mandarin as possible, and when she had to switch back to English for words that she did not know in Chinese, she would often politely ask Ms. Meng, "可不可以 说英文? [Could I speak in English for this?]" Ms. Meng would agree to let her share her ideas in English first and then give Kelly the appropriate Chinese words. Most of the time Kelly would learn the Chinese words quickly and then use them right away or later in classroom discussions. Sometimes Kelly also confirmed with Ms. Meng the Chinese words that she did not know or was not sure of; she tried to refrain from code-switching except when it was necessary.

For example, on December 7, 2009, Ms. Meng was teaching about 8/12) and asked the students how they would know that these numbers are equivalent. Kelly answered by code-switching between Chinese and English: "那 个....分子是 increase 在 2, 4, 6, 8, 分母是 increase 在 3, 6, 9, 12. 第一个是乘 以 2... 乘是不是 times? [Well, ... the numerators increased from 2 to 4, 6, and 8; and the denominators increased from 3 to 6, 9, and 12. So the first one times 2... is '乘' the right word for *times*?]" Ms. Meng answered "是 [Yes]." Kelly then continued, "第二个是乘以3,最后一个是乘以4[The second one times 3, and the last one times 4]." In this example, although Kelly used some English words, she correctly explained the concept of equivalent fractions. Kelly also successfully used math terms such as *numerator* and *denominator* in Chinese. At first, she was not sure that she had used the right Chinese word for *multiply*, and after she had confirmed it with Ms. Meng, she then used the word two more times to finish her explanation. In this example Kelly asked for a word that she did not know and learned to use it right away. She seems to have acquired some very useful strategies and practices as an L2 learner.

Sometimes, instead of asking Ms. Meng, Kelly confirmed certain Chinese words with her classmates when she was answering questions. On May 31, 2010, in Ms. Meng's Chinese language arts class, the students were talking about the social studies that they had learned in the morning. Kelly turned to ask a classmate while she was talking, "Mr. Peterson 讲第二次世界大战 . . . *World War II* 是不是 第二次世界大战? [Mr. Peterson talked about World War II. . . . Is

第二次世界大战 the right words for *World War II*?]" Her classmate said, "是 [Yes]." Kelly then continued, "Yeah! 我说对了!他讲到 deep sea diving. 第二 次世界大战和 deep sea diving 没关系. [Yeah! I was right! Then he talked about deep sea diving. World War II and deep sea diving are not related at all.]" In this example, instead of inserting *World War II* into her Chinese sentence, Kelly used a Chinese word for it first and then confirmed it with her classmate. When she realized that the word was actually right, she was happy and said, "Yeah, I was right"; then she continued talking.

Although there are diverse opinions about code-switching, it seems to have helped Kelly to express herself in Chinese class and to learn from both her teacher and her classmates when she code-switched in class. Ms. Meng allowed Kelly to code-switch in class but also encouraged Kelly's Chinese learning by providing the Chinese words after the code-switching occurred. I also noticed that in group work, Kelly sometimes would use English or code-switch when talking with her peers to generate ideas, but use Chinese when presenting to the class. She seemed to have a sense of the larger audience and transfer the ideas from one language into another when talking to different people.

One day when Mr. Peterson came to the Chinese classroom when Kelly was code-switching, he said to her with admiration, "That sounds so smart. I am so amazed when you guys are doing that, switch from one language to another!" Although the learning environment supported Kelly's code-switching, she seemed to regard code-switching as a strategy or a temporary phase in her Chinese language learning. As she stated in our interview, she would like to be able to speak only in Chinese, not half-half Chinese.

Using Chinese to Express Feelings

Kelly often used English to express herself to her classmates and teachers when she was emotional—anxious, happy, or sad. However, at times she also used Chinese or code-switched between the languages to express these emotions. For example, I was in the Chinese class on the day before Remembrance Day. When the Grade 5 students were practicing a song that they would sing during the Remembrance Day assembly, two girls from other classrooms who were selling poppies for donations entered the room. Kelly was very eager to donate money and wear the poppy right away, but she realized that she did not have any money with her. She said to Ms. Meng in Chinese very quickly and in a rising tone, which often indicates anger or dissatisfaction in Mandarin, "没有人告诉我们带 钱? [How come nobody tell us to bring money today?]" Later, during recess, Kelly realized that what she had said might have sounded as though she was blaming Ms. Meng for not having reminded her, so she apologized to Ms. Meng in Chinese for being too emotional.

Another example of Kelly's use of Chinese to express her emotions occurred on May 17, 2010, when she was upset about the boys' behaviour towards the girls when they played soccer together during recess. Kelly reported to Ms. Meng in class, "我们不 score, 男孩子就笑话我们, 'Kelly, you fail!'... Eric 老是拿着球 [When we didn't score, the boys just laughed at us and said, 'Kelly, you fail!'... And Eric often keeps the ball]." Ms. Meng then reminded the boys of a game that they played called "Every girl is a princess" and emphasized that the boys should respect the girls. Kelly added, "他们不要 treat 我们 any difference,我们要 equal [They don't need to treat us with any difference. All we want is equality]." Although she had used some English words, Kelly clearly expressed her feelings in Chinese. She indicated that she did not like to be told that she had failed when she played soccer with the boys, and she referred to her desire for more inclusion in the game when she chastised Eric for holding the ball too long. When Ms. Meng mentioned the game "Every girl is a princess" and asked the boys to respect the girls, Kelly's last sentence also demonstrated her critical attitude towards the game. This classroom seemed to provide many opportunities for Kelly to explore a wide range of functional speech.

Making Meaning of Chinese Vocabulary

Ms. Meng taught 2 new Chinese words each day and thus 10 words each week, and every Monday she dictated the 10 words from last week to the class. Most of the new words were from the lyrics of songs that they sang, articles that they read, or words that they had learned that week in other subjects such as health and physical education. When she taught each Chinese word, Ms. Meng gave the students the alphabetical Pinyin form, the character writing form, the tone, the meaning in English, and a sample sentence in which she used the word. In my interviews with Kelly she told me that the most difficult thing about learning Chinese was remembering the vocabulary. She found it hard to remember both the meaning and the written form of the new vocabulary and seemed to rely heavily on the English explanation of the meaning. She would confirm with Ms. Meng the meaning of a new Chinese word when she was not sure that she understood it. For example, on May 31, 2010, Ms. Meng explained the Chinese word "发呆 [daydreaming, in a daze]." Kelly asked, "是不是我在想 哈利波特, *Star Wars*, 我 distracted . . . 发呆? [Is it that when I was thinking about *Harry Potter* or *Star Wars* I got distracted, . . . and then I was in a daze?]" Ms. Meng said that that was exactly what it meant.

Another example of Kelly's vocabulary learning occurred when Ms. Meng taught the class the word "一瞬间 [in a minute, very quickly]," Ms. Meng gave the English meaning for the word as "at the very moment." Kelly seemed confused about the meaning of the word and asked, "是不是现在? [Does it mean now?]" Ms. Meng replied, "不是说现在,是很快 [No, it doesn't mean now. It means very quickly]." Kelly kept asking, "可不可以说我们 after recess 做数学, 一瞬间就做完了? [Could we say that we did our math after recess and we finished in 一瞬间?]" Ms. Meng provided a more accurate example, "还没有那 么快. 可以说车子一瞬间开了 100米,你都没有意识到. (Well, you couldn't use the word in that context since doing math is not like that quick. You could say you drove the car for 100 meters in 一瞬间, and you didn't even have time to realize that.)" Kelly said, "那不是说 at the very moment. 是不是很快? (The meaning might not be *at the very moment*. Does it mean *very, very quickly*?)" Ms. Meng agreed that they needed a better English meaning for the Chinese word, and she asked her students for advice. Kelly suggested "in the blink of an eye." Ms. Meng then revised the English meaning as "in the blink of an eye" on the smart board. In both examples Kelly was trying to understand the meanings of the

words by putting them into context and confirming the usage with Ms. Meng. In the first example of the Chinese word "发呆 [daydreaming, in a daze]," Kelly understood the meaning right away, but it took her some time to find an appropriate context for the second word "一瞬间 [in a minute, very quickly]." When Kelly found Ms. Meng's English explanation for the second word somewhat misleading, she helped the teacher to redefine the word. It was evident that Kelly was using English (her L1) as a useful tool to learn her L2. She also demonstrated that asking good questions can help her to understand the precise meaning.

Expressing Complicated and Critical Ideas in Chinese

Although Chinese was Kelly's second and comparatively weaker language, her contributions in Chinese reflected complicated and critical ideas just as in her contributions to her English classes. For example, on May 31, 2010, the class began a new project, a debate in Chinese, and the students were very excited. When Ms. Meng explained the basic rules for the debate, Kelly asked, "Debate 中 有没有第三方,如果我辩论到最后我 agree with the other group 怎么办? [In a debate, is there a third party? What if I argue and argue and end up agreeing with the other group in some aspects?]" Ms. Meng indicated that it was a good question and replied that in a debate they should always uphold their position.

On another occasion in health class on June 7, 2010, Ms. Meng talked about different personalities and the influence of people's personality on their attitude towards smoking and taking drugs. Ms. Meng asked each student to pick one personality and design a scenario with a partner to demonstrate that personality. Kelly raised a question about one personality for each person: "可是 real life 中,可能不只是一种性格 [But in real life, one person may have more than one personality]." Ms. Meng said, "非常好,但在这个活动中,重点表现 一种性格 [A very good point! However, in this activity let's emphasize one personality]." These two examples illustrate Kelly's critical ideas on debating and demonstrating a personality. Although she used some English words, Kelly successfully expressed these abstract ideas in Chinese.

Explaining English Bilingually

It was evident that English is Kelly's strongest language, and in Chinese class she often made a great effort to help her classmates when they had questions about English vocabulary. She seemed to sense when to use Chinese or English to help them. For example, she explained open-ended question as "不是 yes, no 的 question. Do you think I'm right 是 yes/no question. Why do you think I'm right? 是 open-ended question [It's a question that does not need the answer yes or no. Do you think I am right? is a yes/no question. Why do you think I'm right? is an open-ended question]." On another occasion when a classmate asked what die meant in a math problem, Kelly's reply was, "Die 是 plural。不是一个. 是两个, 三个, 四个 [Die is the plural. It's not one dice; it's like two, three, four die]." In the first example Kelly explained the meaning of open-ended question to her classmates by offering examples, and in the second one she used Chinese to explain the other meaning of *die* and the concept of plural forms. In addition, when Kelly helped her classmates with English and in other subjects, Kelly considered their English and Chinese proficiency in deciding which language to

use. For the children who were not proficient in English but good in Chinese, Kelly would try to translate the English into Chinese and use Chinese to explain the meaning; and for the other children for whom English is the stronger language, she would choose to explain in English to help them understand better. She appeared to be making these decisions based on the strengths that she saw in her interlocutors. She demonstrated not only her dual language proficiency, but also her awareness of the pragmatic choice of a language.

Knowing About China

Kelly's class contribution also indicates her knowledge about China and Chinese people. For example, when Ms. Meng taught the Chinese word for *Tshirt*, Kelly explained in Mandarin that Chinese people also use the English word *T*-*shirt* in China because they know its meaning. In May 2010, when Ms. Meng asked the students to write something special about Canada in their Chinese letter writing to their pen pals in China, some suggested McDonaldsTM. Kelly indicated that that was not a good idea because China has McDonaldsTM. In classroom discussions Kelly also presented her knowledge about ancient China. For example, girls were not allowed to go to school at that time. I asked her how she knew about such things in China, and she replied that she had learned them on her trip to China two years ago with her parents. Anything related to ancient China she had learned from talking with her great-grandmother, who is an immigrant from China and does not speak much English. Kelly was very proud that she was the one person in her family who could communicate best with her great-grandmother.

Interaction With Classmates in Chinese Classes

As I stated earlier, Kelly tended to use Chinese to help Eddie and Jenny, the two ESL children, in English classes. I observed that in Chinese classes, Kelly still preferred to talk to them in Chinese even though they did not seem to need help. Sometimes when Kelly needed help with pronouncing or understanding a certain Chinese word, she would ask Jenny or Anthony. Kelly seemed to prefer to use English in her Chinese classes only when she helped her classmates with their math. She chose to use English if the student she was helping would understand the concept better in English. Ms. Meng often emphasized the need to use Chinese in Chinese classes, but she encouraged the students to help each other no matter what language they used in their interactions.

In the Chinese classroom Kelly sat beside Martin, a boy of Chinese heritage who was born in Canada. Martin's L1 is Cantonese. In my interviews and observation of Martin in class, English seemed to be his primary language and language of comfort. Kelly occasionally had small quarrels with Martin in which they would use both English and Chinese. When they teased each other, Kelly was often more talkative, and sometimes she talked so much that he had nothing to say. However, Martin had two very effective strategies. Their quarrels were often in the Chinese classroom because that was where they sat beside each other. Martin's first strategy was to wait until Kelly spoke an English word in a Chinese sentence, and he would immediately yell, "你说英文了! [You said English words!]" because speaking in English was not encouraged in Chinese classes. Sometimes when Kelly tried to say a sentence without one English word, Martin

would use his second strategy: to tease Kelly's anglicized accent. Kelly often ended up laughing and patting Martin for teasing about her accent. The following example shows how Kelly and Martin teased each other in Chinese.

On December 16, 2009, the students were making Christmas cards in their Chinese language arts class. Kelly and Martin were laughing and teasing each other while cutting the paper. Martin said, "Oh!我这个剪坏了![Oh! I cut this wrong!]." Kelly smiled and said complacently, "所以你要 pay attention 啊! [That's why you should have paid more attention!]" Martin replied quickly, "你说 英文了![You said English words!]" Kelly added, "我已经说了很多英文,因 为我不知道中文怎么说。我是说了英文,可是没办法 [I have said many English words before because I did not know how to say them in Chinese. Yes, I did say them in English, but I had no choice]." Martin then mocked Kelly's accent and repeated the words that she had said. In this example Martin used his first strategy when Kelly said "pay attention" in English. After Kelly argued with him in Chinese without using any English words, Martin used his second strategy by teasing Kelly about her pronunciation of the Chinese words. This episode ended in laughter while Kelly ran after Martin to pat his shoulder. She was learning in these interactions how to tease and have fun while speaking Mandarin. It seems that she and her interlocutors enjoyed playing with languages.

Written Chinese

In May 2010 Ms. Meng asked the students to write letters in Chinese to the students in their sister school in China. They were to introduce themselves to their writing buddies in this letter. I have translated Kelly's letter into English (see Appendix F for Kelly's original Chinese brainstorming web and letter writing

with Ms. Meng's revision):

Hello! My name is Meiling. I am a Grade 5 student at Riverbank School, which is the sister school of yours. I live in Canada. My English name is Kelly.

There are five people in my family: My dad, my mum, my brother, my sister and me. We have two cats and one dog. Their favourite activity is to play and walk with us.

I like to read or play my computer after school. I attend the running club every Tuesday and Thursday. I like pizza and sushi. I enjoy listening to music when I am reading or doing my homework. What about you? What do you do when you are not at school?

I am very smart, and I got high grades at school. Among all the subjects, I like Physical Education the best since I don't need to sit there all the time to write. I am not very good at playing soccer though. I am learning Chinese now. My dad is Chinese, but he was born in America, and I now speak much better Chinese than he does!

I was afraid of spiders when I was little, but I become braver now. I have two best friends at school: Jenny and Carol. I enjoyed joking with them at school. I am a little too serious sometimes though, and I need to relax a little bit more.

Oh! You don't even know how I look like when I have talked this much. You wanna guess? I have short hair in the color of coffee, and eyes in the same color. I have been wearing glasses since grade 3. I am five feet in height.

I talked too much about myself. What about you? What do you like? What are you afraid of? What are you good at? I look forward to your letter.

Kelly (Up)

In this letter, Kelly introduced herself and her life at school and at home in

detail. In the fourth paragraph, Kelly emphasized her Chinese heritage from her

father's side and she seemed very proud of the fact that she speaks better Chinese

than her father. When Kelly signed her name at the end of the letter, she used

something that she had just learned from her classmate Anthony. The word "上

[up]" after her name is a very elegant way of signing one's name in Chinese letter

writing. Anthony had used this in his school project "Letter to Tim," in Chinese language arts class and Ms. Meng explained it to the students. Kelly learned the word and used it in this assignment.

Kelly told me that she wrote this letter based on one of her Chinese writings in Grade 4. At that time, BEA organized a Chinese composition competition at elementary level. The competition required the bilingual students to write a Chinese self-introduction paper entitled "Come to meet me." Kelly's writing won the competition and was published in the BEA newsletter in January 2009 (see the last page in Appendix F).

Kelly's Language and Literacy Practice out of School

Kelly's immediate family has five members: Kelly, her mother and father, and her sister and brother. Kelly is the eldest child in the family. Her sister is 9 and in Grade 4, and her brother is 6 and in Grade 1. Kelly's great-grandmother and aunt on her father's side live in the same city and sometimes visit the family.

The family language is English. Kelly's mother and father speak English with each other and with the children, and the three children speak English most of the time among themselves. All three children were enrolled in the English-Chinese bilingual program at Riverbank School. Kelly told me that she is currently the best Mandarin speaker at home. When her great-grandmother comes to visit, Kelly is the one who speaks the most Chinese with her. In the interview Kelly imitated her little brother's Chinese words in greeting Great-Grandma and teased that he "only could say 'Hello, Great-Grandma' in Chinese." Kelly's aunt's Mandarin is better than that of Kelly's father, and she sometimes asks her aunt for help in learning Chinese. Kelly actively searches for Chinese interlocutors with whom she can speak to improve her Chinese.

When doing her Chinese homework at home, Kelly often used her online Chinese-English and English-Chinese dictionary (Appendix G). Kelly could type in either an English word, the Pinyin form of a Chinese word, or a Chinese character, and the online dictionary would then provide the according translation and meaning in another language. Kelly also called her classmates such as Jenny and another girl named Carol (Kelly mentioned her in her Chinese writing) for help when she had questions in her Chinese assignments.

In the interview Kelly's father told me that she often taught Chinese to her sister and brother at home. Kelly would like to become a teacher in the future, and her siblings are perfect students for her "practice teaching." Her siblings are learning more Chinese and like to play along with Kelly in this teaching game. Kelly's father told me that he once found the children were playing the game "是 不是 [True or False]" in Chinese. In this game each child thinks of a statement in Chinese and writes it down on a piece of paper (such as "noodle is growing in a tree"). Then they take turns reading their Chinese sentences and ask the listeners to decide whether the statements are right or wrong. They used the Chinese language in the game, and Kelly was in charge of explaining to her little brother why his answer was right or wrong. When I talked with Kelly's mother about this, she said that she was surprised that they practiced Chinese at home. She recalled her experience in French immersion and told me that at home she spoke only English with her siblings, except for some secret talking in French when they

wanted to discuss something behind their parents' backs. She also mentioned that neither Kelly nor her sister had received an A in Chinese language arts before Grade 3; however, Kelly's little brother was doing well in Grade 1 and had received an A in his Chinese class. She assumed that this must have something to do with his two big sisters' help with Chinese at home. Therefore, in the home context Kelly and her sister were working as more capable others in helping their little brother with his Chinese learning.

I asked the students to take some pictures at home of things that they regarded as language and literacy. Among Kelly's pictures is a birthday card (Figure 7 and Appendix H) that she made for her father in both Chinese and English.

亲爱的爸爸,	
今天是你的四十二的生日,祝你生日快乐	:!
我爱你!	
	美玲上
Dear Daddy,	
Happy Birthday! Year 42!	
	Love,
	Kelly
	Keny

Figure 7. Kelly's birthday card for her father.

The Chinese words have almost the same meaning as the English. This very meaningful and purposeful act demonstrated her biliteracy. In writing the card, Kelly used both her Chinese and her English names and again she used the word " \pm [up]" after her Chinese name.

When she was in Grade 3, Kelly visited China with her family for a few weeks. She was the interpreter or language broker for the whole family. She interacted with the local people and even tried bargaining in the market. According to Kelly's teacher and parents, this trip encouraged and motivated her, and she made incredible progress in Chinese the following year. As I mentioned, some of Kelly's knowledge of China and the Chinese people stemmed from this trip, and in our interview she described many interesting things that had happened. Although it had been two years since she visited China, the trip was very memorable for her. She was drawing on her experiences as a resource for her continued learning.

In one of Kelly's English assignments the students were asked to list 50 things that they wished to do in their lifetime. One of Kelly's wishes was "to organize a class trip to China." When I asked why, she told me that in China she found that interacting with local people was very useful to her Chinese learning, and she wished that she would have interacted more with them. Thus she wanted to arrange a class trip to China so that the students could study with the local students for some time. Later in the term, when Kelly discovered that Riverbank School was setting up a connection with its sister school in China to promote students' interactions internationally, she was very happy because it meant that her dream might come true. Kelly saw herself as a part of a bigger Chinese community than just her school and seemed very pleased to be able to connect with a larger Chinese world. It seemed she wanted to explore her Chinese self in this larger world.

Kelly and her family volunteer in many events organized by BEA, the Chinese bilingual education association that I introduced at the beginning of this chapter. In 2009 BEA organized fundraising activities for a week-long trip to Canada for 18 Sichuan children who had been orphaned in the earthquake in China. The organization called the event "Hope and Happiness." When I volunteered for it, I saw Kelly and her parents, who also worked as volunteers. Kelly was assigned three Chinese girls as her buddies in this event, and she worked very responsibly to take care of them during their trip here. The volunteers were encouraged to speak Chinese to the visitors, and Kelly tried very hard to speak as much Chinese as possible with her buddies. Because I was there too, she asked me for help when she was not able to find an appropriate Chinese word.

A local television station also interviewed Kelly during the Hope and Happiness event and asked for her thoughts on working as a volunteer. Kelly said, "I am luckier than them. I still have my parents and everything. I want to make them happier. I want to be part of making them happier." Again, she considered being able "in Chinese" as contributing to a larger Chinese community.

When we talked about this volunteering experience in our interview, Kelly told me that both of her parents are members of BEA, and the family often took part in its activities. She said that she wished that she knew more Chinese to talk with the participants in the Hope and Happiness event. She was also looking forward to this year's event, Hope and Happiness II, in which BEA will host another 18 orphans from China. Several other Grade 5 children from this class also volunteered for or became involved in BEA activities. The current president is the parent of a child in Kelly's class, and Kelly told me that every time she participates in BEA activities, she meets some of her classmates or schoolmates. The BEA events also offer English-Chinese bilingual children and their parents opportunities to communicate with each other out of the school context.

Summary

To conclude, Kelly's English classroom contributions and sample assignments demonstrate that she was a skillful English-language user. She was also a very enthusiastic and successful Chinese language learner. Having to use the Chinese language does not deter her from expressing complex and critical ideas in Chinese as she does in her English classes. She demonstrated her bilingual knowledge and skills in getting meaning and in helping her peers. She also had enrichment experiences of using both English and Chinese out of the school context.

I am not suggesting that Kelly represents all English speaking children in this program. There were other English speaking mixed-marriage children in Kelly's class who were not as successful as she was and struggled more with learning Chinese, although, according to Ms. Meng and my observation, they too were making good progress. I have discussed Kelly's learning endeavours here as one example of a very engaged L2 learner. She was exceptional at staying focused on her new language.

