The Role of the First Language in Second Language Learning for Adult Learners – A Vygotskian Perspective

Thesis

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by

Kitty Kit-Man Tung Leung
B.Ed. (Hon.), M.Ed. (Adult Ed.), M.Ed. (TESOL)

University of Technology, Sydney

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Certificate of Authorship / Originality

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Abbreviations:

AMES	Adult Migrant English Service
CAH	Contrastive Analysis Hypothesis
ESL	English as a Second Language
ESOL	English for Speakers of Other Languages
L1	First Language
L2	Second Language
TAFE	Technical and Further Education
ZPD	Zone of Proximal Development

Abstract

The purpose of the present study is to provide a view of the second language learning process, in which the first language (L1) was used for second language learning (L2). Through data collected in authentic classrooms from two groups of learners, Level One and Level Two, it is hoped that the present study will provide insight, which will enable teachers and researchers who are interested in second language development to see how adult L2 learners used their L1 in L2 learning. The study also sheds light on the way adult learners perceive their use of L1 for L2 learning.

The first language has long been regarded as 'interference', playing a negative role. Research and theories in the past focused on the problems caused by the first language in the second language learning. With the notion of 'English only' in the ESL classroom, not many teachers allowed the use of L1 in L2 classrooms, and little research has been conducted to determine how L1 could contribute towards L2 learning. Although more recent research suggests that the first language can be a resource, not many significant studies focus on exactly how adult learners make use of their first language in second language learning, and what significance it has for adult second language learning. In reality, adult learners have access to their first language when they learn the second language, and they make use of L1 as a tool to help understand the L2 and to build into their L2 learning. That is to say, there is a discrepancy between theory and practice, and the present study addresses this discrepancy.

The present study attempts to look at the role of the first language from a different perspective, a Vygotskian perspective. The theory of Vygotsky (1962), a sociocultural theory that is based on the concept that human activities take place in cultural contexts that are mediated by language and other symbol systems, provides a

comprehensive framework for considering the use of L1 in L2 learning. Cook (1999), though with a different perspective from that of Vygotsky, regards L2 learners as speakers in their own right and suggests exploiting the students' L1. Cook's idea provides an illuminating way of seeing the L1 use.

Using tape-recorded classroom discourse data from the authentic second language classroom and interviews with learners from two different groups, the present study suggests that L1 plays a complex role in L2 learning. This complex role, with support of data from the present study, comprises the use of L1 for active construction of knowledge; the use of L1 as a tool for thinking and learning; and the use of L1 for support and encouragement.

Apart from playing a complex role, this study concludes that the role of the first language goes beyond the translation of L2, and using L1 does not necessarily imply a lack of competence in L2. Data suggest that adult learners use L1 to define, to dispute and to compare the L2 language. L1 is like a useful tool which helps to obtain deep knowledge and profound understanding in L2 learning. Data also suggest that adult learners use L1 when they need it, and they may not achieve the same degree of learning without L1 use.

Based on the data, the present study draws some implications for teaching and learning. These include the need for teachers to be positive about the use of L1 in L2 learning; to acknowledge and respect the second language learner's first language; to consider the need of L1 use and make appropriate plan to incorporate L1 into L2 learning; and researchers need to note that what the learners say can be different from what they do.

Finally, the present study has made some recommendations for further studies. The present study suggests firstly, to use authentic classroom data; secondly, to extend the study of L1 to other ESL classrooms; and thirdly, to compare and find out various strategies of L1 use for various classrooms.

Chapter 1 Topic and Problematic

1.1 The problem

This study investigates how adult learners make use of their first language (L1) in second language (L2) learning in an attempt to understand what role L1 plays in the process of L2 learning using a Vygotskian perspective, which values the social-cultural aspects of learning. Vygotsky's notion of language and thought, in which language is an indispensable tool for human cognitive development, gives great insight into the understanding of L1 use in L2 learning. The focus of this study is on adult learners who have Chinese language as their first language and English as a second language.

The presence of the first language is 'inevitable and deep-seated' and it is 'inevitable and useful to compare the new language with the mother tongue' (Naiman, Frohlich, Stern and Todesco, 1978:12). From my experience and observation, in the second language classroom, many adult learners admit they have to make use of their L1 in L2 learning. The use of a bilingual dictionary to find out L1 equivalent meaning in L2 learning is most obvious in the second language classroom. However, reviewing the past literature and research, the use of the first language in second language learning is not encouraged. Learners are often asked to suppress L1 references and not to use their bilingual dictionary. Language professionals often take for granted that the only appropriate model of a language's use comes from its native speakers, and naturalistic second language acquisition is favoured.