CHAPTER FIVE: JENNY: "MY CHINESE BOOK IS SO MUCH THICKER THAN MY ENGLISH ONE"

Personal Background

Jenny joined the Grade 5 class in October 2009. In July she and her parents came to Canada from Tianjin, a medium-sized city near Beijing in mainland China. Ten-year-old Jenny is the only child in her family. Her mother told me that the family immigrated to Canada mainly for business and educational reasons.

Conversations with Jenny and her parents gave me some background information about her experience before she began to attend Riverbank School. Jenny was one of the top students in her class in China. Not only was her academic achievement high, but she also did well in many of her areas of interest such as drum and piano playing and the martial art taekwondo. She is a very easygoing and active girl and had a lot of friends in China.

After arriving in Western Canada, Jenny's parents enrolled her in an elementary school with a regular English program. They told me that they had heard of English-Chinese bilingual programs but did not seriously consider them at the time. Jenny's mother said that Jenny came to Canada knowing about 100 English words and with Grade 5 Chinese language proficiency; therefore, the parents wanted her to learn English as quickly as possible and as much as possible. They believed that half-day Chinese classes every day seemed unnecessary and even a waste of time for Jenny. Jenny enjoyed her first two weeks at the new school. She was happy to share the interesting things that happened at school with her parents. She told them that she communicated with her classmates by gestures and body language. However, changes were evident later. Jenny spoke less and less after school and was reluctant to go to school. When her mother asked why, she said that she had no friends at the new school because nobody was patient enough to communicate with her in gestures. Jenny's mother noticed that when she picked her up, Jenny was often alone and had nobody to play with. Jenny missed her friends back in China and wrote to them through e-mail. Her mother told me that one day after Jenny read an e-mail from one of her friends, she silently and sadly sat bent over her table for a long time. "I felt her pain and loneliness at that time, but I had no idea how to help her," Jenny's mother recalled.

Jenny's mother shared one of Jenny's negative experiences at school with me. One day in the classroom as the students were lining up for a game, several naughty boys teased Jenny by jumping in front of her. The first few times that this happened, she said nothing and yielded her position to them. The boys continued, and when Jenny could stand it no longer, she refused to yield and argued with the boys. Hearing the noise, the classroom teacher asked the children what had happened. Because of the language barrier, Jenny could not make herself understood. The teacher believed what the boys had said and told Jenny that she should follow the rules and wait for her turn. Jenny went home and cried. She asked her mother to explain to the teacher that she did obey the rules. When I visited Jenny's home, I saw a picture (Appendix I) that Jenny drew based on this experience. In this picture, there is a girl with an angry face and long hair bristled in the air. Jenny also wrote in the picture "气死我了 [I am angry to death]" with nine exclamation marks.

Seeing Jenny becoming more and more lonely and frustrated at school, her mother was worried and asked other immigrant families for suggestions. One person suggested an English-Chinese bilingual school. Considering that Jenny could make friends with Chinese-speaking children at the bilingual school, her parents contacted Riverbank School, which is the nearest bilingual school to their home. After they visited Riverbank School and talked with the principal and the Grade 5 teachers, Jenny's parents decided to transfer her to this bilingual school immediately. In October 2009, after one month in the regular English program, Jenny joined the Grade 5 bilingual class at Riverbank School.

My first conversation with Jenny occurred during her first library time at Riverbank School that month. Every Monday the Grade 5 students had 30 minutes of library time. They would borrow one English and one Chinese book, read them for a week, and return them to the library the next Monday. During her first time in the library Jenny picked a Chinese chapter book and an English picture book. The Chinese book was a novel of about 200 pages, and the English one, *No Tooth, No Quarter*, was a picture book of fewer than 20 pages about the story of tooth fairy. Having noticed that I was looking at her chosen books, she smiled and said to me, "别人都是中文薄, 英文厚, 我的中文书比英文书厚那么 多. [Most of the students chose thick English books and thin Chinese books; however, my Chinese book was so much thicker than my English one]." We then talked in Chinese about these two books. She asked me the meaning of the word *quarter*, and I explained it and told her the story of the tooth fairy because she had not heard it. I was reminded how cultural based literacy is as we need to know the stories behind the text and these are not common to all languages.

Jenny's Language and Literacy Practices at School

Jenny in English Classes

Receiving Help

In talking with Jenny and her parents, I learned that Jenny had not received any formal English education in China. The school she had attended offered voluntary English lessons as an after-school program once a week, and she learned some simple English words such as *table*, *chair*, and *book* in that program. Given her very limited exposure to English, Jenny found Grade 5 English class at Riverbank School very challenging. During her first few days in her English classes, Jenny kept yawning and turning back to check the time on the clock hanging on the back wall of the classroom. She seemed bored and reluctant to become involved in the classroom activities.

Riverbank school has ESL support for newcomers, and Jenny immediately received help in different ways. Three ESL programs were provided for Jenny. First, she joined three other ESL children in the class and took the ESL tutorial that Mr. Peterson instructed. The ESL students were pulled out of their regular classes to strengthen their English twice a week for 30 minutes. This ESL tutorial involved mainly reading of the levelled reading materials, and they then discussed the reading. Second, Jenny was also supported by another ESL teacher, Ms. Zeng, who visited Ms. Mackey's science class every Wednesday morning for 30 minutes and worked with the four ESL children at a table at the back of the classroom to help them with science. Ms. Zeng is trilingual in Mandarin, Cantonese, and English, and thus she could use the ESL students' mother tongues to help them learn the subject matter. She often spoke Mandarin with Jenny in the science classes, translated Ms. Mackey's instructions for Jenny, explained in Mandarin the science concepts that Ms. Mackey was teaching, and helped her with the assignments. Third, Ms. Zeng also held another ESL pull-out session for 20 minutes with the four Grade 5 ESL students. In this session she would speak the students' mother tongues to explain concepts from the subjects taught in English, such as science, social studies, and English language arts, and answer the subject-related questions that the four students asked.

In addition to the three formal support systems, the Grade 5 teachers assigned a student helper to sit beside Jenny to help her to learn English. During the first week Jenny worked with a girl named Gloria. One day during lunch time, I heard the three Grade 5 teachers discuss Jenny and Gloria. They felt that this pairing did not seem to work well because Gloria was somewhat reluctant to show Jenny her own work. The teachers decided to assign another girl, Suzy, to sit beside Jenny as her helper. I observed Suzy and Jenny getting along very well and becoming very good friends by the end of the term. As I mentioned earlier, Kelly was also always willing to help Jenny, as was Anthony, who sat on Jenny's other side. When she helped Jenny, Suzy seemed to try very hard to use as much Chinese as possible. When she did not know how to say a word in Chinese, she would use English to negotiate the meaning with Jenny. For example, when Jenny asked Suzy what an *attic* is, Suzy did not know the Chinese words for it and said, "Like, like a house . . . " Jenny still did not understand, and the two girls asked Anthony, who translated the English word into Chinese for Jenny. Considering that Jenny received help in so many different ways, Riverbank School was a very supportive environment for her language and subject learning and she made impressive progress, which I will discuss later in this section.

In her English class Jenny often used Chinese to ask Suzy for help when she had questions, and Suzy would explain in Chinese the concepts that the teacher was discussing. Mr. Peterson sometimes reminded Suzy to help Jenny in other ways as well. For instance, he would say, "Suzy, show your notes to Jenny, please" or "Suzy, explain this in Chinese to Jenny. It is very important." When I asked Jenny about Suzy's assistance, she said, "It's so helpful. She could tell me the Chinese meaning, and I then understood it immediately. It's not like in the previous school, I used gestures, guessing, . . . and still I didn't get it." Comparing her experience in the regular English program with the bilingual program, Jenny felt that Mandarin was playing an important role in her English learning.

During the first few weeks the girls used mainly Chinese in their conversations, but as Jenny's English improved, she began to use more and more English words when she talked to Suzy. Suzy, however, used as much Chinese as possible. For example, on February 23, 2010, in science class, Jenny approached Suzy's group to borrow a pair of scissors. Jenny pointed to the scissors and said to Suzy, "Can I use this one?" Suzy held the scissors and replied, "No, 我们正在用 [No, we are using them]." On May 19, 2010, the students were working on a science project in the computer lab, and Suzy reminded Jenny that "你做这个要 写这个在上面 [You need to write this here on the working sheet]." Jenny replied, "Oh, I know." These examples show that both Jenny and Suzy preferred using their partner's primary language in their communication. In a later interview with Suzy's mother, when I praised Suzy for helping Jenny, her mother said to me, "Suzy's Chinese improved a lot too in helping Jenny. We should thank Jenny as well." It seems that the interaction between the two girls gave them an opportunity to practice their comparatively weaker languages, and it became very apparent that this was a benefit of this dual language program.

Jenny also worked very closely with Ms Zeng, her ESL teacher helper. One day in Ms. Meng's math class, Jenny actively shared problem-solving strategies in Chinese when Ms. Zeng arrived to take a child out for an ESL session and asked whether the other ESL students had questions for her. Jenny stopped and said eagerly, "我有, 我有! [I have questions! I do!]" and she quickly took out her English science book and went with Ms. Zeng. Just before she closed the classroom door, she said to Ms. Meng, "孟老师等我回来讲我的 strategy [Ms. Meng, please wait for me to talk about my strategy later]." Ms. Meng smiled and assured her in Chinese that they would wait for her. Jenny was very good in math and often enjoyed solving math problems with her classmates in Chinese, but when Ms. Zeng came, she chose to leave the math class with Ms. Zeng. This shows that even when Jenny was doing something she liked very much, she would like to stop and work with Ms. Zeng to solve the problems she encountered in her English classes. It also indicates that Jenny was very clear about the problems and confident that Ms. Zeng's help in Chinese could help her to solve these problems.

In her English classes, if Ms. Zeng was not available, Jenny sometimes asked me to explain the concepts or translate some unfamiliar words. For example, in a science class, when she was writing a report on electric circuits, she asked me in Chinese, "孙老师, 更亮怎么说? 坚固怎么说? [Ms. Sun, how do you say *brighter* and how do you say *stable* in English?]" Both the English and the Chinese classrooms had English dictionaries, Chinese-English dictionaries, and English-Chinese dictionaries, and Jenny sometimes used them to look up the words she needed.

Jenny and her helpers frequently and significantly used Chinese to help her to adjust to life in the Grade 5 bilingual classrooms. She seems to have relied heavily on the academic knowledge that she had already gained in her L1 to help her to acquire knowledge in her L2. It was useful and efficient for someone to help her transfer the knowledge from her L1 to L2 by using Chinese in their interactions. In Cummins' (1981) terms, Jenny was definitely tapping into her common underlying proficiency.

Progressing in Classroom Participation

During my observation in the classroom over the school year, I witnessed Jenny's progress in English language learning. The kinds of support that she was receiving in her classrooms and the school helped her to greatly improve her language learning. Given that Jenny knew very little English at the start of the year and seemed not to understand much of what was being communicated in English during the first few weeks, her changes and growth over the year were very obvious. She gradually became more and more confident in the English language, and by the end of the second term in June, Jenny had become one of the most active participants in the English classes.

During the first few weeks, as a novice learner, Jenny seemed to focus on understanding her English teachers' instructions. She often showed her agreement or disagreement by nodding or shaking her head. Sometimes she would act according to the teachers' instructions without saying anything. For example, one day, on hearing Mr. Peterson say "Jenny, go wash your hands, please," she quickly went to the sink and did so without saying anything. Later in the English classes Jenny began to participate by raising her hand when the teachers asked questions such as "How many of you watched the news last night?" In my classroom observation the first time that Jenny put up her hand in response was in Mr. Peterson's science class on November 9, 2009, when they were discussing resources in Canada.

Mr. Peterson asked, "Anyone who doesn't like fish?" Several students raised their hands, and after a couple of seconds of hesitation, Jenny raised her hand too. Mr. Peterson immediately noticed that Jenny had her hand up and said to her, "Oh, Jenny, you don't like fish." Jenny answered, "Yes." Mr. Peterson seemed a little confused and said, "Oh, you do like it." Jenny seemed confused too and answered in a low voice with hesitation, "No, I . . . ," and she stopped. As a native speaker of Chinese, I realized the misunderstanding between Jenny and Mr. Peterson. In Chinese, people tend to affirm or negate a whole statement by saying "Yes" or "No." Therefore, on hearing Mr. Peterson's statement "Oh, Jenny, you don't like fish," she answered affirmatively, "Yes," to indicate her meaning: "Yes, Mr. Peterson, you are right. I don't like fish." However, as a native English speaker, Mr. Peterson must have assumed that Jenny affirmed the verb *like* in the sentence "Oh, Jenny, you don't like fish" and that Jenny's answer, "Yes," meant that she did like fish. This demonstrates that Jenny's L1 interfered with her understanding in L2. Although this negotiation about whether Jenny liked fish or not was not very successful, this example indicates that Jenny seemed ready to participate in English classes and was willing to talk out loud to the whole class.

Gradually, Jenny became more and more eager to participate in English classes. Sometimes she was so eager to participate that even when she was asking Suzy questions, she would keep her hand up to make sure that Mr. Peterson knew that she was willing to answer the next question. She began to participate in all kinds of tasks and speak more and more in English. On November 23, 2009, Mr. Peterson was talking about writing and editing and asked, "Who has to look at your writing?" Jenny raised her hand and said, "Anthony, Suzy, teacher." She directly referred to the names of her helpers. When she explained abstract ideas, she would sometimes apply strategies to make herself understood with her limited English vocabulary. On December 7, 2009, when Mr. Peterson asked her the meaning of *evaporation*, Jenny said, "The water, and then the snow, and then" Mr. Peterson affirmed Jenny's answer: "Actually, she is right: a change from liquid to solid. Thank you, Jenny! A round of applause for Jenny!"

The whole class then applauded Jenny, and she smiled and bowed to her classmates. She was very happy to have successfully explained evaporation by using simple words and using the example of water to snow. This also demonstrates that Mr. Peterson recognized Jenny's efforts to learn her new language and solicited support for her from the whole class. Krashen (1981) stated that the best language acquisition occurs in the environment in which the "affective filter" is low. In other words, learners learn best when they feel relaxed and unthreatened. The above examples show that the Grade 5 class was a very supportive community with a low affective filter to improve Jenny's language learning and classroom participation.

During my observation Jenny began to produce complete sentences in her English classes beginning in December 2009. She used her BICS in English in her classroom interactions. For example, in science class she asked questions such as, "Ms. Mackey, can I have a battery?" or "Can I use the coloured paper?" On March 1, when Mr. Peterson's English language arts class discussed the Vancouver Winter Olympics and the stereotyping of Canada in the closing ceremony, Jenny seemed to understand the topic, and when Kelly asked, "Then what is real Canada?" Jenny raised an interesting point: "Canada is cold." On May 17, 2010, in her social studies class, when Mr. Peterson asked, "Why do you think Vancouver has the biggest Chinese population?" Jenny answered, "Maybe it's because . . . like me, I live in Tianjin, then from Beijing, we can only go to Vancouver." Tianjin is the city in which Jenny used to live in China, and she answered this question based on her own experience as an immigrant. She thought
that Vancouver is a more convenient place for Chinese immigrants to visit because there are direct flights from Chinese cities. Mr. Peterson understood Jenny's meaning and said, "Yes, you have a direct flight from Beijing to Vancouver, and you think 'Oh, maybe I'll just stay here.""

On May 17, 2010, Jenny participated in a discussion in which Mr. Peterson's class compared English and Chinese. When he explained that *on* and *off* in a circuit mean *opened* and *closed*, respectively, one student noted that, in Chinese, putting the words *opened* and *closed* together creates a noun that means *switch*. Jenny added that, in Chinese, in saying "Close the door" and "Close your mouth," people actually use different verbs to convey the meaning of close. Mr. Peterson seemed very interested in Jenny's comments and imitated her pronunciation of the Chinese words for "Close your mouth" several times. Jenny smiled and, with some of her classmates, corrected Mr. Peterson's Chinese pronunciation. Her meta-linguistic awareness in two languages was helping her to make cross-linguistic comparisons to better understand the use of English words.

As Jenny acquired more English and became more comfortable and confident in her use of the language, she became more willing to participate in textbook reading activities. Mr. Peterson often asked for volunteers to read a paragraph from the textbook to the whole class, and Jenny would raise her hand, even though she might encounter some unfamiliar words as she read. By comparison, in this class other ESL children seemed reluctant to read in English to the whole class. Jenny's willingness to volunteer to read aloud stood out among the ESL students. I asked Mr. Peterson about this, and he told me that he believed that Jenny is a high risk taking language learner and that she learns English faster than do the other ESL children in this class. Her affective filter in the class atmosphere was low enough that she could take risks without fear (Krashen, 1981).

Every Monday Mr. Peterson asked his students to share the news that they had watched or something interesting that had happened to them over the weekend. This activity required comparatively high proficiency in oral English for the students to be able to express their ideas. On a Monday in January 2010, Jenny reported that she had won a taekwondo competition over the weekend. She began to practice taekwondo five years ago in China and had already been awarded a black belt (the highest level). She practiced taekwondo three times a week after she came to Canada. Mr. Peterson then encouraged Jenny to show her classmates her father's videotape of the competition and to talk more about taekwondo. Jenny happily agreed, and the next day she brought the videotape of the competition that she had just won. Mr. Peterson helped her to set up the smart board for the video, and she stood beside it in front of her classmates. As the video played, she gave the class background information such as the rules of the competition and the grade of each taekwondo player's belt. The class members were very interested in the video and would exclaim "Wow!" or "Cool!" when Jenny hit a player successfully and won points. They asked questions, and Jenny tried her best to answer in English. Mr. Peterson also clarified meanings when Jenny encountered difficulties in communicating her ideas. The students were interested in the topic, and at recess time they asked her questions in both Chinese and English. Later in our interview, Mr. Peterson told me that the main reason that he had encouraged Jenny to show the video was to help the other students to know her better and thus make her feel more of a community member in this class. From his earlier experience in an inner-city school, Mr. Peterson believed that a sense of belonging is crucial for minority children and that it helped Jenny as a newcomer to this class to feel "more legitimate" (Lave & Wenger, 1991) as she engaged in the C of P.

Another example of Jenny's participation in news sharing occurred four months later on May 17, 2010. She shared her volunteering experience in Chinatown on the weekend at a fundraising event that the BEA had organized to collect money to bring another group of Chinese children orphaned in the earthquake to Canada. Jenny wrote Chinese calligraphy and sold the texts that she wrote at this event. She described her experience at the event in English for a couple of minutes without help from her classmates or Mr. Peterson. Mr. Peterson and other students attended this event as well, and after Jenny's discussion, the whole class discussed the volunteering experience. This is another example of Jenny's participation in class based on her out-of-school experiences. With regard to her progress in oral English, when she discussed the fundraising event, she used many more English words and more complex grammatical forms than she had only a couple of months earlier when she shared her taekwondo news. She also appeared much more confident in her ability to get her meaning across to her classmates.

It was also interesting to note that Jenny coughed while she was sharing her volunteering experience and immediately said "Excuse me" before she continued. I noticed she did not have this manner when she just came to the class, which was understandable to me because we don't use this in Chinese culture to show the same etiquette. She was able to recognize more Canadian cultural patterns and incorporating them into her increasing use of the English language.

Requiring Information

When Jenny had questions in class, she often found the answers by asking her teachers or her student helpers. For example, she asked about the usage of the feminine *la* and masculine *le* in French class in December 2009, as I discussed earlier. On another occasion in February 2010, the students discussed a project, a survival manual, in Mr. Peterson's class. The assignment required that they design a manual for the survivors of an accident such as an air crash who try to stay alive on an isolated island. Mr. Peterson explained that there are several ways to test food, such as "rubbing the food on your skin," "rubbing it on your gums," and "leaving it on your tongue for 30 minutes." Jenny asked Suzy about the words with which she was not familiar, and after she understood, she raised her hand and asked Mr. Peterson, "You test it; then what do you do?" Mr. Peterson answered, "Good question! If something fails the test, then what do you do? Don't eat it." Mr. Peterson continued his lecture, but a couple of minutes later Jenny raised her hand and asked again, "When you test something and you can't eat it, what do you see ...?" Mr. Peterson realized that Jenny might not have understood his answer or that he might not have understood her meaning, and with a confused

expression on his face, he said, "You find something else?" Jenny replied, "I know, but what do you see when you can't eat it?" Mr. Peterson realized what Jenny was asking and said, "Oh, good question, Jenny! You can see warming signs such as itchy skin, bumps, and redness." Jenny nodded and made notes in her notebook. This example illustrates Jenny's negotiation of the meaning with Mr. Peterson to gain the information that she needed. She asked the question three times and worded each question differently to help Mr. Peterson understand what she meant; she was using questioning as a strategy or tool to clarify the meaning. Jenny finally gained the information that she needed and made a PowerPoint slide on the warning signs of dangerous foods for her survival manual assignment.

When Jenny worked with the other ESL children in class, she was the most active in asking Ms. Zeng, the ESL teacher, questions. She often spoke Mandarin with Ms. Zeng to clarify academic concepts, which Ms. Zeng translated from English to Chinese. Jenny also asked questions about the meanings and spellings of English terms or asked for the English translations of Chinese words. As an English-Chinese bilingual, Ms. Zeng's transferring of Jenny's academic knowledge in Chinese into English seemed very helpful to Jenny.

For example, on December 9, 2009, Ms. Mackey was talking about electric circuits in science class. Ms. Zeng worked with the ESL children at the back table, and while Ms. Mackey explained open and closed circuits and the electric circuit diagram with a bulb, a bulb holder, a battery, a battery holder, and wire, Ms. Zeng translated the terms and concepts for the ESL children. Ms. Mackey would sometimes confirm with Ms. Zeng at the ESL table that the children understood the lesson. When Ms. Mackey asked, "What are the ways to make the bulb go out?" Ms. Zeng translated the question into Chinese and asked the ESL children. Having understood the question in Chinese, Jenny raised her hand and answered in English, "No wire." "Oh, you have to have the wire, my dear!" Ms. Mackey replied. Jenny then said, "No battery," and Ms. Mackey affirmed her answer: "Yes, you can take out the battery." She then asked the students to write a paragraph to describe the circuit route. Ms. Zeng left before they had finished this assignment, and Ms. Mackey worked with the ESL group. To make sure that Jenny understood the concept, she said, "Let's label the words for you," but Jenny replied, "I don't need it." Ms. Mackey looked surprised and said, "You sure?" Jenny pointed to the blackboard and said, "Yes, it's there." On the blackboard was a diagram of an electric circuit with components such as *bulb*, *wire*, and *battery* labelled. Ms. Mackey had drawn the diagram when she explained the circuit a few minutes earlier, and Ms. Zeng had translated and explained it to the ESL children. When Ms. Mackey realized that Jenny had grasped the concepts and did not need her help, she smiled and praised Jenny: "You are learning very quickly, dear!" Jenny smiled and answered, "Thank you!"

After Ms. Mackey left the ESL group, Jenny continued to work on her description of the electric circuit, and when she wrote the last word, she happily exclaimed "Done!" She seemed pleased to have accomplished this literacy task by drawing on what she now knew orally in both languages. She began to look at the other ESL children's work and offered one of them help with spelling: "No, *bulb*, b-u-l-b, not b-l-u-b. *Stop*, not *step*." She seemed to be unsure whether the child had understood her, and she switched to Chinese: "停止, 一步, 拼错了 [Stop, Step—you spelled it wrong!]" It was evident that Jenny successfully learned the concept of an electric circuit with the help of Ms. Zeng. She already had some knowledge of electricity in Chinese, and Ms. Zeng's help in her mother tongue assisted the knowledge transfer from Chinese to English. Jenny was also willing and open to assisting others in the group as a helpful, contributing member of this community.

Self-Talk

Through self-talk Jenny produced more and more common English colloquial words that her classmates used. In November 2009, by talking to herself, she began to produce phrases such as "Oh, my Gosh!" "Oh, wait!" and "What the heck?" It is interesting that she sometimes used both Chinese and English in her self-talk. One day in May 2010 in Ms. Mackey's science class in the computer lab, Jenny was working on a project with her classmates. She talked to herself frequently while she typed on the computer and produced phrases such as "Oh, wait!" "Again?" "What the heck?" and "哎呀! [Oh, dear!]" On another occasion, in February 2010, while Jenny worked on a science assignment with another ESL child whose native tongue was also Mandarin, they code-switched between English and Chinese while they worked. When they finished it, Jenny was very excited and said, "对! [Yes!], Good! *Tr à bien*! [French: Very good!]" She had said "Great!" in three languages, including the phrase that she had just learned in her French class. This kind of mimicking and self-talk demonstrates her active approach to learning.

Written English

About six months after the unsuccessful negotiation between Mr. Peterson and Jenny with regard to "fish liking," on May 17, 2010, a similar affirmation/ negation incident occurred in the class, and this time Jenny used the rule correctly in English. Mr. Peterson asked the students to talk about the language arts assignment that they had just finished. This assignment required the students to design a museum and write a description of the features and exhibits in the museums that they had designed. When Mr. Peterson asked who would like to talk about their museums, Jenny raised her hand and volunteered to read her description. She had designed a museum about the Three Kingdoms, which is a period in Chinese history when China was geographically divided into three kingdoms controlled by three kings. After Jenny read her description about her museum, Mr. Peterson praised her design: "Really good! I will definitely go to see it!" Then he discussed the history of the Three Kingdoms: "Well, Jenny told us the story of Three Kingdoms. It looks like it is not a positive history." Jenny shook her head and said, "No." Mr. Peterson then asked, "Does it involve a lot of wars?" Jenny answered, "Yes." She used the affirmation/negation correctly to express her meaning, especially in answering the first question. She said "No" to negate the verb is instead of saying "Yes" to affirm the whole sentence in the Chinese way as she had six months before. This Three Kingdoms assignment also showed Jenny's progress in her written English. Figure 8 depicts the web that Jenny used to plan the exhibit for her museum, a compound sentence that she

wrote to describe her museum, and a five-paragraph description of the exhibit that she designed. (Jenny's original writing is in Appendix J.)



Name of Museum: Museum of China's History Stories

Figure 8. Jenny's brainstorming web for her museum design.

One Compound Sentence:

There is three king controls three kingdom, is Wu, Wei and Shu, the three kings is Cao, Sun Quan, and Liu Bei, then they all belong to Jin (Si Ma Yan).

Five-Paragraph Description of the Museum:

Once you want to know Chinese History Stories, of course you have to come to my museum. My exhibits tells you about the three kingdom's story.

The first show is in front of you. A map of China when it's the period of the three kingdoms. Chinese map is just like a rooster. The rooster's tail is belong to Shu, rooster's stamuch and feet are belong to Wu, and the rest of the rooster is belong to Wei. Then you go to right. I got you the second show. My second show is the three gold person—the three king! Cao Cao, the king of Wei, Liu Bei, the king of Shu, and Sun Quan, the king of Wu.

When you were tired, sit down and watch a movie—the biggest war in the story.

After you watch the movie, another gold person—Si Ma Yan, will come out, and he will become the king of China.

Although there are grammatical errors and spelling mistakes in her writing, Jenny obviously made great progress in her English learning in the six months that she had been in Canada. Mr. Peterson praised her for this assignment and used her Three Kingdoms story later when he talked about Canadian history and the unifying of the regions in social studies class. When I asked Jenny how she arrived at the idea of designing the museum of the Three Kingdoms, she told me that she knew the story very well because she had read the Chinese classical novel Three Kingdoms several times before she came to Canada. The book is regarded as one of the four most influential masterpieces in Chinese classical literature. Jenny had read all four masterpieces, and *Three Kingdoms* was her favourite one. Based on my understanding of Chinese children's literacy reading, Jenny was at a very advanced level in Chinese literacy for her age. She obviously read Mandarin very well to have read these texts and was now able to write about them in her L2. This supports Cummins' (1981) bilingual-education interdependence hypothesis because in this assignment the reading and writing skills that Jenny had developed in Chinese increased her literacy-related proficiency in English.

According to Ruiz (1984; as cited in Baker, 2006), people have three basic perspectives on language: language as a problem, language as a right, and language as a resource. In talking with Jenny and her parents about her experience in her first regular Canadian English program, I believe that Chinese, as Jenny's heritage language, might have been a problem or an obstacle to her school learning and daily communication with her classmates. However, in designing the museum of Three Kingdoms, Jenny seemed to view her Chinese language and Chinese background as a resource or an asset, and she used this resource effectively in the assignment.

In a conversation with Mr. Peterson about Jenny at the end of the academic year, he said that he believed Jenny had made great progress over the year considering that she had come to this class with almost no English. He assessed Jenny as at a Grade 4 and almost a Grade 5 English level after this one year. He told me that he had talked about the possibility of putting Jenny into the AC program next year, but that the only thing that he was concerned about was her academic English vocabulary, which needed to improve continuously in the coming year. From Jenny's class participation and sample assignment, it was obvious that she had developed both her BICS and CALP in English in her academic learning over the year, but that her CALP still needed to improve, as Mr. Peterson had observed.

Jenny in Chinese Classes

An Expert and Helper

As a native Chinese speaker who had lived in China for 10 years, Jenny had a much higher level of Chinese-language proficiency than that of her classmates. She was very active in Chinese classes from the first day that she arrived at Riverbank School. She participated in classroom activities, worked as a leader in group projects, and helped her classmates to learn the Chinese language and math. Jenny also worked well in her math class. In our interview she told me that the math content that she had learned in China was much more difficult than that in Canada, and she felt that the Canadian math textbook was "too easy" for her even though it was written in English.

In Chinese language arts class Jenny often served as a language expert for her classmates. When they sang Chinese songs, she was familiar with most of the songs that Ms. Meng chose, and she could sing some without looking at the lyrics that Ms. Meng had printed out for them. Her classmates often asked her for the pronunciation of some words. In new-word dictation, she received full marks almost every time, and she often offered to help test the other students and correct their writing of characters before each dictation. When the students asked Ms. Meng the meaning of difficult Chinese words, Ms. Meng would sometimes say, "Jenny might know this. Let's have Jenny talk about it first." Jenny then would explain the words in detail for her classmates, and she often elaborated by giving examples. It was obvious that Jenny enjoyed these moments to "show off" her Chinese knowledge. When the students asked questions about how to write certain Chinese characters, Jenny often volunteered to demonstrate the writing on the blackboard in front of the whole class. Ms. Meng assigned Jenny as the official helper to two children, John and Leo, who were learning Chinese as a L2. Their Chinese was not as good as that of many in the class, and neither of them came from homes where Chinese was spoken, so they did not have that resource to draw on. In December 2009 Jenny helped John and Leo read a whole article

from their Chinese textbook, which was a very challenging task for them, and Ms. Meng told the class about this very excitedly. John and Leo then read the article together in front of the class, who applauded them after their reading. Ms. Meng thanked Jenny and gave her a sticker for her help. Again, Jenny demonstrated her willingness to be a helpful participant in this classroom community.

In math class Ms. Meng sometimes asked the students to share their problem-solving strategies. Jenny often had more than one way to solve a problem, and she was eager to share her strategies by saying, "我还有一个 strategy [I have another strategy to share]." Sometimes when she shared her strategies, she spoke too fast for her classmates to follow, and Ms. Meng would ask her to slow down. Jenny could often solve a problem in a way that went beyond Ms. Meng's requirement. For example, on November 30, 2009, the class was learning two-digit division, and Ms. Meng asked the students to leave the remainder in the answer (such as: $52 \div 25 = 2 \dots 2$). Jenny asked Ms. Meng if she could use a decimal ($52 \div 25 = 2.08$), and the teacher replied that the class had not learned decimals yet, but that she could challenge herself by using one.

Jenny often offered to help her classmates with their math. Suzy was Jenny's helper in English classes, and they worked together in Chinese classes as well, but in math class Jenny became Suzy's helper. From the C of P perspective, Jenny played a dynamic role in the English and Chinese class communities. She was an "apprentice" and learned from Suzy in English classes, while in Chinese classes, she acted as a "master" to help Suzy with her Chinese and math.

Talking About Chinese Culture

Ms. Meng often discussed topics related to Chinese culture with the students, and Jenny made many contributions to these discussions based on her life experience. For example, on November 9, 2009, Ms. Meng dictated the vocabulary in language arts class, and one of the words in the dictation was "中国制造 [made in China]." The students then talked about the fact that many things were made in China nowadays. Ms. Meng said, "如果考虑出生地的话,我就是中国制造 [If we consider the birth place of people, I am a 'made-in-China' person]." Jenny quickly added, "我也是! 我是天津出生的 [Me too! I was born in Tianjin]." A few other students echoed Jenny and said, "我也是! [Me too!]"

In another dictation activity in February 2010, when the teacher dictated the word "莲藕 [lotus root]," Ms. Meng explained that many Chinese families used the lotus root in their cooking. Jenny said, "把糯米和蜂蜜加在藕的孔里, 再蒸,很好吃. [You can put sticky rice and honey into the holes of the lotus root, and then you steam it. It is very delicious]." A few of her classmates nodded and said that their mothers cooked lotus root too, but in different ways such as fried lotus root or lotus root soup.

On another occasion in December 2009, the class developed stories in Chinese by using four pictures, and the word for one of the pictures was "皮肤 [skin]." In the picture was the face of a Western lady with fair skin. Ms. Meng said in Chinese that the standards for judging beauty were different between Eastern and Western countries. For example, in Canada, people tan their skins, whereas in China people like to use whitening cosmetics. Jenny said, "我们不晒 黑皮肤 [We don't tan skin]." The above examples show Jenny's active participation in discussions on Chinese culture that were closely related to her personal experience as a young Chinese immigrant.

Learning Through Two Languages

Ms. Meng instructed the math and health classes in Chinese, but the textbooks were written in English. Jenny often asked her classmates or Ms. Meng for help when she did not know a word. For example, on March 3, 2010, the health class was talking about different foods and the food groups to which they belong. Jenny asked, "什么是 bagel? [What is a bagel?]" Before Ms. Meng answered, a few other students began to make an effort to find the Chinese words for Jenny. They used their hands to gesture the shape of a bagel, but none of them immediately found the Chinese words. Ms. Meng quickly searched a picture of a bagel on the Internet and showed it on the smart board. Once Jenny saw the picture, she burst out, "哦!面包圈! [Oh! Bread ring!]" The helpers followed and said, "对,对,面包圈 [Right! Right! Bread ring]." The helpers had also learned the Chinese words "面包圈 [bread ring]" from Jenny in the process of helping her. She never hesitated to ask for help in class with words that she did not know, and no one laughed at her limited English vocabulary. The class atmosphere was so supportive that Jenny was comfortable asking questions without feeling embarrassed.

Another example that illustrates Jenny's comfort when she encountered a difficulty in the English language occurred on the last day of the fall term when Ms. Meng's class had a Christmas party. A boy who was good at telling jokes

shared a joke in English, and most of the children laughed. However, Jenny did not seem to understand the joke and did not laugh with the others, but two or three seconds later she said, "是脑筋急转弯吧? 孟老师,我可不可以讲一个中文的? [Is it like a brainteaser? Ms. Meng, can I tell a Chinese one?]" Ms. Meng said that, of course, she could share a Chinese brainteaser. Jenny then told hers in Chinese, and although her classmates thought hard, no one could get the correct answer. Jenny finally very proudly offered the answer. This example shows that Jenny successfully turned her disadvantage in English into an advantage in Chinese at the party. She was not discouraged when she could not understand the English joke; on the contrary, she very confidently participated in the party by sharing a Chinese joke.

Initially in Chinese classes, almost all of Jenny's activities and discussions with her classmates were in Chinese. Gradually, I noticed her code-switching between Chinese and English, and sometimes she used English to explain Chinese words to her classmates. For example, on February 22, 2010, Ms. Meng was teaching the class a funny Chinese popular song, "Look at Me, the Girl Across the Street!" When the students were learning the words in the lyrics, Ms. Meng asked "谁知道无人问津是什么意思? [Anyone know the meaning of 无人问津?]" Jenny raised her hand and said, "Nobody care 的意思 [It means *nobody care*]." Even though she had made a subject-verb-agreement grammatical error, Jenny was focusing on the meaning and correctly translated the Chinese phrase for her classmates. As I stated, when Ms. Meng taught Chinese vocabulary, she gave the English meaning for the word. Therefore, the students were used to using both

English and Chinese when they learned Chinese vocabulary, and this technique seemed to work very well for them. I think this is a very authentic and meaningful dual language learning technique that enables students to draw on their wealth of linguistic resources to learn instead of being limited to only one language.

Written Chinese

Ms. Meng encouraged the students to "play with humour" in their writing and projects. In May 2010 she asked the students to write self-introduction letters in Chinese to the students in their sister school in China. Jenny's letter was written in a very humorous style and Ms. Meng read her letter out loud in class as an example of a well-written one. I have translated it into English (see

Appendix K for Jenny's brainstorming web and original letter in Chinese):

Hey! How are you? My name is Li Ziyi, and my English name is Jenny. I'm 11 years old this year, and I am the only child of the family. I came to Canada at the end of July in 2009. I'm now studying at Riverbank School. You know what? I have been a black belt holder in taekwondo since I was in China, and now in Canada I spend most of my spare time in the taekwondo gym. Oh! Talking so much to you, I haven't told you what I look like. I have long hair to the shoulder, big eyes, double-fold eyelid, a medium-sized nose, and a sweet, sweet mouth. I have a boyish personality because I enjoy running around every day and many kinds of sport activities. I have a small shortcoming, and that is . . . Don't tell anyone; otherwise, I'll be in trouble . . . Please? Oh, well, I will tell you anyway. My small shortcoming is . . . I don't know how to be a graceful lady! I have my good sides as well though, such as I often make my teachers and classmates laugh, I like helping others, I am not lazy . . . etc. To sum up, I am just ADORABLE! Ha-ha!

If you ask me why I am learning Chinese in Canada, that is because . . . Ha-ha . . . I am a Chinese girl. Remember? I told you I just came to Canada. OK! I will talk to you later. Bye! Oh, wait, don't go! I forgot my questions for you. What is your name? Do you have an English name? Do you have any brothers or sisters? What do you do after school? What do you look like? Do you have a lot of homework? . . . I look forward to your reply! Jenny introduced herself and her school life in a humorous way in this letter. She seemed to be enjoying her life at school. In the last paragraph she emphasized that she was learning Chinese and that she was a Chinese girl. It seemed that she was proud to talk about her Chinese heritage and identified with being Chinese. She considered herself Chinese and Canadian and seemed to be proud of both. Jenny felt that she could directly express her pride and confidence in her Chinese background in this classroom because she perceived the students' respect for her Chinese background, and sometimes being Chinese was an advantage for her.

Jenny in School Clubs

In my interview with Jenny's mother, she told me that Jenny enjoyed the school clubs. She had joined the running club the first day she came to Riverbank School, and Kelly had invited Jenny to run together in the club; the second day, Jenny joined the chorus club because another girl in the class invited her and told her that it was very interesting. She also joined the Chinese calligraphy club the second week. Each club met for 20 to 25 minutes of the students' lunch time, and of the five lunch times each week, Jenny used two for running, one for singing, and one for Chinese calligraphy writing. Considering Jenny's frustrating experience in the previous school, her mother was very supportive of these club activities and told me that what she cared about the most was not that Jenny would learn something from the clubs, but that she would make more friends and be happy.

Jenny told me that she enjoyed all of the clubs and that the running club was her favourite because she always enjoyed running around. At the end of the first term the whole school had a Christmas party in the school gym, and as a member of the chorus club, Jenny participated in many singing and dancing performances. The instructor of the Chinese calligraphy club was the chairman of BEA and also a parent in Jenny's class, and from this instructor and the Chinese calligraphy club, Jenny and her parents learned a great deal of information about BEA activities. Jenny volunteered in many BEA events, including the one in which she wrote Chinese calligraphy and sold her writing at a fundraising event for Sichuan earthquake orphans, which I described earlier in the section "Jenny in English Classes." Jenny's participation in these clubs connected her in numerous ways to the Chinese community.

I visited the running and Chinese calligraphy clubs and sometimes ran with the running club members. The first time that I went to the running club, Jenny acted as my mentor. She gave me all of the details, such as the meeting place, the appropriate clothes and shoes to wear, where to leave my backpack before running, and the running route; and she insisted that I eat a little before running to "have more strength." I thanked Jenny for her considerate suggestions. She told me that the first time that she went to the club meeting, she was just like me, and her classmates explained all of the rules to her. I realized that, in Jenny's eyes, I was the newcomer to this club community and that she was helping me in the same way that she had been helped. She viewed her role as a more experienced member of the club who was showing a new member the way to act.

Jenny's Language and Literacy Practice out of School

Jenny spoke primarily Chinese with her parents in her home. However, partway through the year her mother indicated that Jenny had been inserting more and more English words into conversations with her parents since she began to attend this school. As new immigrants, Jenny's parents were in the process of looking for jobs and applying to colleges for Canadian education and credentials. Both of her parents had received postsecondary education in China. In Canada, for the most part, they lived in the Chinese community. Most of the family's friends were of Chinese heritage whom they had met through Jenny's school, BEA events, and the taekwondo gym.

Jenny's mother said that when they lived in China, Jenny had a large collection of books and that almost all of them had been shipped to them in Canada. When I visited Jenny's home, I saw many books on a big bookshelf in her room. She invited me to look at her collection and showed me some of her favourite books, including a children's encyclopedia, a series of books on Chinese history, biographical books on world-famous people, and the four masterpieces of classic Chinese literature. The content of one of the masterpieces was central to Jenny's museum design for her English language arts class. Almost all of the books on the shelf were written in Chinese except for a few levelled-reading English books from the "I Can Read" series that Jenny had borrowed from the local public library. Her mother said that Jenny loved to read at home so much that she had to remind her to let her eyes rest once in a while. Jenny read the Chinese books by herself almost every day, and she and her mother often read the English books together. Jenny's mother told her that they would learn English together and encouraged her to borrow more English books. These personal family times devoted to English literacy show their caring and valuing of their new language.

Jenny also had an English tutor who read English books with her once a week at home. Jenny had met her 15-year-old tutor, Ann, in a taekwondo gym, and Ann volunteered to help her to learn English. Ann was also from a Chinese immigrant family who had been living in Canada for 10 years, and she had been a student in English-Chinese bilingual education programs. Every week Ann went to Jenny's home and worked with her for an hour. The two girls read the levelled reading books together, and Ann helped Jenny to understand the story. Jenny told me that they spoke about their reading in both English and Chinese. Sometimes Ann translated the English words into Chinese for Jenny. When Ann struggled to translate words, she would use simpler English words to explain them to Jenny. They often played together for a while after reading, and Jenny's mother told me that they tended to use English in their play. This was an opportunity for Jenny to play with her new language and have more chances to develop her BICS.

Hanging on one wall in Jenny's bedroom were about 20 pieces of paper with English vocabulary words written on them (see Appendix L for an example). Jenny felt that the most difficult part of learning English was that there were so many terms and so much vocabulary, especially academic vocabulary that she did not know. To work on that, every day she collected the words that she did not know, checked the dictionary for their Chinese meanings, wrote them down on a piece of paper, and hung it on her bedroom wall. Jenny explained that she would frequently look at the new English words from school on the wall at home and remember them better. I saw that each piece of paper had a date; the names of the subjects, such as English language arts and science; about 15 to 20 English words; and their Chinese meanings. A few examples of Jenny's words were *grease*, *inland*, *canoe*, *elk*, *M áis*, *archives*, and *shovel*. Jenny was very precise and focused on learning these new English words by placing them in the context in which she had first seen or heard them. I also noticed traces of white correction fluid on many of the Chinese characters on the paper. Jenny's mother told me that Jenny had originally written these characters wrong, and after her parents corrected them, she covered the wrong ones with Whiteout and wrote the correct ones on top. Her parents wanted her to remember the Chinese words while she was learning the English words. This family obviously valued the idea of being bilingual and retaining their L1.

Jenny went to the taekwondo gym three times a week. English was spoken at the gym, which did not seem to be an obstacle for Jenny because she already knew most of the taekwondo concepts from her experience in China. At the beginning of each taekwondo session the children had to take an oath with their coach in English. Jenny's mother observed that on the first day Jenny just murmured the words with the other children without knowing what they meant, but after a couple of months she could clearly say every word in the oath. Her excellent performance in the gym was noted, and she won a few championships in several local taekwondo competitions. Jenny made several friends in the gym including her English tutor Ann.

On the weekends Jenny often volunteered with her parents at some of the BEA events. She often met her classmates at these events, and Jenny's mother considered them good opportunities for her to communicate with the other parents and get to know more about Jenny at school. These volunteer experiences were a rich source of ideas for Jenny in the weekly news sharing and journal writing in Mr. Peterson's English language arts class.

Jenny told me that she sometimes went out with Kelly on the weekends. Kelly had invited her to watch movies, have dinner, and sleep over at her home. One time Kelly invited Jenny and her parents to have dinner with her family at her home. Jenny said that Kelly's father, brother, and sister all tried to speak Chinese with her and her parents during that dinner, and, from Jenny's perspective, Kelly was the best Chinese speaker in her family. These families came together because of the bilingual program and constructed bilingual opportunities to be together where the Chinese language was valued.

Summary

As a newcomer to this Grade 5 class, Jenny made considerable progress in both her language and academic learning over this academic year. It was evident that Jenny's L1 played an important role in her new language learning. My classroom observation revealed that Jenny's personal, linguistic and cultural background and knowledge was valued, affirmed, and respected in this community. While receiving help from her teachers and peers, Jenny also worked as a contributing member of the classroom to help her classmates with her language and math expertise.

CHAPTER SIX: ANTHONY: "MY MANDARIN AND ENGLISH ARE EQUALLY GOOD"

Personal Background

Anthony was 11 years old at the time of this study. He was born in southern China, and Cantonese was his L1. He came to Canada with his family when he was four years old, and in kindergarten and Grade 1 he attended a regular English program in Vancouver. Anthony was sent back to China at the age of 7 and stayed there with his grandparents for a year and a half. While he was in China, he studied at the local elementary school. The language of instruction at the school was Mandarin, but Anthony told me that at recess and after school he spoke Cantonese with his friends. He returned to Canada and had been in the English-Chinese bilingual program at Riverbank School since Grade 3. When I asked Anthony to rank his proficiency in the four languages that he knew (English, Mandarin, Cantonese, and French), he rated Cantonese the highest, Mandarin and English as "equally good," and French as the lowest.