The use of L1 is generally discouraged in the second language classroom. With the practice of the 'English Only' movement in the United States, ESL educators continue to uphold the notion that English is the only acceptable medium of communication within the confines of the ESL classroom (Auerbach, 1993). Cook (1999:201) states that 'vertually all language teaching methods since the Reform

Movement of the 1880s, whether the audiolingual and audiovisual methods, the communicative method, or the Silent Way, have insisted that teaching techniques should not rely on the L1'. He comments that methodologists' insistence on the L2 does not mean that the L1 has not in practice been used in most classrooms but that doing so goes against the official doctrine. He cites the United Kingdom national curriculum for modern languages, "The natural use of the target language for virtually all communication is a sure sign of a good modern language course" (Department of Education, 1990, p.58). In second language teaching, officially the use of L2 is favoured while the use of L1 is not encouraged, but in reality the use of L1 by adult learners in L2 classrooms has long been a common practice. In other words, there is a discrepancy between what 'should be' happening and what 'is' happening in the second language classroom.

The aim of the present study is not only to find out what is common in the adult second language classroom, but also to suggest what potential role L1 plays in L2 learning. This study focuses on L2 learning in the classroom. Tape-recording of classroom protocols is used to collect data for analysis. Such data endeavour to understand how adult learners make use of L1 in L2 learning and to understand the role of L1 in L2 learning. It is hoped that knowledge of these contributions can help us understand the language development in adult second language learning and ultimately inform current teaching practices.

1.2 Significance of the problem

Researchers in general have ignored the fact that many adult learners are using L1 in L2 learning. Not many significant studies focus on how adult learners make use of the first language in the second language learning and what significance it has for adult second language learning. Wigglesworth (2003:222) states that not only has 'the role of the L1 been reduced from the perspective of teaching, it has also been largely excluded from formal research with adult learners'. The present study addresses this

problem by collecting data in the second language classroom in order to reveal what actually happens when adult L2 learners make use of L1 for L2 learning.

In discussing the use of the first language in second language learning, many teachers still hold the view that the first language should not be used in second language learning or advocate the 'English only' policy. An interesting discussion of the use of the first language in second language instruction in the TESL-EJ Forum (2002) includes some similar views. For example the following is a quote from one of the arguments which disagrees with the use of L1, 'I believe (and have seen) that a well-trained and resourceful L2 teacher can act out, demonstrate, illustrate or coach new learners to do what is required in class without ever using L1.(TESL-EJ Forum, 2002:8)'

Although the teacher's ideal may be that learners use only the L2 to accomplish collaborative tasks, in reality students do use their L1 to some extent. As mentioned above, there is a gap between what the ideal should be and what the practice is. This is a discrepancy between ideal and reality. For many down-to-earth teachers who work with second language learners realise that L1 does play a role in the second language classroom and at times the use of L1 is inevitable. For example, in the TESL-EJ Forum (2002) there are some teachers who admit the use of L1 in the second language classroom. This is one of the opinions:

> When I am introducing new vocabulary in which meaning can be expressed through drawings, noises, pantomimes or the like, I use the target language exclusively. However, when attempting to communicate ideas that are abstract, I use/permit first language. All in all, I believe input needs to be COMPREHENSIBLE. I had a Spanish teacher who insisted on NO English in her classroom or office. I cannot tell you how many times I asked questions to which I simply did not understand the answer. (I finally resorted to dragging a native speaker with me every time I went to her office so he could translate for me after we left. (TESL-EJ Forum, 2002:1-2)

The following is another example from the TESL-EJ Forum (2002):

> A tale from my times teaching survival level English to Russian immigrants in the US: The students came into class with no English and I insisted on only using English in the classroom,