Anthony's teachers regarded him as the most helpful child in class. In English classes he helped the ESL children with their English, and in Chinese classes he helped the children who struggled with Chinese. Because his L1 is Cantonese, he also translated for and helped a few children in class whose mother tongue was also Cantonese. He received the most stickers for helping people in his class. In my interviews with the teachers, they all praised Anthony for helping his classmates. Ms. Meng reported that she also gave him a book at the end of the Grade 5 year as an award for being an exceptional helper in class.

Anthony's Language and Literacy Practice at School

Anthony in English Classes

An Active Contributor

Anthony was very active in English classes. I often saw him raise his hand high while he waited for his turn to speak. Sometimes he was so eager to speak that he stood up, waved his hand, and said, "Oh!" or "Oh, I know!" One day Mr. Peterson sent him to the back table for misbehaving with his neighbouring classmate, but he kept his hand up during most of his punishment time. Anthony seemed attentive to the current news and often participated in the Monday newssharing event. During the Vancouver Winter Olympics in February, every Monday Anthony watched the CBC news and reported the number of medals that Canada had achieved.

In May 2010 when the class talked about the Gulf of Mexico oil spill, one of the students asked, "How did the leak happen in the first place?" Mr. Peterson asked whether anyone knew the answer. Anthony went to the blackboard and drew a diagram to explain the cause of the oil spill. He also seemed aware of news about China, and he talked about the Chinese NBA player, Yao Ming, who had a daughter in the US, the babies in China who were sick from eating milk products with melamine in them, and several campus injuries that led to the placement of security guards at schools in China. In our interview Anthony told me that he learned about the news from China by reading a Chinese newspaper to which his family subscribed and by listening to his parents' conversations with their friends. These were very rich literacy resources for Anthony—"funds of knowledge" (Moll, 1992) on which he could draw for class participation. The news that Anthony read or heard was in Mandarin or Cantonese, and he translated it and shared it in his English class.

Raising Questions

Anthony usually asked the teacher immediately if he had questions. He seemed curious about so many things and asked many "Why?" and "How?" questions. For example, when the class discussed tornados on December 7, 2009, Anthony asked why tornados follow a swirling pattern and why people name tornados.

When the class talked about expensive watches on March 1, 2010, Anthony asked why the logo on Omega watches was a headphone. Mr. Peterson drew the Omega logo on the blackboard and explained that it was not a headphone, but the last letter in the Greek alphabet.

On May 31, 2010, Mr. Peterson talked about copyright in journalism. Anthony asked, "How come two persons have the same information and go through the same company?" Mr. Peterson answered, "There is a word for this, my friend—*scoop*." He explained that in a scoop, someone had a news story that a competitor took and reported first. Anthony then wrote the word scoop in his workbook.

He often asked for the meanings of English words in class such as *drought*, *interactive*, *protestor*, *dough*, and *penetration*. In our interview Anthony told me that to improve in English he thought needed to expand his vocabulary. He did not know some of the words when he read in English, and he wanted to be a better reader. In addition to asking his teachers in English classes, Anthony also used his electronic dictionary to look up unfamiliar words. His dictionary gave both English and Chinese explanations for English words, and Anthony often read both because he felt that reading the meaning in the two languages helped him to understand the word better. He seemed to use these two linguistic systems to draw for a more complete understanding of the terms.

A Language Helper

In English classes Anthony sat between Eddie and Jenny, the two ESL students. Although Suzy was Jenny's official helper in class, Anthony often seemed to know how to help even more, and Jenny often asked Anthony if Suzy failed to answer her questions. For example, on March 1, Mr. Peterson asked the students to write a journal entry about their thoughts on the Vancouver Winter Olympics. Jenny wanted to write that the quantity of gold medals that Canada had won was 14, but she was looking for the word *quantity*. She asked Suzy, "奖牌的 数量是 14 块, 数量怎么说? [The quantity of gold medals that Canada won was 14. How do you say *quantity*?]" Suzy thought for a while and replied that she did not know. Jenny then asked Anthony, and he answered, "数量是 *quantity*, 但你不 用说这个词,只说 14 块金牌就行. [The word you are looking for is *quantity*, but you don't have to use this word. You could directly say 'We won 14 gold medals, it's the most in the world Winter Olympics history." It seemed that she conceived the

idea in Chinese first and then tried to translate it directly into English by using the Chinese syntactic system. Anthony seemed to understand that Jenny was relying on her knowledge of Chinese grammar, and he taught her a more standard grammatical form in English to express her meaning.

Anthony frequently offered to help Eddie in English classes and became one of his official helpers. When Kelly, Eddie's other official helper, had difficulty explaining something to Eddie, she would often ask for Anthony's help: "Anthony, could you help me explain this to Eddie?" or "Anthony, how do you say. . . ?" Anthony and Eddie shared the same mother tongue, Cantonese, and Anthony sometimes used Cantonese to help Eddie to better understand the concept. When Mr. Peterson asked the students to do in-class assignments or exercises that required a great deal of writing in English, Anthony often explained the instructions to Eddie in Mandarin or Cantonese and worked together with him. Mr. Peterson encouraged this communication: "Anthony, you could move your chair so that Eddie can hear you better."

Mr. Peterson's requirements for ESL students were sometimes different, and Anthony was very attentive to this. For example, on November 2, 2009, Mr. Peterson asked the students to write a journal entry about Halloween. The topics for the journal writing were "What is Halloween all about?" "What makes for a good costume?" And "What is the best/worst 'treat' that you have ever been given?" After explaining the instructions and the three topics to Eddie in Chinese, Anthony asked, "Mr. Peterson, does Eddie need to write a paragraph?" Anthony was trying to understand Mr. Peterson's requirement for Eddie so that he could help Eddie to complete this assignment successfully.

On May 31, 2010, when Mr. Peterson was teaching functional writing, he asked the students to write a news story based on the fairy tale *The Three Little Pigs*. Before the students began, Mr. Peterson asked whether anyone was unfamiliar with the story, and two students raised their hands, including Eddie. Mr. Peterson told them the story, and other students helped with the details. After Mr. Peterson's storytelling in English, Anthony moved his chair to Eddie and briefly told him the story again in Cantonese. I noticed that not a single student expressed surprise or disdain that the two students did not know this story. Instead, some students, such as Anthony, tried to help Eddie as much as they could. The class atmosphere was obviously very supportive for the ESL children who struggled in English class.

In science class, when Ms. Mackey worked with the ESL children without Ms. Zeng's help, she would sometimes ask for Anthony's help too. Anthony often used Cantonese to help Ms. Mackey explain things to Eddie and another Cantonese-speaking ESL child. Eddie and Anthony seemed very close and spent a great deal of time together in class and at recess time. The two boys often used Cantonese when they were talking, and Anthony often went along with Eddie's language choices. Eddie would initiate a conversation in Mandarin, Cantonese, or English, and Anthony would reply in the same language. Anthony seemed very attuned to the language choice of his interlocutor.

Self-Talk

In addition to using Chinese to help his classmates, Anthony sometimes used Chinese in his self-talk in English classes. For example, on October 22, 2009, Mr. Peterson told the students that they would take a quiz in social studies by using the smart board and smart clickers. It was the first time that they had used the smart board for a quiz, and the students were very excited. While they waited for Mr. Peterson to set up the quiz, the students played with the smart clickers. I observed Anthony putting his clicker near his ear and saying, "喂, 我想回中国, 我要订机票. [Hello! I want to go to China, and I would like to book a ticket.]" Anthony was obviously using the clicker as a phone and pretending to call a travel agency to book a ticket to China. He spoke in Mandarin even though his first Chinese language is Cantonese. I assume that he hoped that more of his classmates would understand his Chinese words even though he seemed to be talking to himself.

Written English

Anthony was very willing to share his English writing in class. Mr. Peterson often used the smart board to conduct peer reviews of the students' writing as part of the writing process. When the students finished a piece of writing, they would type it and send it to Mr. Peterson, who would then save it on the classroom computer. In revising the students' writing in class, Mr. Peterson would first ask for volunteers to share their writing and then open their files from the smart board so that everyone could see it. The volunteer would use the keyboard to revise his or her own writing while the other students and

Mr. Peterson were talking about the writing and offering suggestions.

In November 2009 Mr. Peterson asked the students to write a narrative story based on a picture of a house (Appendix M). After receiving the students'

first drafts, he asked them to revise and edit them. Anthony volunteered to share

his writing in class, and Mr. Peterson opened his writing file and gave Anthony

the computer keyboard. The following is Anthony's draft story in English prior to

the peer editing (see Appendix M for Anthony's draft with revisions):

The Mysterious House

"WHAT IS wrong with the house? or we out of luck?" complained 11 years old Lucas as he fall mysteriously down the narrow white stairs and landed on the dark beige carpet.

"What happened?" wondered his mom.

When their dad heard this, he yelled down the stairs "well then I guess the Sherwood family is going to be moving soon, if this doesn't end, it is ridicules! Third time strange stuff has happened to us today"

Lucas grunted "I will go help setting up the table" Lucas thought. Time has flew by, after supper 15 years old Ann found out her homework had been drew on with dried red marker, she rush down the stairs as a gush of wind with her home work tightly squeezed in her hand, "LUCAS!! did you do this, I'm going to get a "B" on my English L.A if I mess this up, now I have to do it again!" she squealed to Lucas and holding her fist in front of him.

"You think I'm the one who did it!?! I wasn't even upstairs after our meal!" exclaimed Lucas as he is innocent.

Their dad was up stairs in his dim room working with his project after the kids slept, mom walked nervously into the room, the wind blew in from the window and her long shinny black hair waved around, "honey . . . I think something was wrong with the house, it is been acting strange lately, I don't feel safe." muttered mom, dad thought for a while then he finally spoke with confidence, "we are in the U.S.A, and we've got insurance bought, even if someone is hiding in our house now, there is no need to fear." "Y . . . Yeah" thought mom.

Their conversation flew into the ears of awaken Ann, her heart was jumping faster and faster millions of questions has popped up inside her, she just can't wait to find out why, she got up and shut the windows tightly with her tumbling sunburned arms and strong fingers, she has left the curtains open, then she jumped back into her bright purple bed and shoved into her green sheet "maybe I should really get some sleep." moaned Ann.

The next morning someone spilled their dad's coffee on the carpet while he is taking a bath, when he found out he got in a mad mood "we should really move away." he hissed with anger.

When he came back from work this afternoon he was still in a mad mood, Lucas was doing his homework upstairs, and Ann is just working on her science project, but she piece she can feel shaking as she glued on the piece on her hands are sweaty "what now?" she thought, when Lucas crashes into her room, "what happened? The house is SHAKING! Is it an earthquake ?" A whole bunch of questions popped up into his mind.

"Cool it Lucas everything will be okay" Ann blabbered with her body shaking slightly, she hold Lucas by the hand, and ran outside filling with fear while Lucas's sky blue slippers rattled across the cement front sidewalk.

Ann did a "be quite" hand sign to Lucas, but the ground isn't shaking! Not even a single leave is moving But the house is shaking and the windows are shattering "better get back into the house" shouted Ann as she dragged Lucas back into the house.

"Mom dad, quick, gets into the basement, you got to trust me" yelled Ann nervously, she hasn't been letting go of Lucas's arm. They jumped down the stairs into the old dirty basement which has two dim ceiling lights hanging with frayed wires.

Anthony's story about this mysterious house was three pages long, and his

narrative had a storyline, four characters, and descriptive details and was full of

intrigue and suspense. Mr. Peterson praised him for his use of descriptive

language in his writing; for example, "she rush down the stairs as a gush of wind"

in paragraph 5. Mr. Peterson and the students also offered suggestions for

revisions. One of the questions that Mr. Peterson raised was, "What's happening

here with time?" One student answered, "He switched back and forth with past

and present tenses." When Mr. Peterson suggested the use of past tense to tell a

story, Anthony realized that it would improve his story and revised several tenses

with the keyboard, such as *fall* in paragraph 1 and *rush* in paragraph 5.

Mr. Peterson then asked the class, "Do you have present, future, and past tense in Mandarin?" Some students replied "Yes" and others, "Not really." Mr. Peterson asked, "How do you say 'I went walking yesterday' in Chinese?" Anthony answered, "昨天我去散步了 [I went walking yesterday]." Kelly added that if Anthony's words were translated directly according to the Chinese word order, they would read, "Yesterday I went walking." Anthony explained that in Chinese, in addition to the time indicators such as the word *vesterday*, a functional word, " \mathcal{T} ," is sometimes added at the end of the sentence to indicate the past tense. Mr. Peterson then asked, "But you use the same verb, right?" and Anthony said "Yes." Mr. Peterson explained, "In English, we don't do that. We have to change the verb from go to went." Here again the comparison between Chinese and English was very valuable because it gave the students an opportunity to negotiate their understanding of two languages and helped to raise their cross-linguistic awareness. This activity encouraged the students to learn how the two languages work in relation to each other. It was a very authentic and meaningful dual language learning activity that drew on the students' linguistic knowledge from L1 to learn their L2. Although this was an English-class activity, it obviously became a dual language learning experience.

Anthony in Chinese Classes

A Chinese Language Expert

As in his English classes, Anthony very actively participated in his Chinese classes. When he answered questions or made comments in class, he

could produce Chinese sentences without code-switching to English. Ms. Meng always pushed her students to use more Chinese in class, but she told me that she did not need to encourage Anthony because he seldom used English when he spoke in class; if he did, his classmates would give him a hard time. I did notice the situation that Ms. Meng described. For example, when the class was talking about a car race on May 31, 2010, and Ms. Meng said, "赛车时是要考虑车子的 速度极限的. [We should consider the speed limit when we are car racing.]" Anthony continued to say, "不然就会 car crash, then bang! ... [Otherwise, there will be a car crash, then bang! ...] He had hardly finished his sentence when a few students exclaimed, "啊? 你说英文? [What? You spoke in English?]" Kelly argued in Chinese, "你那么好的中文,还说英文? [You have such good Chinese, and you used English?]" Ms. Meng smiled and said, "你看!都不用我说你. [See! I don't even need to say anything!]" Anthony, embarrassed, smiled and finished his sentence in Chinese. This example indicates that Anthony's classmates regarded him as a Chinese expert and voluntarily monitored his use of English in Chinese classes if he code-switched. In my observation of Anthony's Chinese proficiency, he did not need to code-switch in the above sentence, and his classmates knew that as well.

When she taught new Chinese words, Ms. Meng would discuss the meanings of the words with the students to make sure that they understood them and could use them appropriately. Anthony was very good at answering questions and making comments in these discussions. For example, on June 7, 2010, when Ms. Meng was talking about the Chinese word "好奇心 [curiosity]," she asked

the students whether it was a good thing to be curious. One student said, "好, 可 以 know more. [It's good. You could know more.]" Another student said, "不好, 没有 privacy. [It's not good. You don't have privacy.]" Anthony's answer was, "有时是好,因为可以学多一点东西.可是如果是吸烟,想知道烟是什么味道, 就不好. [Sometimes, it is good because you could learn more knowledge. However, when it comes to smoking, if someone is curious about how cigarettes taste, it is not good]." Ms. Meng responded "非常好! [Excellent!]" Anthony not only produced two Chinese sentences without code-switching, but he also analyzed the issue of curiosity in two ways and gave a more comprehensive answer. Ms. Meng had talked with the students about smoking in their health class a few weeks earlier, and Anthony connected the new word curiosity with that topic. Later that day a student asked the meaning of the word "反叛 [rebel, disagree]," and Ms. Meng replied, "就是你说东, 我说西. [It's like I said this, and you said that.]" Anthony continued, "板凳长, 扁担短 . . . [Long stool, short] pole . . .]" These were lyrics from a popular Chinese song that the students had just learned a few days earlier. In the song was a short rap that described how a stool disagreed with a pole. Again, Anthony used what he had learned before to explain the new word "反叛 [rebel, disagree]" to his classmate. When Anthony mentioned the song, which was one of the class's favourites, the students began to sing it, with their heads and shoulders moving up and down to the rhythm. Ms. Meng smiled and said to them, "你们又 high 了! [You guys are high again!]"

When she taught a new Chinese word, Ms. Meng often asked the students to use the word appropriately in a sentence. On May 31, 2010, when she
explained the word "可贵 [respectable, valuable]," Anthony shared his sentence: "雷锋叔叔经常帮助别人,他乐于助人的精神很可贵. [Uncle Lei Feng was always willing to help others. His generosity in offering help is very valuable.]" As a Chinese speaker who has received about 20 years of education in China, I know Uncle Lei Feng very well. He was a famous Chinese soldier in 1960 who, as Anthony said, was always ready to help others. Nowadays Chinese people use Lei Feng as a symbol of the spirit of generosity when they offer help. I was surprised that Anthony knew about Lei Feng, whom, I would have thought, was very far removed from these Canadian children both geographically and chronologically. Ms. Meng seemed surprised too, and she asked Anthony, "你知 道雷锋叔叔? [You know Uncle Lei Feng?]" Anthony answered, "知道. 我在中 国读过他的故事 [Yes, I know him. I read stories about him when I was in China.]" Ms. Meng then invited Anthony to tell his classmates about Lei Feng, and he explained, "他是一个中国军人, 他常常帮助人. 我在中国读过他的故事, 是讲他帮老婆婆过河的. [He was a Chinese soldier. He often helped others. I read a story about him in China. The story is about how he helped a granny to cross a river]." The students were interested in Anthony's description and asked questions such as when the story had happened and what kind of people Lei Feng had helped. Ms. Meng helped Anthony to explain that he was a soldier in 1960 and helped anyone he could. Ms. Meng also made a joke: "他帮助别人, 做好事 是不留姓名的.不像你们,做了好事要 sticker. [He never told people that he helped his name, not like you guys. You often ask me for stickers after you help people.]" The students laughed. This example demonstrates Anthony's knowledge

about Lei Feng. Observing his classroom participation, I realized that he had a great deal of knowledge of Chinese culture, such as special Chinese festivals, the names of Chinese teas, and the Chinese way of addressing people. In our interview, when I asked him how he knew so much about Chinese culture, Anthony told me that he had learned it in China when he lived with his grandparents and attended Chinese primary school there for a year and a half. His mother had also taught him about Chinese language and Chinese culture at home. Not only was Anthony a very fluent Chinese speaker, but he also knew a great deal about the history, culture, and politics of China.

Playing With Humour

Ms. Meng encouraged the students to have fun using humour in her classes, and she often made jokes in Chinese in her classes. In our interview she said that, initially, the students did not understand her humour in Chinese; but, gradually, they began to understand and make jokes themselves. Anthony was one of the students who told jokes and made funny comments in Chinese that often made Ms. Meng and his classmates laugh.

When Ms. Meng talked about the four food groups (grain products, vegetables and fruit, milk products, and meat and alternatives) in health class on May 3, 2010, she showed pictures of foods such as pudding, eggs, rice, and bagels and asked the students to identify the group to which each one belong. Ms. Meng noticed that one of the boys, Jack, was silent for a long time, and she pointed to a new picture and asked, "Jack, 属于什么类? [Jack, what group . . . ?]" Before Jack replied, Anthony answered, "调皮类 [Naughty group]." It was a joke about

Ms. Meng's question, which sounded like an inquiry about which group Jack belongs to. Everyone laughed, including Jack, who replied, "我是人类. [I belong to the human group.]" Ms. Meng laughed with them and repeated her question to Jack.

Later that day Ms. Meng talked about beans and asked, "豆子给了身体很多的...? [Beans could provide your body with a lot of ...?]" Anthony replied, "放屁 [farts]." The whole class burst into laughter, and Ms. Meng said, "Anthony 说的也对, 不过我要的答案是蛋白质 [Anthony is actually right, but the answer I want is protein.]"

In health class on May 17, 2010, Ms. Meng talked to the class about addiction as one of the harms of smoking. Anthony announced that he was addicted to chocolate, and another student said that he was addicted to gum. Ms. Meng smiled and said, "我觉得你们这不叫上瘾, 叫嘴馋. 你们不吃巧克力, 不吃口香糖不会打哈欠,不会流眼泪 [I think chocolate and gum just make your mouth water. You are not addicted to them since you won't yawn or burst into tears if you don't eat them]." Anthony replied, "可是我不吃巧克力,不会最作业! [But if I don't eat chocolate, I can't do my homework!]" The class laughed, and a few students said, "Me neither."

Revising Lyrics

On June 23, 2010, after recess, Ms. Meng asked the students to take out their lyrics books and sing a song named "天凉好个秋! [What Cool Weather in Autumn!]" It was a hot summer day, and after having played soccer at recess, many students were sweating while they sang. After the song Anthony said, "孟

老师,应该是'天热好个夏' [Ms. Meng, the song should be 'What Hot Weather in Summer!']" The students laughed and sang together, "What hot weather in summer!" Ms. Meng smiled and said, "那我们把它改编一下吧! [Let's revise the lyrics to make a new song!]" The students then hummed to the rhythm and tried different Chinese words in the lyrics to make it a summer song, and that afternoon they wrote a new song with the old rhythm. Ms. Meng told me that they had done something similar before.

The class had performed a "three sentences and a half" at the school's Chinese New Year celebration and at BEA's New Year celebration in February 2009. "Three sentences and a half" is a traditional Chinese artistic form in which the performers cite several sets of three and a half sentences to illustrate a point. The half sentence often has a humorous meaning. Ms. Meng told me that the students summarized the knowledge that they learned from health class and revised their "New Year three sentences and a half" into "Health three sentences and a half."

Name Giving and Translation

To facilitate the use of Chinese, Ms. Meng encouraged the students to assign Chinese names to items that commonly have English names but might not have Chinese names yet, such as smart board and smart sticker, and then to use the Chinese names in their Chinese class. The class often adopted Anthony's Chinese names. For example, on November 27, 2009, Ms. Meng told the students that they would have a "book talk" that day. The school librarian would come to the class, introduce a few new books, and read some of the new books to the students. Ms. Meng asked them to give *book talk* a Chinese name. Some of the students named it "书说话," a direct translation from the English words that means "the book talks." Some named the activity "新书说话 [the new book talks]" to refer to the special feature of the books. Anthony's name was "新书介 绍 [the introduction to the new books]." Ms. Meng and the students agreed to use Anthony's name because it represented the real function of this activity. This name-giving exercise replicated what occurs in all languages and culture when new items or inventions are introduced. It is interesting to see that in this literacy practice this Grade 5 class worked as linguists who were doing corpus language work.

In addition to giving items Chinese names by translating from English to Chinese, Anthony also seemed curious about translating from Chinese to English. For example, in November, when the students were practicing singing the song "祈祷 [Prayer]" for the Remembrance Day assembly, Ms. Meng said, "注意歌曲 的中间那一段, 叫过渡段. (Pay attention to the middle part. It's called a transitional paragraph in the song.]" Anthony asked, "那英文叫什么? [What's the English name for it?]" He knew that Ms. Meng, who is bilingual, would be able to tell him English translation for things he had learned in Chinese.

Anthony also used Chinese-English translation when he helped his classmates with Chinese. They regarded him as the Chinese expert and often went to him for help with Chinese words that they did not know. As I stated earlier, Jenny's classmates also regarded her as the Chinese expert, but Anthony seemed to be a more popular resource when they needed help. Anthony seemed to be more fluently bilingual and biliterate, and his classmates often drew on his language expertise. He offered his help in a more bilingual way and explained the Chinese words by giving them the corresponding English meanings to help them to understand better.

A Language and Math Helper

Anthony had many opportunities to use English in group work or peer cooperation in Chinese classes. Just as he used Chinese to help ESL students in English classes, Anthony often used English in Chinese classes to help students. For example, on November 2, 2009, when Anthony was helping a student named Kevin prepare for the Chinese dictation, Kevin wrote a Chinese character wrong, and Anthony circled it. Kevin asked, "What's wrong?" Anthony rewrote the word and said, "This one, you need the stroke here, like this, not like this."

Anthony also explained math concepts to his classmates in English when he thought that they would understand them better in English. When Ms. Meng explained math problems in Chinese and asked the students to work in groups to do the exercises, Anthony would often help the members of his group by explaining some of Ms. Meng's instructions in English. He was often encircled by a few students while he explained the math concepts in English, and he was very attentive to everyone and made sure that they all understood. Eric and Martin were the two boys that Anthony helped most with their math, and Anthony often naturally walked to them and asked if they need help once he finished his own tasks. Ms. Meng praised Anthony often for helping his classmates, and she used his story to introduce new Chinese vocabulary. On May 17, 2010, Ms. Meng was teaching the word "束手无策 [can't think of any ways to solve the problem]," and her example sentence was, "我在那道数学题面前束手无策, 还好 Anthony 及时 帮助了我. [I couldn't think of any way to solve the math problem. Luckily, Anthony came in time to help me with it.] Several students shouted, "Anthony! Anthony! 你在那里面! [Anthony! Anthony! You are in that sentence!]" when they saw the sentence on the smart board. Anthony raised his head, read the sentence, and said with smile, "哦! 真的! [Oh! It is true!]" Ms. Meng encouraged students to use as much Chinese as possible in class, but when it comes to peer help in her class, she made it very clear that helping each other was highly advocated in this class and they could use either language that they preferred in their talk.

Anthony told me that he loved math and often received high marks. For multiplication calculations, Anthony said that he always thinks in the Chinese times table, which he learned in an elementary school in China. The times table is a kind of rhyming song in Chinese that helps students to find answers to any one-digit multiplication question such as " $\equiv \Box + =$ [three times four is twelve]." The times table is very easy to remember in Chinese because most of the Chinese words have only a single syllable. I have used it myself in calculations since I learned it in elementary school. I found it hard to translate and remember it in English because of the very different linguistics features of the English language. Anthony found the times table very useful in math problem solving, and even when the problems were written in English, he repeated the table to himself in Chinese when he did multiplication calculations. It is worth mentioning that

Anthony was not the only student in the class who used this technique to do math. Many students of Chinese heritage told me in the interviews that they preferred to use the Chinese times table, which they had learned either at school in China or from their parents, when they did calculations. Therefore, being English-Chinese bilingual is obviously a benefit, because the Chinese times table helps these children with mathematics, which is a kind of strength of fluent Chinese speakers in using mathematical language.

Written Chinese

Ms. Meng often used Anthony's written Chinese as an example of one of best in the class. In the Chinese language arts class she asked the students to write a story by using words in pictures. She showed them four to six pictures, each of which represented a Chinese word that they had recently learned. The class first discussed each picture and identified the word. Then they worked in groups to write a story from the words in the pictures. The groups presented their stories after 25 minutes of preparation, and finally the class voted for the best story.

On November 30, 2009, Ms. Meng asked the class to use "森林 [forest]," "贝壳 [sea shell]," "期待 [except]," and "成长 [grow]" to write stories. Anthony worked with three other group members and wrote a story of about 200 words about an orphan girl who lived in the forest with her animal friends. Anthony scribed the story as the group dictated, and he helped each group member to read his or her part of the story before the presentation. When they presented the story, the other groups chose the best Chinese speakers in the group to read the whole story. However, Anthony divided the story into four parts and assigned each group member a part in the presentation. He also offered help when group members had difficulties with the presentation. When the class voted Anthony's group's story the best, Ms. Meng highly praised the spirit of teamwork in their group. I noticed that in their following creative writing activities the students tended to follow Anthony's pattern and paid more attention to teamwork. Almost every member of the group had a part in the final presentation, and the better Chinese speakers offered to help other group members.

On October 22, 2009, Ms. Meng asked the students to write a letter in Chinese to Tim, a former student in their class who had moved to the US. They worked on the assignment for about two weeks, and Ms. Meng read Anthony's letter in class as one of best. He had written a four-page composition (Appendix N) with descriptive language, complex sentence patterns, and humorous expressions. In the letter Anthony introduced the teachers and new student in Grade 5, described the current events in the school, and asked about Tim's life in the US. At the end of the letter he signed his name and wrote a Chinese character, " \perp [up]," after his name. After Ms. Meng read Anthony's letter, many of the students asked about the last word. She explained that this is a very delicate Chinese way of showing respect for the person to whom you are writing because the word up signifies raising your letter high with your hands and handing it to the recipient. The students seemed very interested in this expression, and many learned from Anthony and used the word when they revised their own letters. As I mentioned, Kelly had also used this word in her birthday card to her father. I asked Anthony

about this in our interview, and he told me that he had learned this expression in China and remembered it.

Transferring Knowledge Between English and Chinese Classes

In both his English and Chinese classes, I observed Anthony often transferring the knowledge that he learned in one class to another. On November 2, 2009, Ms. Meng introduced a new Chinese word, "失败 [failure]," and repeated the saying, "失败是成功之母 [Failure is the mother of success]." She explained that people often fail several times before they achieve success. Anthony asked, "为什么猪流感的疫苗一下子就成功了? [Why was the H1N1 vaccine successful in such a short time?]" Ms. Meng answered, "因为那是好多 科学家一起努力的结果 [That is because of the cooperative effort of many scientists]." I remembered that same day Mr. Peterson had just discussed the H1N1 immunization shot with his students in the morning, so it was quite possible that Anthony was asking this question in Chinese class based on what he had learned in English class.

On November 23, 2009, in his English language arts class Mr. Peterson discussed how to make a story funny. He asked the students what could make them laugh, and Anthony answered, "When Tim is here, he can tell jokes, and that makes me laugh." Mr. Peterson said, "Oh, Tim is hilarious." As I stated that in their Chinese classes the students had written a letter to Tim, a former student, a month ago, and they had talked about Tim's joke telling in class. Again, Anthony seemed to use his knowledge from Chinese class to answer questions in English class. Anthony's written language work also revealed his transfer of knowledge from one class to another. For example, in his letter to Tim, Anthony talked about the Lunar Crater Observation and Sensing Satellite mission that the National Aeronautics and Space Administration had launched in 2009 to bomb the moon. When I asked Anthony about this in our interview, he told me that he had learned this in Mr. Peterson's English class in a Monday news-sharing activity when the students talked about exploring outer space. Anthony translated the English discussion into Chinese and used it in his Chinese writing.

On October 13, 2009, in English class, Anthony wrote a journal on the first mission to the moon in 1969 as Mr. Peterson had asked the class to do, and the students discussed the famous quotation "One small step for man, one giant leap for mankind." In May 2010 Anthony translated this quotation to Chinese and added it to his environmental protection magazine, a project required in Ms. Meng's Chinese class. In this magazine Anthony talked about the issue of global warming. A few weeks later in social science class Mr. Peterson asked the students to choose a topic and develop a project with Windows Movie Maker[™]. For Anthony's topic of global warming, he used resources that he had collected for his environmental protection magazine. The resources were in Chinese, and Anthony translated them into English for his project. He was evidently using both languages and literacies to demonstrate his learning. He seemed to be "learning through language" (Halliday, 1979/1980) in two languages in a very seamless way.

Mr. Peterson and Ms. Meng cooperated in teaching writing in Grade 5, and they used a similar pattern to teach narrative writing. The students learned similar writing strategies in two languages, such as mapping for brainstorming and using the five senses (hearing, sight, touch, smell, and taste) to create descriptive languages. The teachers' cooperation seemed to make it easier for students such as Anthony to transfer knowledge between the two writing systems. For example, on December 2, 2009, in Chinese language arts class, Ms. Meng showed the students nine pictures of interesting washrooms in different places. She asked the students to work in groups. Each group was to choose a picture and describe the washroom in the picture. After 20 minutes of preparation, each group presented its description, and the class had to guess which picture they were describing. Anthony's group used the five senses in their description. Some used English and others used Chinese to refer to the term *five senses*, and everyone seemed to understand very well how to use this technique. They seemed to move fluidly and easily between the two languages.

Anthony's Language and Literacy Practices out of School

Anthony is the only son in his family, and he has two younger sisters, one 7 years of age and the other 5. Both of his sisters were born in Canada. Anthony's parents encouraged the children to speak Cantonese at home all the time. Both parents are trilingual speakers of Cantonese, Chinese, and English. Anthony's sisters, especially the older one, tend to use more English at home, and they often speak English with each other. Anthony's mother asked him to encourage his sisters to use Cantonese, and when the girls initiated a conversation with him in English, Anthony would pretend that he did not understand and ask them to repeat it in Cantonese.

Because Anthony had lived with his grandparents in China for a year and a half, he had a strong relationship with them. He phoned them once a week and spoke only in Cantonese. Anthony's mother told me that of her three children, Anthony communicated the best with his grandparents, who spoke only Cantonese: "No matter what Anthony said, his grandma always enjoyed listening. They laughed a lot in the phone conversation. She missed him so much that she often cried after she laughed." This intergenerational and transcontinental connection was very special for Anthony and obviously reinforced his sense of belonging and sense of being Chinese.

When I visited Anthony's home, I found many Chinese books on his family's bookshelves. Anthony's parents often went to book fairs in Chinatown to collect Chinese books for their children. Relatives in China also sent them Chinese books regularly. Anthony has a cousin in China who is a few years older, and he sent Anthony used textbooks (see Appendix O for an example) and Anthony's mother used them to tutor him in Chinese language arts and math at home. She kept a record of his reading in Chinese and told me that Anthony had just finished reading a very long Chinese martial arts novel.

I remember once I was telling a Chinese fable story in Anthony's Chinese language arts class at Riverbank school. Anthony knew the story and kept trying to interrupt to tell the class what happened next. His classmates had to ask him to stop to prevent him from giving away the ending. Anthony told me later that his mother had told him that fable and he also had the book about the story at home.

Anthony told me that his mother had been telling him stories since he was small. He had learned the Chinese versions of many English fairytales such as *The Three Little Pigs* first from his mother. Anthony was very well versed in Chinese stories in different genres, and they were in abundance in his home.

The family subscribed to a Chinese newspaper that Anthony read regularly. The family also had two Cantonese TV channels at home and often watched Chinese news and talked about it together. Anthony told me that some of the news stories that he shared in Mr. Peterson's Monday news activities were from the newspaper and TV news. His home was a rich resource for both his oral and written language growth.

Anthony's parents take his Chinese learning very seriously and want him to continue to do well in Chinese. They believe that his English-Chinese bilingualism will present Anthony with many opportunities in the future.

Summary

To conclude, Anthony seemed to be a more balanced English-Chinese bilingual among the three student participants. Anthony was in fact trilingual in Cantonese, Mandarin, and English, and he was successful in both maintaining his heritage language and learning his second and third languages in this bilingual program. He used English and Chinese as two powerful tools to understand new vocabulary and academic concepts and demonstrated the ability to smoothly transfer his knowledge in one language to the other. It was possible that his CALP developed at the same time in both English and Chinese. His multi-language and literacy knowledge and skills were also manifested in the helper role that he took in the interactions with his peers in this class.

CHAPTER SEVEN: INTERPRETATION

The purpose of my research was to explore the bilingual language and literacy practices of the children in one Chinese-English bilingual program at school and out of school and to identify the factors that affect their practices. In Chapters 4, 5, and 6, I describe the language and literacy practices of the student participants, Kelly, Jenny, and Anthony. This chapter provides a cross-case interpretive account of these three students' bilingual language and literacy practices in three thematic areas: dialogue between languages, dialogue among peers, and dialogue across places.

Theme 1: Dialogue Between Languages

In Chapter 2 I discussed Cummins' (1981) interdependence hypothesis, which emphasizes the interrelationship between students' L1 and L2. In my study the three student participants, Kelly, Jenny, and Anthony, appeared to be connecting their L1s and L2s rather than separating them in their language and literacy practices. There was also evidence that they transferred their literacy knowledge from L1 to L2 and vice versa. I will first discuss the respective features of the three children's L1 and L2 development and then focus on the interactive activities between their L1s and L2s. The participants' first and L2s are shown in Table 2. Kelly and Jenny have opposite L1s and L2s, and in Anthony's case, his L1 is Cantonese, and both English and Mandarin Chinese can be considered his L2s, although Mandarin and Cantonese are more similar to each other.

Table 2

Student	L1	L2
Kelly	English	Chinese (Mandarin)
Jenny	Chinese (Mandarin)	English
Anthony	Chinese (Cantonese)	English/Chinese (Mandarin)

The Three Participants' L1s and L2s

In their L1 learning the three students all performed very well. Kelly's classroom participation and the literacy artifacts that I collected imply that she is proficient and skilful in her use of English. Jenny came to this Grade 5 class with a well-developed literacy foundation in Chinese, and she continued to develop her L1 during the year of this study and demonstrated her use of L1 as a tool and resource to develop her L2. Anthony's L1 is Cantonese, which shares its writing system with Mandarin. Based on his humorous, skilful, and creative use of Mandarin at school and the interview with his parents at home, I believe that as a young immigrant in Canada, Anthony has maintained and developed his L1 very well while he has acquired L2s. His bilingual repertoire is the most balanced of the three students.

In their L2 learning all participants demonstrated passionate involvement and continuing progress. Kelly used every opportunity to speak Chinese with the other children and adults around her. She tried her best to use Chinese or at least code-switch between English and Chinese in the Chinese classroom. She also used Chinese to help her ESL peers. Jenny has shown gradual but impressive progress in her English-language acquisition since she came to this class. As the months went by, she used more and more English in her interactions with her classmates. Anthony's oral and written examples in English showed that he was doing well in his L2 learning. He was also working as a more capable peer in his classmates' English learning.

In addition to their respective development in L1 and L2 learning, all three children engaged in their L1 and L2 cross-language activities, which included code-switching, translation, cross-language transfer, and cross-language comparison. It was evident in the data that these cross-language activities positively influenced the bilingual students' dual language development.

Code-Switching

All three children code-switched between Chinese and English in their classrooms. Kelly used Chinese or code-switched to Chinese to help her ESL classmates in their English classes. She switched to English in Chinese classes when she did not know how to say certain words in Chinese, and she learned new words from her teacher and peers following this code-switching because they gave her the words that she needed. Jenny switched to Chinese when she did not know the English words and asked for help in English classes. As her English improved over the year, Jenny gradually inserted more English words into her conversations with her peers in Chinese. Anthony, on the other hand, refrained from switching to English in Chinese. His code-switching between English and Chinese seemed to be reserved for situations in which he helped classmates whose Chinese was more limited. Kelly and Jenny seemed to use code-switching to express ideas, get their meanings across, and learn new words in their L2 classrooms. It was evident that code-switching gave them opportunities to access their L2 learning and participation. As a more balanced bilingual, Anthony rarely needed to codeswitch in classroom participation, but he used code-switching to help his classmates and cater to their language needs.

There are varying opinions in the field about the acceptance or allowance of code-switching, but for these three children it appeared to be an effective second language acquisition strategy.

Translation

All three focal students translated between Chinese and English and used the language resources and tools available to them, as well as the bilingual dictionaries. Kelly often used a bilingual dictionary at school and her online dictionary at home, particularly when she needed a Chinese word. Jenny also used a bilingual dictionary both at school and at home for English learning. Anthony used both an English dictionary and bilingual dictionaries and said that when he encountered a new English word, he understood it through both the English meaning and the Chinese meaning, so he would use both dictionaries to gain a more complete understanding.

Translation from teachers and peers were very useful to Kelly and Jenny in their L2 learning. Kelly seemed to rely heavily on the English meaning that Ms. Meng gave her when she learned Chinese vocabulary. By contrast, Jenny often asked her teachers and peers for the Chinese translation of certain English words. She also made word lists at home by translating the meanings of the English words in the textbook that she did not know into Chinese. These word lists also made her realize that she might have forgotten or miswritten some words in Chinese and motivated her to be more exact in her writing of Chinese characters. Chinese character writing is a very precise system, and translation from English to Chinese requires a great deal of time and precision; therefore, it was a dual language learning experience for her. Although Anthony did not rely on Chinese translations for unknown English words, he was confident and able to translate terms between English and Chinese. In Ms. Meng's class Anthony was the expert in the "Chinese name-giving" activity and translated many English terms into Chinese. He was also curious about the English translation of Chinese terms and asked Ms. Meng for the English names of the musical terms he had learned in Chinese. The translation process between languages seemed to be very natural and beneficial at this stage of these children's dual language acquisition.

All three children used translation to help their peers at school and were language brokers to translate between their L1s and L2s for their classmates. Kelly translated English words or concepts to Chinese for ESL students such as Jenny and Eddie, Jenny translated Chinese words to English for her classmates, and Anthony translated among English, Mandarin, and Cantonese to help his peers. Working as language brokers gave these children extended dual language learning opportunities because they were able to practice using the two languages when they helped other students by translating for them.

Cross-Language Knowledge Transfer

I observed a great deal of cross-language knowledge transfer in the three children's language and literacy practices. Kelly sometimes used her L1, English, to brainstorm key ideas when she wrote Chinese compositions. She also used English to generate ideas in small-group discussions in Chinese classes, but when she made presentations to the whole class, she spoke in Chinese. She seemed to think in English first and transfer her ideas into Chinese. As a new ESL student with a high level of Chinese language and literacy. Jenny had learned subjects such as math and science in Chinese prior to coming to Canada, and in this bilingual classroom she received assistance from her peers and teachers with transferring her prior knowledge from Chinese to English. Jenny's assignment of the museum design illustrated how she successfully transferred her Chinese knowledge into English. She demonstrated this orally and in English text and visuals. Both Kelly and Jenny used their L1s as a useful resource in their L2 learning. Anthony, as a more balanced bilingual, more seamlessly transferred his knowledge in one language to the other, and he used the same resources to complete assignments and projects in both languages. Of the three children, the transition between languages seemed to be a smoother two-way process for Anthony. This supports Cummins' (1981) dual threshold theory in his CUP model, illustrated in Figure 2 in Chapter 2. The literacy-related proficiency in bilingual students' L1 and L2 are seen as common or interdependent across languages, and when both languages reach similar or equal levels, critical transfer between the

languages will occur more easily and frequently to allow them to successfully meet the academic demands associated with CALP.

Cross-Language Comparison

The focal students were very active in their metalinguistic awareness of their multiple languages. As I stated previously, Mr. Peterson sometimes discussed the different grammatical features of the two languages, such as the singular/plural forms and verb tense. He also talked about the common features of the two languages, such as the way to use descriptive terms in writing. The three children each demonstrated some awareness of the differences and similarities between the two languages, and they were each actively involved in these discussions, although to different degrees. They gave examples in Chinese, translated the examples for Mr. Peterson, and explained the similar and different features of English and Chinese. As native Chinese speakers, Jenny and Anthony seemed to understand that some of the mistakes that they made in their English writing might be influenced by their L1 grammatical rules, and they corrected them in their revised drafts. As an L2 Chinese learner, Kelly compared the grammatical forms and rules of Chinese with those of English, which might facilitate her Chinese language learning. I believe that their cross-language comparisons not only raised their cross-linguistic and metalinguistic awareness more generally, but also provided very meaningful and authentic dual language learning practices in this bilingual class.

Discussion

During my observation the Grade 5 teachers highly encouraged and promoted the above kinds of cross-language activities among the students. Ms. Meng is a Chinese-English bilingual, and when she taught the students Chinese words, she gave them the English meanings. She sometimes used English to explain math and health concepts, and she encouraged the students to construct new Chinese words for things that they did not know how to say in Chinese. She allowed her students to use code-switching in class and taught them the Chinese words they needed. She encouraged her students to use as much Chinese as possible in Chinese classes but made it clear that when they were helping each other, they could use whichever language they preferred to be able to communicate better.

Mr. Peterson is a native English speaker with a little knowledge of the Chinese language. He encouraged the students to use Chinese in his class when they helped or received help from others. He considered Kelly's code-switching between English and Chinese "smart," and in class expressed his admiration for bilingual ability. Mr. Peterson also led discussions to compare the different and common features of the two languages.

Ms. Mackey is an English-French bilingual who had no apparent knowledge of Chinese. She worked with Ms. Zeng, an English, Mandarin, and Cantonese trilingual speaker, to help the ESL children in her class and encouraged the students to use Chinese to help each other. As Mr. Peterson had, she expressed her admiration for students' multilingual ability. For example, she explained a French grammar point to the class: "It must be hard for you to remember all the different rules for different languages." The students answered with pride, "Not really!" Ms. Mackey then smiled and said, "Oh! You are just super intelligent!" The students' pride in their bilingual or multilingual ability was also apparent on another occasion in Chinese class when one of the Grade 5 students announced that it was his birthday that day, and the whole class voluntarily sang "Happy Birthday" in four languages: English, Mandarin, Cantonese, and French. Each time they changed the language, they laughed and excitedly shouted its name.

Teacher cooperation is another factor that promoted the students' crosslanguage repertoire. Ms. Peterson and Ms. Meng cooperated to teach writing, and the students could easily transfer the concepts and strategies that they learned in one class to another. When he saw Chinese-speaking students make some common English errors, Mr. Peterson asked Ms. Meng about the features of Chinese that might cause this and then discussed cross-linguistic comparisons in his class. Ms. Mackey cooperated with Ms. Zeng in science class to help the Mandarin- and Cantonese-speaking ESL students to transfer their prior knowledge from their L1 to their L2.

In Chapter 2 I discussed three interrelated false assumptions associated with the SUP model. Cummins (2007) pointed out that "direct method" assumption, "no translation" assumption, and "two solitudes" assumption continue to dominate bilingual instruction. However, my study shows that the teaching practices in this bilingual program revealed contradictions to these three assumptions and promoted the CUP model in dual language learning. In Chapter 2 I discussed Cummins' (2001) framework for the development of CALP (see Figure 3). Cummins offered this framework as an instructional guideline for teachers to help English language learners to develop their CALP. Although my research focus is not on teaching, I think that the students' crosslanguage activities that I discussed in this chapter support Cummins' framework, which includes a central sphere and three focus areas. The central sphere represents teacher-student interactions. Within this interpersonal space, Cummins argued, students' cognitive engagement and identity investment must be maximized for them to progress academically. According to this framework, the three focus areas in the development of CALP refer to a focus on meaning, a focus on language, and a focus on use. I will discuss how the central sphere and these three focus areas speak to the findings of my study.

The Central Sphere

Cummins (2001) explained that in the central sphere of the framework is a reciprocal relationship between cognitive engagement and identity investment within the interpersonal space of teacher-student interactions and that, to maximize students' cognitive engagement and identity investment, their prior knowledge must be activated. First, this enhances their cognitive engagement. As Chamot (1998) argued:

Nowhere is the role of prior knowledge more important than in second language educational contexts. Students who can access their prior knowledge through the language and culture most familiar to them can call on a rich array of schemata, whereas students who believe they can only use that knowledge they have explicitly learned in the second language are limited in their access. (p. 197)

The cross-language activities that I described in this Grade 5 class enabled the students to activate their prior knowledge in their L1 to facilitate their L2 learning. They all used cross-language knowledge transfer in their language and literacy practices to transfer prior knowledge from one language to another, which made the language and academic content learning less cognitively loaded, more context embedded, and more comprehensible. In addition, the cross-language comparison activities in which the students engaged helped to activate their metalinguistic knowledge in their L1s and raised their cross-linguistic awareness in both their L1s and their L2s. In this way the cross-language comparisons supported the students' cognitive engagement in this dual language learning.

Second, activating the students' prior knowledge promoted these students' identity investment. Cummins (2001) argued that the cultural, linguistic, and personal identities that students bring to the classroom are important and need to be affirmed for maximum identity investment in the learning process. In this Grade 5 class the students were not asked to leave their language and culture at the school door. Instead, their teachers and peers respected and appreciated their prior linguistic and cultural knowledge. The students could use their L1, code-switch to their L1, and use their L1 translations in classroom participation and peer collaboration. Malakoff and Hakuta (1991) noted that "translation provides an easy avenue to enhance linguistic awareness and pride in bilingualism, particularly for minority bilingual children whose home language is not valued by the majority culture" (p. 163). This aligns with these bilingual children's pride that I witnessed. The Chinese language is not a highly valued linguistic

commodity in Canada, yet these minority children lived out the pride that they felt in becoming competent bilinguals. The cross-language activities such as translation, code-switching, and cross-language comparison and transfer helped the students in my study to invest their identities in ways that motivated them to express their ideas, participate in classroom learning, and offer help to their peers. In this process it is very possible that they felt affirmed, respected, and needed by their teachers and peers and thus established a positive and powerful sense of self and sense of being Chinese in this learning community.

The Three Focus Areas

Focus on meaning. The focus on meaning, which is similar to *learning language* in Halliday's (1979/1980) language and learning triptych, emphasizes students' construction of meaningful language and concepts. Cummins (2001) stated that, to develop academic language, students need to gain access to sufficient comprehensible input in the target language and then develop critical literacy based on a deep level of understanding of this input. In my study it was evident that the Grade 5 bilingual students used cross-language activities to make the input more comprehensible. They understood the language and concepts in the target language with the help of the corresponding meanings in their L1s. Kelly and Jenny used their prior linguistic and academic knowledge in their L1s to understand the language and concepts in their L2s. As a more balanced bilingual, Anthony understood new English vocabulary through both English and Chinese explanations. In this study it is evident that language and academic content learning were more meaningful and comprehensible when the students received

help from their teachers and peers who were language brokers between Chinese and English. All three of these children had learned the importance of getting at the meaning and used numerous strategies to try to understand and make themselves understood.

Focus on language. The focus on language, like Halliday's (1979/1980) concept of *learning about language*, refers to understanding how language works and developing language awareness. In this study the bilingual students' crosslanguage comparison between Chinese and English was a very powerful way to raise their metalinguistic awareness generally and their cross-linguistic awareness more specifically and to promote meaningful and authentic dual language learning. When Mr. Peterson noticed some common grammatical mistakes that the Chinese-speaking students made, he did not treat the mistakes as negative influences from the students' L1s. Rather, he encouraged the students to discuss and teach him about the syntactical and grammatical differences between English and Chinese. The students also compared ways to use descriptive language in writing Chinese and English text. The cross-language comparison therefore affirmed the students' identity because it reinforced the idea that both students' L1s and L2s are legitimate and powerful, and there are ways to use their L1 knowledge as a resource rather than its being a barrier to learning their L2s.

In addition to working as "language detectives" (Cummins 2001, p. 137) in cross-language comparison, the students in this study also explored how language works by translating between Chinese and English. Anthony worked as a "corpus linguist" in the "name-giving activity" in Ms. Meng's class, in which he had to create a translation by thinking about the meanings and forms in the two languages. Other language and literacy practices that I described in Chapters 4, 5, and 6 also show the focus on language, such as the students' playing with humour and recomposing lyrics.

This focus on language was evident in all three children's use of both oral and written language in both languages. In Chapter 2 I discussed Goodman's (1996) framework for language in literate societies that considers oral and written language systems as parallel and yet distinct with similarities and differences. These bilingual children were working with at least two language systems, and it might be possible that the strategies they used to uncover their L1 systems enhanced their understanding of their L2 systems.

Focus on use. The focus on use, similar to Halliday's (1979/1980) *learning through language*, emphasizes the use of the target language in authentic and meaningful ways instead of using it only abstractly or its being classroom bound. In this study both English and Chinese were target languages for different students, and they were required to use both languages to learn a variety of subjects in very authentic and meaningful ways. In addition to content learning, working as language brokers for their peers was also a very authentic and meaningful way to use the target languages. All three children were language brokers in both their L1s and L2s to help their peers, who were their authentic audience and engaged in two-way communication with them in this process. Cummins (2001) stressed that "language use can stimulate linguistic growth, cognitive development and affirmation of identity" (p. 144). This idea was evident in my study because, in the process of helping others, these students practiced using both their L1s and L2s and developed their intellectual functions in these social interactions. For example, Suzy's Chinese improved by helping Jenny with her English learning because Suzy had to translate words and concepts between the two languages for Jenny. Helping their peers in two languages also affirmed their identity because it enabled the students to use their languages in a powerful way to connect with each other, express themselves, and create a positive sense of self as capable helpers.

Summary

In short, I have analyzed four kinds of cross-language activities in which the students engaged as a part of their bilingual language and literacy practices. I used Cummins' (2001) language development framework to interpret the dialogue between students' L1s and L2s. The three focus areas in this framework were influenced by Halliday's (1979/1980) language and learning triptych: learning language, learning through language, and learning about language. Halliday's language and learning theory was developed from research on L1 acquisition, and Cummins' framework was developed mainly from the learning experiences of minority bilingual children who were English language learners. I believe that my research expands these language development theories because it applies them in a two-way English-Chinese bilingual learning context.

Theme 2: Dialogue Among Peers

All three students actively interacted with each other and with their peers at school and out of school. They and their most common interlocutors, whom I introduced in previous chapters, are shown in Figure 9. These children's interactive practices were in the form of helping, practicing, sharing, and respecting. Using the C of P perspective (Lave & Wenger, 1991), I will discuss how the peer interactions contributed to constructing the students as legitimate peripheral participants in language and literacy practices in this bilingual classroom.



Figure 9. The participants and their most common interlocutors at school.

Helping

The arrows in Figure 9 indicate the directions in which the children offered help to or received help from their peers. The practice of students helping each other is a very common occurrence in this class. All three students were assigned as official helpers for someone else in the class, and they actively assisted their assigned peers and other classmates and at the same time received help from others in some way. The helping in this class was often a two-way process from which each recipient benefited.

Kelly helped the ESL children such as Jenny and Eddie with their English learning, and sometimes she also helped Anthony and Martin with English words that they did not know. She received help from Anthony, Jenny, Carol, and Martin when she encountered difficulties in her Chinese learning.

The cooperation of student helpers such as Suzy, Kelly, and Anthony enhanced Jenny's noticeable progress in her English learning. At the same time, Jenny's expertise in Chinese and math benefited other students whom she helped. For example, she helped Kelly with her Chinese projects, Suzy and Martin with their Chinese and math, and John and Leo, the two learners who struggled with Chinese.

Anthony helped ESL children such as Eddie and Jenny with their English learning, Kelly with her Chinese, and Eric and Martin with their math; and sometimes he asked Kelly for help with words that he did not know in English.

In her ethnographic research in one elementary multilingual classroom, Toohey (1998) noted that some classroom practices discouraged and even prohibited help from peers. One contributing factor was the teacher's seating plan. No children who spoke the same L1s (other than English) sat together, and ESL students were seated near the front of the room closer to the teacher. Toohey observed that the ESL students had few opportunities to use their L1s and interact with more capable peers; thus, according to Toohey, this arrangement marginalized the ESL students. In my study, however, the teachers' main concern in seating the students was to encourage them to help each other. As I mentioned earlier, when pairs did not work out well, the teachers discussed it and made new arrangements. In addition, students who spoke the same L1s often sat together, such as Anthony and Eddie, so that they could communicate in their L1s. The students could also move their chairs or walk around in the classrooms to help others, and they could use English, Chinese, or even Cantonese to communicate, as long as they were helping each other. When I asked about the issue of seating, Ms. Meng told me:

The most important thing is to have them work together, to help each other. We have to consider factors such as their L1, their language proficiency, and their personality in arranging the seating position. We will observe and make changes to have the pair work out.

In the process of helping each other, the children often became good friends. For example, Jenny and Suzy, Kelly and Jenny, and Anthony and Eddie spent a great deal of time together both in class and at recess.

In addition to arranging the seating, the teachers used other ways to encourage the students to help each other. For example, both Mr. Peterson and Ms. Meng awarded the student helpers stickers. The last Friday of every month Ms. Meng had a meeting with the students and asked them to nominate the people who had helped them the most in the last month and to describe how they had offered help. Ms. Meng would then award the nominated students with gifts, and she encouraged the helping spirit in her daily teaching. For example, she used Anthony's story of helping others with math to introduce new words.

In short, helping each other was a very common and highly encouraged practice in this class. Throughout the year the students seemed to become more and more willing to volunteer to help each other. By the end of the year I observed that, once they had finished their own tasks, many students would spontaneously ask whether any of their peers needed help. This helping practice constructed the children as legitimate participants who gained access to linguistic and academic resources in this bilingual classroom community, and it enabled the bilingual children who were having difficulties in either language or content learning to have opportunities to interact with more capable peers. It is also worth recognizing that in these interactions, the power relations between the peers were often reciprocal. In this two-way bilingual classroom, the children helped each other with their own language expertise, and the helpers could become helpees in different classrooms.

Practicing

Two-way bilingual programs bring native speakers of two languages together and offer them a chance to learn the other language from their peers. However, research (Carranza, 1995; McCollum, 1994; Potowski, 2004) has shown that this peer collaboration is not very common in two-way bilingual programs. Research (Carranza, 1995; McCollum, 1994; Potowski, 2004) conducted in English-Spanish bilingual programs in the US revealed that when native speakers of English and Spanish are together, they all prefer to use English, even the native speakers of Spanish. Genesee (1985) reminded us that "combining students from different language backgrounds does not guarantee that they will interact, nor that they will use the minority language" (p. 554). Each bilingual context can have contextual factors such as both the wider society's and the local community's relative value for these languages. These more macro influences can impact local realities.

The findings from this study, however, show that students from two different linguistic and/or cultural backgrounds not only interacted, but also considered their peers' language expertise for the purpose of their own language practice. In their local context they evidently valued each others' expertise. When Kelly and Jenny talked, particularly in the second term when Jenny's English had improved, the two girls tended to use more of their L2s to speak to each other. That is, in their conversations Jenny spoke more English, and Kelly spoke more Chinese. It is possible that they were using each other's language expertise to practice and strengthen their own comparatively weaker languages. The same situation occurred when Jenny and Suzy talked. Suzy's mother also indicated that Suzy's Chinese improved when she helped Jenny.

When I asked Ms. Meng about this, she told me that she had also noticed that the students were making use of each other to practice their new languages: We are very lucky to have some new immigrant children from China in our class. Interacting with these children is very valuable for the other students' Chinese learning. I encourage the students to cherish the chances to talk with them in Chinese. At the same time, the newcomers could learn English from their peers.

Ms. Meng's words point to the importance in this class of having a good balance of language strengths in both English and Chinese to promote dual language learning and cooperation. In this class the immigrant children were not just minority children in this country who needed help with their English; they were also considered contributing members who brought valuable linguistic and cultural resources to the learning community.

Using peers to practice is another example of students' language learning through social interactions with more capable peers. This kind of peer collaboration indicated the desire of the children to learn their L2s. Kelly did not want to speak "half-half" Chinese, and Jenny felt that her English reading books were "thinner" than her Chinese books. They were both determined to improve their L2s and to find opportunities to practice their new languages. The benefits that they derived from each other's language expertise also indicates that, by negotiating and interacting with each other, these students strategically appropriated and internalized the linguistic resources that their peers offered in this bilingual community. Again, the interactions and practice in this two-way bilingual community shows that the power relations among the peers were often reciprocal. The children used their peers to practice their weaker language and at the same time offered their stronger language as linguistic resources for their peers' practice.
Sharing

All three participants tended to share their school work with their peers, which the teachers encouraged. In some classrooms this might be viewed as cheating and be prohibited, but that was not the case in this classroom. As I mentioned earlier, Jenny was reassigned to sit with Suzy because Jenny's previous deskmate was reluctant to share her work with Jenny. When she worked with Suzy, Jenny often copied Suzy's class notes, especially during the first few weeks, and then asked questions about the notes. Suzy sometimes shared her assignments with Jenny to explain the teachers' requirements. Jenny often shared her English writing with Suzy, Kelly, and Anthony and made revisions based on their suggestions. Kelly also shared her Chinese writing with Jenny and Anthony.

In my observation, many class activities facilitated this sharing. For example, in English class Mr. Peterson encouraged the students to conference on their writing as part of the writing process. He asked volunteers to share their written texts in class, and he used the smart board to demonstrate the revisions to their writing. Anthony often volunteered and revised his writing based on the suggestions that his teacher and peers offered. In Chinese class Ms. Meng would read a student's writing and ask the others to make comments and offer suggestions. When Ms. Meng read Anthony's Chinese writing in the assignment of *the letter to Tim*, they talked about his use of the Chinese word " \perp [up]" at the end of the letter after the writer's name. I noticed later that several of his peers adopted this Chinese signature. Kelly used this signature in another assignment and on the birthday card that she made for her father. These examples also point out how the students used "writers' workshop" (Graves, 1991) methodologies effectively in two languages.

These sharing activities gave the students another opportunity to interact and cooperate with their more capable peers. Sharing among the students enabled them to legitimately gain access to the linguistic, intellectual, and academic resources that they needed from this bilingual community. Such peer cooperation helps children to perform tasks just beyond their level of ability and eventually learn to be capable of completing the task independently.

Respecting

I noticed that this classroom was a very supportive environment, and the participants felt free to try out new things and make mistakes. Nobody laughed at Kelly's code-switching in class, and no one laughed at Jenny when she could not produce complete sentences in English. When the students helped each other, they never made jokes or laughed at their peers' mistakes or deficiencies. For example, when Anthony realized that Eddie did not know the story *Three Little Pigs*, he did not express surprise or ask questions; rather, he immediately told Eddie the story in Cantonese, and they went on to do their in-class assignment.

When I addressed this issue with Mr. Peterson and Ms. Meng, they both reported that they had addressed the point of respect in their teaching. Mr. Peterson stated, "I made it very clear that it is not fair to ask for the same things from every student, because in this classroom there are people who have been in Canada for 10 years and the ones who are here for 10 days." Ms. Meng told me: At the beginning of the term, there was one boy laughing at others' mistakes in class. They are kids, right? But I was very strict with this. I said 'It's not funny!' right away. I asked them if I ever laughed at them when they made mistakes in learning Chinese, and if I did, how they would feel about it. We had a discussion. I then asked them not to do the same thing to their peers.

As experienced L2 teachers, Mr. Peterson and Ms. Meng were very aware of the importance of keeping the children's affective filter low. Throughout the year I noticed that most students would ask the teachers questions in front of the class without hesitation, and sometimes the students would voluntarily applaud their peers who accomplished challenging tasks despite their lack of language proficiency.

This attitude of respect among the peers in this class resulted in very positive power relations in this community of learners. It is very important for the students to feel respected and affirmed in the community, and thus become more "legitimate" in moving towards "full participation" in two languages in the community of practice.

Discussion

Lave and Wenger (1991) explained that "learning is an integral and inseparable aspect of social practices" (p. 31). They emphasized that learning is not a one-person act and that it occurs by participating in the learning community. In my study the four kinds of interactive activities in which the students participated seemed to be very powerful social practices that positively influenced their bilingual and biliteracy learning in this community. Ms. Meng said in an interview, "My top priority for my students is to be happy at school and to be close with their peers as brothers and sisters. I hope them to be friends for the rest of their lives." This reminds me of Cummins' (1996) emphasis on the benefits of interpersonal interactions to students: "Human relationships are at the heart of schooling. The interactions that take place between students and teachers and among students are more central to student success than any method for teaching literacy, or science or math" (pp. 11-12). In my study the positive interactions between the students played an important role in their dual language and literacy development and academic success.

Lave and Wenger (1991) stated that the "social structure of the C of P, its power relations, and its conditions for legitimacy define possibilities for learning (i.e. for legitimate peripheral participation)" (p. 98). When we examine bilingual children's learning as social practices, we have to consider the social structure of the community. It is evident that the four kinds of peer interactions among the students helped to establish and reinforce the positive power relations among the students in this community. In addition, in this two-way bilingual community, the peer interactions often reflected the reciprocal power relations. Being bilingual seemed to be of benefit in moving the students toward full participation in this C of P because this bilingual classroom had Chinese and English subcommunities, proficiency in both or either language gave the students opportunities to become more legitimate and more powerful in their legitimate peripheral participation because they were contributing members with different language expertise in this reciprocal cooperation. For example, Jenny was not just a newcomer who needed help with her English; she also contributed by helping her peers with Chinese.

This might have made her feel more respected, needed, and affirmed by her peers and thus more legitimate and motivated to participate in the bilingual community.

The C of P framework was useful in my study because it helped to explain how social interactions among students promote their language and literacy learning. However, I am not certain that this framework adequately explains and answers many of the questions that I had as the study progressed.

First, as Toohey (1998) pointed out in her discussion of legitimate peripheral participation, it might be difficult to analyze only two sorts of participants, newcomers and old-timers, with newcomers moving towards full participation in the C of P. In my study I found the old-timer/newcomer dichotomy difficult to apply because my participants in this bilingual context seemed to shift their identity in relation to these terms frequently in different settings. Kelly was literally an old-timer in this Grade 5 class, and she offered help to Jenny, the newcomer, especially in English classes. When she worked with Jenny in Chinese classes, Kelly was sometimes a newcomer who learned from Jenny to complete a project in Chinese. Similarly, although Jenny was a newcomer to this class, she came to this community with a high level of Chinese language expertise, and she worked as an old-timer and helped her peers with their Chinese learning. Therefore, the more advanced learners are not necessarily the literal old-timers in the community; there is a distinction between the oldtimer/newcomer to the community and the old-timer/newcomer to languages. In the context of my study, there is no straightforward old-timer/newcomer

171

distinction among the community members, and the students had fluid, dynamic, and continuously changing identities in different learning context.

Second, Lave and Wenger's (1991) notion of LPP puts more emphasis on the newcomers who are engaging in the learning process in the C of P. In LPP, there may be "very little observable teaching; the more basic phenomenon is learning" (p. 92). However, in my study the teachers and the more capable others played significant roles in helping the students to learn in their ZPD (Vygotsky, 1986). The teachers' role was crucial in establishing and reinforcing positive interactions between the learners and creating the conditions for them to stretch their ZPD. They created supportive classroom atmospheres, arranged students in what they considered the most appropriate pairings, and encouraged collaboration among peers. In this bilingual community it was evident not only that the newcomers were making an effort to move towards full participation, but also that the more advanced learners, including the teachers, were trying very hard to support the development of the less advanced learners. I agree with Haneda (1997) that "if the notion of community of practice is to enrich our understanding of classroom learning, it needs to be extended to incorporate the Vygotskian idea of working in the zone of proximal development (ZPD)" (p. 23). That is to say, we need to consider the crucial role of teachers and more advanced students in peer interactions and in the process of newcomers' moving to full participation in the learning community to maximum language participation and potential acquisition.

Finally, within the C of P framework the students in this class effectively conducted their language and literacy practices in their social interactions.

However, it seems too simple to imply that if we put students from different linguistic backgrounds together, they will naturally learn from each other in their social interactions. A two-way bilingual education classroom is not the universal solution to bilingual and biliteracy acquisition. As I stated earlier, research on US Spanish immersion revealed limited bilingual interactions among the students. The idea of newcomers' moving inexorably toward fuller and more powerful participation does not seem to be adequate to answer all the questions. Paley (1992) observed in her classroom-based research that

the [traditional] approach has been to help the outsiders develop the characteristics that will make them more acceptable to the insider. I am suggesting something different: The group must change its attitudes and expectations towards those who, for whatever reasons, are not part of the system. (p. 33)

From Paley's perspective, instead of asking outsiders such as children who speak languages other than English to become more "acceptable" in North American schools, we need to consider how to make changes to the group or the learning context to allow these outsiders in. Freire (1970) further argued the notion of insider/outsider:

The truth is that the oppressed are not "marginals," are not people living "outside" society. They have always been "inside"—inside the structure that made them "being for others." The solution is not to "integrate" them into the structure of oppression, but to transform that structure so that they can become "being for themselves." (p. 55)

If we apply this perspective to examine students' learning in the C of P,

we need to pay more attention to how the educational structure or the community

can be transformed to become more inclusive for newcomers rather than to how

the newcomers can make changes to fit into the community. In other words, when we use the C of P framework to examine bilingual children's learning as social practice, it is not sufficient to assess only how individuals move progressively towards fuller participation in the community; we also need to examine how the community constructs positive and empowering social structures to help newcomers to make progress in their participation. This speaks to my research, in which the design and social structures of this Grade 5 class helped to create a very supportive and inclusive learning community. The interactive practices among these children in the form of helping, practicing, sharing, and respecting were effective and powerful ways to build a learning community in which all of the learners had access to community resources such as linguistic, academic, and culture expertise; in which all of the learners had practice opportunities and sufficient scaffolding in their interactions with more capable others to learn languages and academic knowledge; and in which all of the learners, especially the newcomer language learners, occupied powerful positions and felt included, affirmed, and valued in language and literacy practices.

Theme 3: Dialogue Across Places

In examining the student participants' language and literacy practices in at-school and out-of-school contexts, I found four ways in which their learning places, such as the classroom, school, home, clubs, and local communities, were connected: (a) by language, (b) by knowledge, (c) by activity, and (d) through the school-community organization, BEA.

Connected by Language

Language dissonance has a significant impact on bilingual children's learning at school and at home. Li (2003), for example, demonstrated that parents who are deficient in English can prevent their children from communicating with their teachers or avoid being involved in their children's schoolwork. In my study the bilingual program included instruction in two languages: English and Chinese. The principal and some teachers at the school are bilinguals who can carry conversations with parents in either English or Chinese. Jenny's mother told me that when she was considering a school transfer for Jenny and visited Riverbank School for the first time, she felt so relieved and included when the principal initiated a conversation with her in fluent Chinese. I noticed that Ms. Meng also chose to talk with parents in the language in which they felt comfortable. The school newsletters and notices to parents were also printed bilingually. When I talked with the parents, they all indicated a sense of inclusion in and connection with the school despite their different proficiencies in English and Chinese. The parents of my three participants all seemed involved in their children's school life, frequently talked to the teachers, and often volunteered at school activities.

Both Jenny's and Anthony's parents adopted a first-language-only policy in oral interactions among the family members at home to maintain their heritage language and develop their children's literacy skills in their L1. All three families considered their L1 and literacy as resources or assets to facilitate their bilingual development rather than as barriers to their children's language learning. They also valued the development of their children's L1s and L2s, and they offered their children help at home with either or both languages if they were able to do so. The children used both languages at home to some degree and engaged in biliterate practices such as watching the news, reading newspapers, and talking with the other family members. This varied from home to home, but there was evidence of biliteracy practices in all three homes.

All three children communicated intergenerationally with their grandparents or great-grandparents in Chinese or in English. Clubs at school or out of school and volunteering in community activities also gave the children ample opportunities to practice both English and Chinese. All three students had lived in or visited China, where they learned or practiced the Chinese language.

The bilingual continuum in these children's language and literacy practices in different learning places is evident. This continuum not only gives the students opportunities to practice their L1s and L2s in different contexts, but also helps them, the school, and the family to communicate better with each other in the process of supporting the students' language learning and identity development.

Connected by Knowledge

Anthony used the Chinese rhyming times table that he learned in China in his math calculations. Anthony's mother also used Chinese textbooks to tutor her son in math. When I asked the other children of Chinese heritage about this Chinese rhyming times table, many of them told me that they had learned it from their parents and found it very useful. This is an example of how the parents have contributed to their children's academic learning at school. Both the English and the Chinese cultures were introduced in the bilingual program. In English classes Kelly often shared the Canadian cultural knowledge that she had learned from her parents at home. In Chinese classes Jenny and Anthony also had chances to share Chinese culture-related knowledge that they had learned from home literacy activities such as reading the newspaper, watching TV and talking with their family members. Anthony also told me that his parents were familiar with many of the Chinese songs and Chinese stories that he learned at school, and they sometimes sang the songs together at home. This bicultural education helped not only the children to feel more included in the school community, but also the parents to feel more connected with their children and their children's school life.

All three students actively volunteered and participated in events organized by BEA during weekends or on holidays. They have all lived or visited nationally or internationally as well and used the knowledge and experiences that they gained at home or in other out-of-school contexts as resources, or funds of knowledge, in their language and literacy learning at school. They shared these experiences in classroom discussions or used them as resources to complete school assignments and projects.

Connected by Activity

The three children were language brokers in their peer interactions at school and participated in similar literacy-related activities out of school as well. Anthony and Jenny were sometimes language brokers for their parents, who are immigrants in Canada. Kelly was as a language broker for her family when they visited China, as well as a language and cultural broker for her Chinese friends in the BEA events for which the earthquake-orphaned children were brought to Canada.

All three children were attentive language helpers for their peers at school. Kelly helped her brother and sister with their Chinese learning by playing teaching games with them, and Anthony helped his siblings with their Chinese by insisting that they speak Chinese even when they initiated conversations in English.

These literacy-related activities have similar features across different learning places, and they helped the students to form better habits to learn language-related skills in these activities.

Connected by BEA

The three children and their parents volunteered in BEA activities. BEA was an important bridge that connected the bilingual students' school and home experiences. As BEA members, the parents attended council meetings with the principal and school representatives to discuss issues related to their children's school life, and the principal and teachers also learned more about the students' home life via the BEA meetings. Many activities that the BEA parents organized promoted and supported the bilingual program in the city more broadly. The children in my study often used their BEA experiences as resources for their classroom participation. In addition, the activities provided a space not only for the students to interact with each other out of school, but also for the parents to get together to discuss questions related to their children's school life.

Discussion

Ellis (2005) discussed the importance of *place* as a social construction in the field of education. Ellis developed a "place and identity" (p.63) framework (Figure 10) to illustrate how educators could plan for teaching as planning for place-making and how students could be helped to construct their identities through actions in everyday life which were constrained or enabled by rules, routines, resources, and relationships.



Figure 10. Structural formations of place (Ellis, 2005, p. 63).

The successful language learning practices of the three participants show the importance of positive identities and useful everyday practices at school, at home, and in other communities. Using Ellis's analytic framework, I created Table 3 to encompass the rules, routines, resources, and relationships in different places that support bilingual children's language and literacy learning; it indicates the positive and collaborative connections among the rules, routines, resources, and relationships in the students' everyday lives in different learning places. These connections have given the students familiar and supportive bilingual learning experiences in different contexts and encourage their continuous development of a positive sense of self and a sense of places in language- and literacy-related activities.

Table 3

	School	Out of school
Rule	L1 and L2 are both used Students can/should show each other their work No laughing at others' mistakes	L1 and L2 are both used First-language-only policy in oral communication
Routines	Helping peers Practicing L2 with peers	Helping siblings Volunteer and meeting classmates in BEA events Practicing L2 with family members, tutors, and friends Intergenerational talk in L1 or L2
		(table continues)

Rules, Routines, Resources, and Relationships in Different Places

	School	Out of school
Resources	Language broker Language helper Bilingual books and dictionaries Collaboration among teachers Bilingual and trilingual teachers, principal, and peers	Language broker Language helper Bilingual books and dictionaries Bilingual and trilingual family members, tutors, and buddies
Relationships	Helper/helpee Respecting peers	Helper/helpee Respecting parents and grandparents Buddies in BEA events

CHAPTER EIGHT: CONCLUDING REMARKS

This research has allowed a glimpse into English-Chinese bilingual students' language and literacy practices in one classroom in one Western Canadian city. In Chapters 4, 5, and 6 I analyzed three children's bilingual and biliterate practices in this one local context at school and out of school, including their practices in different classrooms, at school clubs, in their peer interactions, at home, and in community activities. These three chapters address my first two research questions. To answer my last research question, I conducted a cross-case analysis that I discuss in Chapter 8, and I present an interpretive account of the three students' language and literacy practices in three thematic areas: dialogue between languages, dialogue among peers, and dialogue across places. The findings of my research reveal that these types of dialogue positively affect English-Chinese bilingual children's language and literacy practices in this context.

The findings of this research show that the three child participants, Kelly, Jenny, and Anthony were successfully engaging in the language and literacy practices in the two languages in and out of the school contexts. They were making progress in achieving both English and Chinese language and literacy, and developing positive identities as language learners. Their success in bilingual and biliterate learning were supported by multitude factors in different learning places. As I discussed in Chapter 8, the dialogue between the students' L1s and L2s helped maximize their cognitive engagement and identity investment, and provided ample opportunities for them to learn languages, learn through languages, and learn about languages (Halliday, 1979/1980) in these two languages. The dialogue among peers, in the form of helping, practicing, sharing, and respecting, helped created powerful social interactions in this community, which positively influenced the students' bilingual and biliterate learning and identity construction. The dialogue across places enabled the students to experience continuous and collaborative connections among the rules, routines, resources, and relationships that supported the students' bilingual and biliterate development in their everyday lives at school, at home, and in other communities.

Many studies (Li, 2002, 2006, b; Valdes, 2001) on bilingual and multilingual children demonstrated that they tended to lose their L1s and rapidly shift to English due to the fact that their first language and culture were not validated in school and in other learning contexts. As Wong Fillmore (2000) described,

Children in such situations, irrespective of background or age, are quick to see that language is a social barrier, and the only way to gain access to the social world of the school is to learn English. The problem is that they also come to believe that language they already know, the one spoken at home by their families, is the cause of the barrier to participation, inclusion, and social acceptance. They quickly discover that in the social world of school, English is the only language that is acceptable. The message they get is this 'The home language is nothing: it has no value at all.' If they want to be fully accepted, children come to believe that they must disavow the low status language spoken at home. (pp. 207-208)

Chinese is one of the minority languages with relatively low status in

Canada. In this study, however, both the bilingual students' first and second

languages were validated in school and in other learning contexts. The children's

L1s were regarded as valuable resources and useful tools in their bilingual

learning, peer interaction, and other social activities. It was obvious that the students in my study have recognized the value of both their L1s and L2s, and they drew upon their lingual and cultural resources as they were exploring their world.

With regard to the complexities of the issue of bilingual and biliterate practices, I think that the image of a Rubik's cube (Figure 11) might partially represent the phenomena that I have described in this paper. In a classic Rubik's cube, each of the six faces is covered by nine stickers in six solid colors. A pivoting mechanism enables each face to turn independently, thus mixing the colors. For the puzzle to be solved, each face must be a solid color. If we consider the stickers as different languages, each of the languages has a visible surface as the BICS show; however, below the surface, in the depths of this model, higher thinking skills related to CALP such as synthesis, transferring, and analysis are located and interact with other languages. If we consider the students in the bilingual classroom as different stickers on this magic cube, each student has a different linguistic, cultural, and intellectual background. To cooperate in the cube and solve the language problem, we have to consider many sociocultural factors as the pivoting mechanism to enable each of the students to turn independently while, at the same time, mixing with other students to achieve productive learning. School, families, and communities can be seen as different stickers in the global Rubik's cube as different contexts in which language and literacy practices take place. They have to figure out their own ways to work collaboratively as the pivoting mechanism to solve the bilingual education puzzle.



Figure 11. Rubik's cube.

Several of the theoretical frameworks that I discussed in this study— Halliday's (1979/1980) language and learning theory, Cummins' (2001) language development framework, and Lave and Wenger's (1991) notion of C of Ps were previously rarely used in a two-way bilingual context. My research expanded these theories in the ways that it applied these theories in a two-way English-Chinese bilingual leaning context, and analyzed the usefulness of them in this specific context.

In addition, when I applied the theories in my data analysis and interpretation, I found myself often trying very hard to make my study fit the theories. It took me a long time to realize that the fit between my data and the literature does not have to be perfect, and in fact it is these places in between that provide very interesting "food for thought". For example, Lave and Wenger's (1991) notion of C of P was useful in interpreting the students' language and literacy practices in their social interactions; however, it did not adequately answer all of the questions that emerged from the study. When I extended Lave and Wenger's framework to work with other sociocultural theories such as Vygotsky's (1986) notion of ZPD and Paley's (1992) idea of outsider expectation, I was able to interpret my data more easily. As Graue and Walsh (1998) argued:

The value of theory is that it allows one to see the previously invisible and to see the previously visible in new ways; the danger of theory is that it can function like a set of blinders, restricting what one sees and how one sees it. (p. 26)

I learned in this research process that my research does not need to fit a theory; rather, the theory needs to illuminate and inform my research. In addition, I learned to theorize based on the gaps between my data and the literature.

Methodologically, the study provided insights into the challenges of conducting an ethnographic case study. When I reflect on the research process, I cannot help thinking about the challenges of conducting classroom-based ethnographic research. First, I felt overwhelmed by the complexity of examining a classroom setting. During the first few weeks I had no idea of how to be an ethnographer sitting in a classroom with so much going on. I found that Boostrom's (1994) suggestion for classroom observation was useful in this process. As I discussed in Chapter 2, I followed Boostrom's steps while I worked in the classroom. In the first phase, observer as video camera and observer as playgoer, I tried to relax during the classroom observation to make sense of what was going on in the setting without worrying too much about complexity. In the second phase, observer as evaluator and observer as subjective inquirer, I began to return to my research questions frequently, make inquiries about the phenomena, interview the students and the teachers, and try to connect my research questions to the classroom practices. In the last phase, insider and reflective interpreter, I finally felt confident about working in the classroom. The classroom practices began to make sense to me, and after further interviewing and talking with my participants, I began to reflect on and interpret the data.

In addition, ethnography is a description of what a culture is, what being a member of that culture means, and how that culture differs from other cultures. As an English-Chinese bilingual, I certainly see some advantages to having conducted this research; however, as an insider I found that some of the English-Chinese language-learning practices seemed too obvious for me to notice. I began to wonder about questions such as, Is it a disadvantage for an ethnographer to be too familiar with the research culture? Is it possible to overcome the disadvantage of being an insider in ethnographic research? In an article on conducting ethnographic research in a school, Erickson (1984) suggested "making the familiar strange" and argued that in doing ethnographic research in one's own culture, the ethnographer must adopt a critical stance and continually examine and question the oddness and arbitrary nature of the ordinary and obvious phenomena. Erickson's article helped me greatly to work as an insider while at the same time making the familiar strange.

Pedagogically, this study has extended the thinking on how English-Chinese bilingual children engage in language and literacy practices in dual language program. The research may be of value and interest to theorists, researchers, educators, and policy makers in the field of English-Chinese education. Currently, other school districts in Canada are in the process of developing Chinese bilingual programs and perhaps this study will be useful for

their deliberations.

On a larger scale in a country like Canada, many things still need to be

done to raise the awareness, status, and value of minority languages such as

Chinese. A recent article in The Globe and Mail, "Septilingualism in BC Schools"

(2011), reveals some unfortunate misconceptions about bilingual programs.

Septilingualism

The Ministry of Education of British Columbia should not diminish the place of French in the school curriculum to give it the same status as five other languages, namely Mandarin, Punjabi, Spanish, Japanese and German, as is proposed in a draft curriculum that could come into effect in autumn, 2012.

The more languages the schools can teach, the better. To be sure, there is increasing value in learning languages that are useful in emerging economies, such as Mandarin, Hindi, Spanish and Portuguese. But that should not detract from the status of French, which is after all one of Canada's two official languages....

It is a good thing for children to connect to their various heritages through language, but families are in the best position to effect that goal. In particular, the choice in the draft curriculum of Punjabi, rather than Hindi, the national language of India, which is also understood in Pakistan, suggests a political motive of appealing to ethnic communities well represented in B.C.

Other languages than French should be offered as options, but Canada's two official languages should be at the core of the curriculum. The 1960s concept of biculturalism may have largely yielded to multiculturalism, but official bilingualism—English and French—remains an important part of Canadian public policy that should continue to be manifested in the country's elementary and secondary schools.

In this article it is interesting to notice that minority languages are still

considered extra to bilingual education in Canada. The author also views families

as responsible for these languages. Chinese language may not be considered as

important as English or French, and people may feel that students can learn it at

home instead of wasting taxpayers' money on a bilingual program. In the recently established English-Chinese bilingual programs in BC, enrolment priority is given to children without a Chinese language and literacy background. In other words, the purpose of the program is to teach English-speaking children something extra rather than to help Chinese-speaking children to maintain their heritage language. There is no recognition of the power of a good dual language program for these children.

The findings of my research show, however, that minority languages are not just extras, that they are important stickers on a Rubik's cube, and that it is crucial to enable the pivoting mechanism to work effectively and successfully to solve the bilingual education puzzle. The findings of my research reveal that dialogue between languages, dialogue among peers, and dialogue across places can positively affect English-Chinese bilingual children's language and literacy practices in a dual language program. As Li (2006, b) argued, developing bilingual programs in Canada "will benefit not only the immigrant children, their families, and ethnic communities, but also the nation as a whole by preserving the language resources of the country" (p. 378). If this is to be a truly multilingual country and Chinese Canadians who have relocated here over generations are to continue their positive identity in Canada, then the many possibilities of language education need to be explored.

REFERENCES

- Ager, M. (1996). *The professional stranger: An informal introduction to ethnography* (2nd ed.). New York: Academic Press. (Original work published 1980)
- Baker, C. (2006). *Foundations of bilingual education and bilingualism* (4th ed.). Buffalo, NY: Multilingual Matters.
- Bakhtin, M. (1981). The dialogic imagination. Austin: University of Texas Press.
- Barton, D. (1994a). *Literacy: An introduction to the ecology of written language*. Cambridge, MA: Blackwell.
- Barton, D. (1994b). The social impact of literacy. In L. Verhoeven (Ed.), Functional literacy: Theoretical issues and educational implications (pp. 185-197). Philadelphia: John Benjamins.
- Barton, D., & Hamilton, M. (2000). Literacy practices. In D. Barton, M. Hamilton, & R. Ivanic (Eds.), *Situated literacies: Reading and writing in context* (pp. 7-15). New York: Routledge.
- Bilash, O., & Wu, J. (1998). The influence of bilingual education on student selfidentity and inter-cultural sensitivity: Perspectives from Grade 6 children in Chinese and Ukrainian bilingual programs. *Journal of Interdisciplinary Education*, 2, 68-87.
- Blair, H. A. (2000). Genderlects: Girl talk and boy talk in a middle-years classroom. *Language Arts*, 77(2), 315-323.
- Boostrom, R. (1994). Learning to pay attention. *Qualitative Studies in Education*, 7(1), 51-64.
- Carranza, I. (1995). Multilevel analysis of two-way immersion discourse. In
 J. Alatis, C. Straehle, B. Gallenberger, & M. Ronkin (Eds.), *Georgetown* University round table on languages and linguistics (pp. 169-187).
 Washington, DC: Georgetown University Press.
- Cenoz, J., & Genesee, F. (1998). Psycholinguistic perspectives on multilingualism and multilingual education. In J. Cenoz & F. Genesee (Eds.), *Beyond bilingualism: Multilingualism and multilingual education* (pp. 16-32). Clevedon, UK: Multilingual Matters.
- Chamot, A. U. (1998). Effective instruction for high school English language learners. In R. M. Gersten & R. T. Jimenez (Eds.), *Promoting learning for culturally and linguistically diverse students: Classroom applications from contemporary research* (pp. 187-209). Belmont, CA: Wadsworth.

- Chui, T., Tran, K., Maheux, H., & Social and Aboriginal Statistics Division, Statistics Canada. (2009). 2006 census: Immigration in Canada: A portrait of the foreign-born population, 2006 census: Findings. Retrieved April 10, 2009, from http://www12.statcan.ca/english/census06/ analysis/immcit/index.cfm
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Upper Saddle River, NJ: Merrill Prentice Hall.
- Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In California State Department of Education (Ed.), *Schooling and language minority students: A theoretical framework* (pp. 3-49). Los Angeles: California State University, Evaluation, Dissemination and Assessment Center.
- Cummins, J. (1989). *Empowering minority students*. Sacramento: California Association for Bilingual Education.
- Cummins, J. (1996). *Negotiating identities: Education for empowerment in a diverse society*. Ontario, CA: California Association for Bilingual Education.
- Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the crossfire*. Clevedon, UK: Multilingual Matters.
- Cummins, J. (2001). *Negotiating identities: Education for empowerment in a diverse society* (2nd ed.). Ontario, CA: California Association for Bilingual Education.
- Cummins, J. (2001). The influence of bilingualism on cognitive growth: A synthesis of research findings and explanatory hypothesis. In C. Baker & N. Hornberger (Eds.), *An introductory reader to the writings of Jim Cummins* (pp. 26-55). Buffalo, NY: Multilingual Matters.
- Cummins, J. (2007). Rethinking monolingual instructional strategies in multilingual classrooms. *Canadian Journal of Applied Linguistics*, 10(2), 221-240.
- Edmonton Public School Board. (2009). Retrieved April 18, 2009, from http://www.ecbea.org
- Ellis, J. (1998). Interpretive inquiry as a formal research process. In J. Ellis (Ed.), *Teaching from understanding* (pp. 15-32). New York: Garland.
- Ellis, J. (2005). Place and identity for children in classrooms and schools. *Journal* of the Canadian Association for Curriculum Studies. 3(2) 55-73.

- Ellis, J. (2006). Researching children's experience hermeneutically and holistically. *The Alberta Journal of Educational Research*, *52*(3), 111-126.
- Ellis, J. (in press). Interpreting results. In A. J. Mills, G. Durepos, & E. Wiebe (Eds.), *Encyclopedia of case study research*. Thousand Oaks, CA: Sage.
- Erickson, F. (1984). What makes school ethnography "ethnographic"? *Anthropology and Education Quarterly, 15*(1), 51-66.
- Freire, P. (1970). Pedagogy of the oppressed. New York: Seabury Press.
- Gee, J. P. (1999). Reading and the new literacy studies: Reframing the National Academy of Science report on reading. *Journal of Literacy Research*, *31*, 355-374.
- Gee, J. P. (2001). Reading as situated language: A sociocognitive perspective. *Journal of Adolescent & Adult Literacy, 44*, 714-725.
- Geertz, C. (1995). *After the fact: Two countries, four decades, one anthropologist.* Cambridge, MA: Harvard University Press.
- Genesee, F. (1985). Second language learning through immersion: A review of U.S. programs. *Review of Educational Research*, *55*, 541-561.
- Genesee, F. (1987). Learning through two languages: Studies of immersion and bilingual education. Rowley, MA: Newbury House.
- Genesee, F. (1991). Second language learning in school settings: Lessons from immersion. In A. Reynolds (Ed.), *Bilingualism, multilingualism, and* second language learning: The McGill Conference in honor of Wallace E. Lambert (pp. 183-201). Hillsdale, NJ: Lawrence Erlbaum.
- Genesee, F. (2003). Rethinking bilingual acquisition. In J. M. deWaele (Ed.), *Bilingualism: Challenges and directions for future research* (pp. 158-182). Clevedon, UK: Multilingual Matters.
- Genesee, F., Paradis, J., & Crago, M. (2004). *Dual language development and disorders: A handbook on bilingualism and second language learning*. Baltimore, MD: Brookes.
- Goodman, K. (1996). On reading. Richmond Hill, Ontario: Scholastic Canada.
- Graue, M. E., & Walsh, D. J. (1998). *Studying children in context: Theories, methods, and ethics.* Thousand Oaks, CA: Sage.
- Graves, D. (1991). Build a literate classroom. Portsmouth, NH: Heinemann.

Guba, E., & Lincoln, Y. (1981). Effective evaluation. San Francisco: Jossey-Bass.

- Guba, E., & Lincoln, Y. (1994). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.) *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.
- Hall, S. (1996). Who needs "identity"? In S. Hall & Paul du Gay (Eds.), *Questions of cultural identity* (pp. 1-17). Thousand Oaks, CA: Sage.
- Halliday, M. A. K. (1975). *Learning how to mean: Explorations in the development of language*. London: Edward Arnold.
- Halliday, M. A. K. (1979/1980). Oral and written language development: Impact on schools. In Y. Goodman, M. Hausser, & D. Strickland (Eds.), *Proceedings from the 1979 and 1980 IMPACT Conferences*. Urbana, IL: International Reading Association and National Council of Teachers of English.
- Haneda, M. (1997). Second language learning in a 'community of practice': A case study of adult Japanese learners. *The Canadian Modern Language Review*, *54*(1), 11-27.
- Hanks, W. F. (1991). Foreword. In J. Lave & E. Wenger (Eds.), Situated learning: Legitimate peripheral participation (pp. 13-24). New York: Cambridge University Press.
- Heath, S. B. (1982). Protean shapes in literacy event: Ever-shifting oral and literate traditions. In D. Tannen (Ed.), *Spoken and written language: Exploring orality and literacy* (pp. 91-118). Norwood, NJ: Ablex.
- Heath, S. B., & Street, B. (2008). *On ethnography: Approaches to language and literacy research*. New York: Teachers College Press: NCRLL/National Conference on Research in Language and Literacy.
- Hornberger, N. (2006). Voice and biliteracy in Indigenous language revitalization: Contentious educational practices in Quechua, Guarani, and Maori contexts. *Journal of Language, Identity, and Education, 5*(4), 277-292.
- Krashen, S. (1981). *Second language acquisition and second language learning*. Oxford, UK: Pergamon Press.
- Lambert, W., & Tucker, G. (1972). *Bilingual education of children: The St. Lambert experiment.* Rowley, MA: Newbury House.
- Lankshear, C., & Knobel, M. (2006). *New literacies: Everyday practices and classroom learning* (2nd ed.). New York: Open University Press.
- Lankshear, C., & Knobel, M. (2007). Researching new literacies: Web 2.0 practices and insider perspectives. *E-Learning*, *4*(3), 224-240.

- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.
- LeCompte, M., & Schensul, J. (1999). What is ethnography? *Designing and conducting ethnographic research* (pp. 1-28). Walnut Creek, CA: AltaMira Press.
- Lederman, R. (1990). Pretexts for ethnography: On reading fieldnotes. In R. Sanjek (Ed.), *Fieldnotes: The makings of anthropology* (pp. 71-91). Ithaca, NY: Cornell University Press.
- Lee, J. (1984). *Chinese-English bilingual education: Parental attitudes and bilingual schooling*. Unpublished master's thesis, University of Alberta, Edmonton, AB.
- Li, G. (2002). *East is east, west is west?: Home literacy, culture, and schooling.* New York: Peter Lang.
- Li, G. (2003). Literacy, culture, and politics of schooling: Counter narratives of a Chinese Canadian family. *Anthropology & Education Quarterly*, 34(2), 184-206.
- Li, G. (2006, a). The role of parents in heritage language maintenance and development: Case studies of Chinese immigrant children's home practice. In K. Kondo-Brown (Ed.), *Heritage language development: Focus on East Asian immigrants* (pp. 15-32). Amsterdam: John Benjamins.
- Li, G. (2006, b). Biliteracy and trilingual practices in the home context: Case studies of Chinese-Canadian children. *Journal of Early Childhood Literacy*. 6(3), 355-381.
- Lindholm-Leary, K., & Borsato, G. (2006). Academic achievement. In F. Genesee, K. Lindholm-Leary, W. Saunders, & D. Christian (Eds.), *Educating English language learners: A synthesis of empirical evidence* (pp. 176-222). New York: Cambridge University Press.
- Lyster, R. (2007). *Learning and teaching languages through content: A counterbalanced approach*. Philadelphia: John Benjamins.
- Malakoff, M., & Hakuta, K. (1991). Translation skills and metalinguistic awareness in bilinguals. In E. Bialystok (Ed.), *Language processing in bilingual children* (pp. 141-166). Cambridge, MA: Cambridge University Press.
- McCollum, P. (1994). Language use in two-way bilingual programs. *IDRA Newsletter*, 21(2), 1, 9-11.

- Merriam, S. (1998). Case studies as qualitative research. *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass/Wiley.
- Moll, L. C. (1992). Bilingual classroom studies and community analysis: Some recent trends. *Educational Research*, 21(2), 20-24.
- Nystrand, M. (1997). *Opening dialogue: Understanding the dynamics of language and learning in the English classroom*. New York: Teachers College Press.
- Paley, V. G. (1992). *You can't say you can't play*. Cambridge, MA: Harvard University Press.
- Potowski, K. (2004). Student Spanish use and investment in a dual immersion classroom: Implications for second language acquisition and heritage language maintenance. *The Modern Language Journal*, 88(1), 75-101.
- Riches, C., & Genesee, F. (2006). Literacy: Crosslinguistic and crossmodal issues. In F. Genesee, K. Lindholm-Leary, W. Saunders, & D. Christian (Eds.), *Educating English language learners: A synthesis of empirical evidence* (pp. 64-108). New York: Cambridge University Press.
- Schwandt, T. (2007). *The Sage dictionary of qualitative inquiry* (3rd ed.). Los Angeles: Sage.
- Septilingualism in BC Schools. (2011, February 5). *Globe and Mail*. Retrieved February 14, 2011, from http://www.cpf.bc.ca/site3/index.php/media/ headline-news/76-news-articles/1339-septilingualism-in-bc-schools
- Spradley, J. P., & McCurdy, D. W. (1990). *Cultural and conflict: Readings in social anthropology*. New York: HarperCollins.
- Stake, R. E. (2006). *Multiple case study analysis*. New York: Guilford Press.
- Street, B. (1993). Introduction: The new literacy studies. In B. Street (Ed.), Crosscultural approaches to literacy (pp. 1-22). New York: Cambridge University Press.
- Swain, M. (1996). Integrating language and content in immersion classrooms: Research perspectives. *The Canadian Modern Language Review*, 52(4), 529-548.
- Swain, M., & Lapkin, S. (1982). Evaluating bilingual education: A Canadian case study. Clevedon, UK: Multilingual Matters.
- Tarone, E., & Swain, M. (1995). A sociolinguistic perspective on second language use in immersion classrooms. *The Modern Language Journal*, 79(2), 166-178.

- Tavares, A. (2000). From heritage to international languages: Globalism and Western Canadian trends in heritage language education. *Canadian Ethnic Studies*, 32(1), 156-171.
- Toohey, K. (1998). "Breaking them up, taking them away": ESL students in Grade 1. *TESOL Quarterly*, 32(1), 61-84.
- Toohey, K. (2000). *Learning English at school: Identity, social relations, and classroom practice*. Toronto, ON: Multilingual Matters.
- Tucker, G., & Dubiner, D. (2008). Concluding thoughts: Does the immersion pathway lead to multilingualism? In T. Fortune & D. Tedick (Eds.), *Pathways to multilingualism: Evolving perspectives on immersion education* (pp. 267-277). Buffalo, NY: Multilingual Matters.
- Valdes, G. (2001). Heritage language students: Profiles and possibilities. In J.K. Peyton, D.A. Ranard and S. McGinnis (Eds.) *Heritage language in America: Preserving a national resource* (pp. 37-80). McHenry, IL: Centre for Applied Linguistics.
- Verhoeven, L. (1994). Transfer in bilingual development: The linguistic interdependence hypothesis revisited. *Language Learning*, 44(3), 381-415.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. (1986). Thoughts and language. Cambridge, MA: MIT Press.
- Wells, G. (1999). *Dialogic inquiry: Towards a sociocultural practice and theory of education*. Cambridge, MA: Cambridge University Press.
- Willis, A. (1997). Focus on research: Historical considerations. *Language Arts*, 74(5), 387-397.
- Wiltse, L. (2005). *Cultural diversity and discourse practices in Grade 9*. Edmonton, AB: Qualitative Institute Press.
- Wong Fillmore, L. (2000). Loss of family language: Should educators be concerned. *Theory into Practice* 39(4), 203-210.
- Wu, J., & Bilash, O. (2000). Empowering minority students though bilingual education: A multifunctional English-Chinese bilingual program in Western Canada. Retrieved December 15, 2007, from http://www.ecbea.org/publications.html

APPENDIX A: SAMPLE PRE-INTERVIEW ACTIVITIES

FOR THE CHILDREN

Make an "all about me" poster to bring to the first interview. The poster could include pictures of your favorite activities, things, pets, people, and places.

Make a drawing, map or diagram showing the important, favorite or most used places in your life.

Make a list of 20 important words in your life and then to divide the words into two groups.

Use pictures and words cut from magazines to make a collage or poster about how you see Mandarin and English learning.

Draw a picture of yourself engaging in the language learning.

Make a timeline listing significant events in your experience of the Mandarin and English learning.

If someone were to make a movie about your experience of Mandarin and English learning, make a list of key segments or scenes that ought to be included.

Draw a diagram or pictures showing an important aspect of your Mandarin and English learning experience, e.g., where your sources of support come from, where your hope comes from.

(Adapted from Ellis, 2006)

APPENDIX B: SAMPLE INTERVIEW QUESTIONS

FOR THE CHILDREN

- 1. If you had to go to school only three days a week, what are some of the things you'd like to do with the extra time?
- 2. What are your favorite subjects in school? What do you like best about school? Why? What do you like least about school? Why?
- 3. Tell me about English learning at school. What do you like? What do you not like? What is easy for you? What is difficult for you?
- 4. Tell me about Mandarin learning at school. What do you like? What do you not like? What is easy for you? What is difficult for you?
- 5. Do you learn English out of school? Tell me about that.
- 6. Do you learn Mandarin out of school? Tell me about that.
- 7. Do you use different language with different people (teacher, classmates, friends, parents, and strangers) in different places (school, home, community centre, online)? Tell me about your experience about that.
- 8. Are English and Mandarin useful in your daily life? In what ways? Give me some examples please.
- 9. What are some of the things you'd like to accomplish in Mandarin and English learning (this year, when you are a teenager, when you are an adult)?
- 10. How would you describe yourself as a person who knows two languages?
- 11. Show me your best piece of writing this year (in both English and Mandarin).
- 12. If you could give 3 pieces of advice to the people who are planning to enrol in English-Mandarin bilingual program next year, what would you say?

APPENDIX C: SAMPLE INTERVIEW QUESTIONS

FOR THE PARENTS

- 1. Can you describe your child's experience in learning and practicing two languages at school and at home?
- 2. Are you an English-Mandarin bilingual? If yes, can you describe your experience of being a bilingual?
- 3. Why do you encourage your child to learn both English and Mandarin?
- 4. What is your goal for your child's bilingual development? Why?
- 5. What do you see as the benefits of being an English-Mandarin bilingual? What, if any, drawbacks, do you see?
- 6. In what ways have you involved in your child's bilingual language learning?
- 7. How has your child's bilingual education influenced his/her language development, academic learning, and social behaviors?
- 8. If you could change one thing about your child's bilingual program, what would it be?
- 9. What do you see as the most important factors in children's bilingual learning?
- 10. What advice would you give to the parents who want their children to become English-Mandarin bilingual?

APPENDIX D: SAMPLE INTERVIEW QUESTIONS

FOR THE TEACHERS

- 1. Can you describe your background or any previous experiences you have had related to English-Mandarin bilingual program?
- 2. What are your goals for students' bilingual development?
- 3. What do you see as the most beneficial thing of the English-Mandarin bilingual program for the children? What are you most concerned about the program?
- 4. What kind of "bilingual learning" environment are you trying to establish in your classroom teaching?
- 5. In your students' language learning, what are you most proud of? What do you wish had gone better? What will you do differently another year?
- 6. Do you feel the bilingual program is effective in promoting children's bilingual proficiency, academic achievement, and intercultural competence? Please explain.
- 7. Are the children motivated in bilingual and biliteracy learning? Please explain.
- 8. Are the parents actively involved in their children's bilingual and biliteracy learning? Is parents' involvement important? Please explain?
- 9. What do you see as the most important factors in children's bilingual learning?
- 10. What advice would you give to the pre-service teachers for English-Mandarin bilingual programs?

APPENDIX E: KELLY'S ENGLISH WRITING

BEAR HOUSE BREAK-IN

13 Year-Old Sentenced to Community Service and Counseling

By:/

Amateur Reporting Team

This Sunday afternoon, 13 year-old Goldilocks Smith was caught uninvited sleeping in the Bear Family House. She was charged with breaking and entering along with eating the bear's food and damaging some furniture and windows.

"Like, I am totally surprised at Goldie, I didn't think she would do such a thing!" says Red Riding Hood, Smith's best friend. "I was just on my way home from like, Grandma's when I spy her totally creeping into the poor bear's house. I headed straightaway for the police, I knew for a fact they just hadn't invited her, the bear's were just taking a stroll in Meadowlark Forest before breakfast. I like, met Imelda just as they were leaving."

It turn out Goldilocks was taking a hike through the forest when she grew tired and decided to take a rest. She pleads that she wasn't planning on breaking-in; it was just that she was "so dreadfully tired" and they weren't there. When she came in she saw the three bear's bowls of porridge lying on the kitchen table, she tasted two but finished the third. After devouring their breakfast, Goldilocks Smith swept into the parlour and began to sit on all of the chairs. She broke Teddy Bear's chair but the court is unsure why. Goldilocks protest that it was and accident but Teddy thinks her procedure was quite violent. The bears then caught her sleeping in one of their beds. She woke up startled and then promptly broke the window by jumping through it. Smith broke her arm in the fall.

Goldilocks is sentenced to community service for a year and will be enrolled in heavy counseling.

我的 缶热 相 ζ. 谋 1 ð 9 20 17 雨 話人 自主 11

APPENDIX F: KELLY'S CHINESE WRITING
Υ 4.83 以一百年光世纪学校的姐妹學校。我住在埃蒙顿,我的 你一 古五個人華金家裡,爸爸,1500, 希弟, 味味和我。 我们没雨重小猫,一直狗,小狗只是雨影最喜歡跟我们 1元和教装 我放了學的時代。喜歡讀書或又在愛問一上玩笑去每 個星期二和四我然田徑队。我喜歡吃很萨和春司。雲書和 做功課時,我喜歡听著說你不可了上學的时候喜欢合效 後年一成绩 我里耳息明在學校例的公式最喜欢的科目是是有 帮助方仰方要生在皇育總是抄字但是我玩足球不太好。我在學 村立學中文因為我爸爸是一個中國人但是仍出生在美國。我現 在此代言克的中文分明。 業小的时候,害怕軟缺非但是現在長的勇敢,我 喜 就和我两個好朋友林子時和黃浩儘笑着。 间元定 我讲友展要你認不知道我長的怎麼样。要打一才 吗?我有天空的咖啡色的頭髮和咖啡色的眼睛。我從三年 飯之美日見金麗。我五尺高。 算成 約全部都是关于我,你是怎麼未样人?喜歡什麼?會小的什麼? 展给我的很we.1. ·上 1



"Understanding Through Education"

請來認識我

作者:

我的名字是 我的名字是 我今年九歲,我的生 日是在一九九九年二月九日,在 第四年級。

我的樣子很可愛,我有雙大大亮亮的眼睛,但是要戴眼鏡,因爲我看不清楚,頭髮是 咖啡色的,長到我的肩膀。

我的家裡有五個人,有聰明的爸爸,努 力工作的媽媽,親切和攜的妹妹,可愛的弟 弟和美麗的我。我家裡還有一隻灰色的小狗 和兩隻白色和灰色的小貓。

爸爸和媽媽都是醫生,他們每天都工作 得很忙,回到家的時候,爸爸做好美味的食 物給我們吃,媽媽回家時,我讀課文給她 聽。

每天早上,起床收拾好後,還要喂狗和 貓吃早餐,然後坐校車去上學。在學校,每 天認真地聽老師的話。回家的時候,我做完 功課後就幫助妹妹,或帶小狗去散步。每天 全家人都很忙。

我希望世界上的人們都能和平快樂地生 活在一起。

Ð

APPENDIX G: KELLY'S ONLINE DICTIONARY



APPENDIX H: KELLY'S BIRTHDAY CARD FOR HER FATHER

親愛白9爸爸, 今天是你白夕四十 = 自为生日! 1-050 Dear Dady Happy Birthday!

APPENDIX I: JENNY'S DRAWING OF HER EXPERIENCE

IN THE REGULAR ENGLISH PROGRAM





APPENDIX J: JENNY'S ENGLISH WRITING

Week 1 · Day Use your web from Day 4 to write a description of a museum exhibit you would design. Sentence Fluency Be sure to use commas in compound sentences correctly, and avoid writing rambling sentences. Wan DU С PCP tories Istory exhibits mu museur 100 three stor Unadom's front of Ine show 9 map the men Deci 15 DOSTO Shi to no roost stamuc to Wu the 200 naof the rooste you go to right. hen the. second shau second the three 900 20 can no The kin lei Su De 'nρ C And auan king the of 111 5 When you were tired down and watch sit a movie - the biggest war in the story. TPI P P other gold 00 person ma uan, will the come OL. and 0 king become of China

APPENDIX K: JENNY'S CHINESE WRITING



11ay.14 仍 2010 英文名字是 0黑!你好啊!我叫,,,,,我令年十一岁,我是一个独生女, 在2009年七月底我来到了加拿大。我现在是在美得乐学校读书。你 知道吗?我在中国的时候就已经是一个跆拳道黑带了。而现在我在拿个 空闲的时候差不多都在跆拳道馆度过。哦,对了记了这么多你还不知道我 是一个怎样的人呢!我是一个假小子,头发到肩膀,大眼,睛,双眼皮,中 等身子和一个甜甜的嘴巴。我之所以说我是一个假小子是因为我只喜欢。 你说出去我就完蛋了啊!本你了!妈了,不管怎么样,我还是告诉你吧 我的小毛病就是一不会当淑女。不过我还有一些好的地方,比如: 我经常逗老师和同学们笑啦,喜欢帮助别人啦,喜欢劳动啦... 你!因为我是中国人啊!忘了吗?我刚来加拿大哦! (好o拉!其它的事下次再说!科科! 哦,对了,等一下再走!我得问你点问是近。 【你叫什么?你有没有英文名字?你有没有兄弟姐妹?你陈 了上学还干什么?你长什么样?你学习累不累?希望你能回信。

APPENDIX L: JENNY'S WORD LIST ON THE WALL

IN HER BEDROOM

fairly 相当 suited 告述 environment 外界 环境 village 树庄 pity 雨情 cedar 雪松 canoe 独木梅 groven 周佳刻 articipating 期望 herring 青鱼 spawn 卿 cockles gs始 barnede 藤壶 inbod (内地 butush 芦 taning 制 半	P164 - P166	Social
	fairly 相当 Suited 合适 environment外界 Village 村庄 pity 同情 cedar 雪松 Canoe 独木舟 graven 周佳刻 anticipating 期望 herring 青鱼 spawn 卵 cockles 岛站 barnack 藤壶 moss 苔藓	buckskin 康皮 antler 鹿角 aul 尖钻 shinbone 胫骨 Chinook Jargon 奇努克湿含语 petroglyphs 岩石画 potlatch 冬季 赠礼 节 wealth 财富 ban 禁止 kuskwaka wakw 夸夸嘉夸 族 strict 严 楼 as bid o jo off ain 把一对 ji



APPENDIX M: ANTHONY'S ENGLISH WRITING



the room, the wind blew in from the window and her long shinny black hair waved around, "honey... I think something was wrong with the house, it is been acting strange lately, I don't feel safe." muttered mom, dad thought for a while then he finally spoke with confidence, "we are in the U.S.A, and we've got insurance bought, even if someone is hiding in our house now, there is no need to fear." "Y..... Yeah" thought mom

Their conversation flew into the ears of awaken Ann, her heart was jumping faster and faster millions of questions has popped up inside her, she just can't wait to find out why, she got up and shut the windows tightly with her tumbling sunburned arms and strong fingers, she has left the curtains open, then she jumped back into her bright purple bed and shoved into her green sheet "maybe I should really get some sleep." moaned Ann

The next morning someone spilled their dad's coffee on the carpet while he is taking a bath, when he found out he got in a mad mood "we should really move away." he hissed with anger.

When he came back from work this afternoon he was still in a mad mood, Lucas was doing his homework upstairs, and Ann is just working on her science project, but she piece she can feel shaking as she glued on the piece on her hands are sweaty "what now?" she thought, when Lucas crashes into her room, "what happened? The house is SHAKING! Is it an earthquake.....?" A whole bunch of questions popped up into his mind.

Page 2

2/22/2011

"Cool it Lucas everything will be okay" Ann blabbered with her body shaking slightly, she hold Lucas by the hand, and ran outside filling with fear while Lucas's sky blue slippers rattled across the cement front sidewalk.

Ann did a "be quite" hand sign to Lucas, but the ground isn't shaking! Not even a single leave is moving But the house is shaking and the windows are shattering "better get back into the house" shouted Ann as she dragged Lucas back into the house.

"Mom dad, quick, gets into the basement, you got to trust me" yelled Ann nervously, she hasn't been letting go of Lucas's arm. They jumped down the stairs into the old dirty basement which has two dim ceiling lights hanging with frayed wires

Page 3

2/22/2011

APPENDIX N: ANTHONY'S CHINESE WRITING

Letter size of 亲爱的 你好,你最近好吗? 华盛顿的天气是不 是在你们的意料之内?住得开心吗,是时候下雪了 吗?你最近一次剪头发父母给你奖励了一些怎样 的东西啊? 有没有忘了带电子游戏? 你在华盛顿 上不上学,如果不上学,没功课,我们会很乐意 的布置一些功课给你!你在美国华盛顿有没有交 了新朋友, 忘了我们了吗? 我们很想念你的笑话 和搞笑的动作!还有,你的新家是怎么样的?寄 几张照片回来让我们看下行吗?我还有好多好多 的问题想问你,噢!我只记得问关于你的,都几 乎忘了跟你说我们的啦! Relation 好啦!现在就让我跟你谈一谈我们这个 学期的变化吧!啊等一下,要不要先猜一猜?如 果猜不中就让我告诉你吧!我们的新学期来了一 个新同学叫做 _____ (ping yin is: _____ () 他是一个十岁的男孩子身高大 约一米四五/他打羽毛球打得很好 好到可以代表 我们的省来打羽毛球,他还是一个一号种子呢! 我们的老师也改了,(我想你也知道)___ 和 是我们的英文老师, 是教英文和社会学的, 他这个人啊很灵活,如果你不做功课没问题,只要 求一下你的家长来写一张纸条给他,他就会放过你 11/10/2009 Page 1

了。Mrs. _____ 是教科学,美术和法语她是一个很 搞笑的老师哦! 老师是大家的中文老师,我想你 猜都猜得到她教什么了,但是还是让我给你回忆一 下吧,她是教我们中文,数学,健康以及你最爱的科 目, 体育。但是我还没说完, 学校还多了两个新老 师, 一个是 Mrs. 1, 她是教英文一, 二年级的 老师,她长得和 Mrs. 差不多。另外一个是上 年帮助我们学习的孙老师回来了,她说在我老师比哥 NEX 他我们还聪明,她呀,要写一篇当博士(DoctorDegree) 的论文,我想大家都很兴奋,因为我们可以上书本 哦!那在高科技的方面呢,同学们正在用一个叫 "School Zone" 的网站, 网站让我们的学习都进步 了。姜然倫,你还记不记得 Smart board?现在每一 个教空都有一台了,还有考试时,我们能用一样东 西叫"聪明答题器" <Smart response clicker>来 按答案,大家考试也方便多了! 我讲完变化就说最近的事情吧! 在好的那 一边呢, 就是我们上电视, "Omni" 那个电视台 来录影我们唱一首歌叫"为我自己骄傲"。还有 几个有趣的节目,其中一个就是读书周,周一我 们就要穿运动服,周二我们要戴围巾,周三是戴 帽子,周四是穿怪袜子和每年每度的"故事时装 表演"(Storvbook Character fashion show)时 装表演时, Omni 的电视台又来了给我们录像,

Page 2

12 12

11/10/2009

文任

但我们的班没人参加,真可惜!周五呢,是"放 下所有的东西读书" (Drop everything and read) 那就是一听到校长们说"开始读!"大家就 放下手的东西开始读书了。另外一件事是,我们班 的男孩子们发明了一个游戏叫"飞天球"这个游戏 很简单,只要把小红球踢过学校的公园就行了,但 是我们被老师看见了,现在不能玩了。还有一件事 是学校的五, 六年级全都去了市中心的电影院看了 一场演员表演得 Jungle Book 我们看了一个多小 时! 可是我呢 就觉得很闷哦, 最后一件好事我想你 也知道了,那就是美国的太空公司 N.A.S.A. 发射了 一枚火箭(L.C.R.O.S.S), 它的任务就是去撞月球的 北极这样的事会帮助人类的科学进一大步。可是在 不好的方面上说呢,就是托儿所那边厕所的地下管 被一些人用厕纸堵塞了,水流了一晚,所以学校的 那一边要重新装修过了,这给了那一边的同学们带 来了很多的不方便!

是时候让我跟你说一下我们的学习情况了,在 体育课呢我们学了很多的新游戏,我就讲两个给你 听吧。第一个游戏是"一,二,三木头人"它的规 矩就是像英文的"Eagle's Eye"一样,第二个游 戏呢就是"鱼儿,鱼儿,鱼儿游过来"这个游戏有 两条鲨鱼,其他人都是小鱼,被鲨鱼抓到的同学就 是海草,谁最后还是小鱼就赢。关于数学呢,我们 开始了学大数和小数,还有天天我们都做运算呢。

Page 3

11/10/2009



APPENDIX O: ANTHONY'S TEXTBOOK FROM CHINA