> hiding my knowledge of Russian from them. We worked well and hard, but finally the day came when the word "however' popped up in a reading. The students were baffled and the reading ground to a halt. I spent what felt like an eternity trying to explain "however" to them in English. I tried everything – pantomime, drawings, verbal explanation...No luck. It was beyond their current ability level to understand the concept through these means and the result was an increasingly frustrated group, including me. Finally, I gave up and had one of the students search through her belongings for her dictionary to look it up, wasting a few more minutes. Everyone was relieved the torture was over. Later, I thought about it and realised that I had lost a lot of time on an unimportant issue and had effectively lost control of the lesson. I made the choice then that when this situation came round again, I would simply translate the word and move on with the real focus of the lesson. (TESL-EJ Forum, 2002:10-11)

To quote these examples is not to join in the on-going debate of whether or not to use the students' first language in L2 learning, but to show that in practice L1 has been used in second language learning and there is a discrepancy between 'what it ought to be' and 'what it is'. In spite of the discrepancy, the first language issue has not been formally acknowledged, possibly because of its 'problematic' history which will be further discussed in the chapter of literature review. Many second language studies ignore the use of L1 although L1 did occur in the transcripts of their studies. There are some studies which mention the L1 use: for example in Ohta's (2001) study of 'Second language acquisition processes in the classroom learning Japanese', the learner's use of English (L1) is measured in quantity and is mentioned as being related to task design, task implementation and individual differences (Ohta, 2001:235). However, the first language is not addressed in its own right, and its value and contributions are not being explored.

For adult learners, the first language is what they already know and what they can use in learning a new language. The first language is deep-rooted in the learners. It is inevitable that they make use of the first language consciously or unconsciously in L2 learning. Cook (1999: 201) has pointed out that the insistence of language methodologists on L2 does not mean that L1 has not in practice been used in most classrooms. A number of adult educators (Piasecka, 1988; Collingham; 1988; Spiegel, 1988) support the use of L1 in L2 learning. Corder (1992) emphasises the

role of mother tongue, that is the role of the first language, in second language learning. He states,

> The situation now seems to be that an interest in the role of the mother tongue in language learning is, in the first place, an essentially theoretical one and is part of the general interest in the processes of second language acquisition. (Corder, 1992:19)

The point to note is that Corder indicates there is an interest in the role of the first language in language learning. However, as mentioned above, the issue of using the first language for second language learning remains rather controversial. Some language educators allow the use of the L1 and regard the L1 as a useful language learning resource in L2 learning while some language educators still insist that only L2 should be used in the second language classroom and that using the L1 in the second language classroom will hinder L2 learning.

Reviewing the literature in the 1960s and 1970s, the role of L1 in L2 learning has not been highly regarded; instead it has been referred as 'interference' and related with 'error analysis'. Language educators often take for granted that the only appropriate model of a language's use comes from its native speakers. Language teachers encourage students to be like native speakers. In his recent article, Cook (1999) argues that the prominence of the native speaker in language teaching has obscured the distinctive nature of the successful L2 user and created an unattainable goal for L2 learners.

Current research sheds light on second language learning by focusing on the learning in the second language classroom. Several studies on the use of L1 in L2 learning conducted in Australia (e.g. Wigglesworth, 2003; O'Grady & Wajs, 1989; Yip, 1983.) have indicated the need of the use of L1 in L2 learning for adult learners. Cook (1999) recognises L2 learners as speakers in their own right and suggests to exploit the use of L1 in L2 learning.

Spiegel (1988) argues for acceptance of the use of the first language in the classroom and using bilingual ESL teachers. She comments on the 'native' speakers practice and says,

> 'For years many of us were trained into believing that modern languages could and should only be taught by 'native' speakers. The influence of the direct method and behavioral theories of learning told us that students needed to copy and repeat 'correct usage' at all time. Teachers were warned off using the students' first languages in the classroom, for this, we were told, would hinder and confuse. The implication was that students might be tempted to think and translate from one language to another in an attempt to make sense of the new jumble of words. Instead, they were to be made to listen and repeat. At their most extreme, these theories encouraged teachers to think of their students as blank boxes, programmed into learning language through repetition and audio-visual contextualization.' (Spiegel, 1988:188)

In fact, L2 learners have the knowledge and experience of L1 and it is inappropriate to think of L2 learners as 'blank boxes' or to ask them to forget their first language in learning a second language. It is also inappropriate to suppress L2 learners' first language or make L2 learners feel ashamed of their first language. Halliday (1968:165) states, "A speaker who is made ashamed of his own language habits suffers a basic injury as a human being: to make anyone, especially a child, feel so ashamed is as indefensible as to make him feel ashamed of the colour of his skin". L2 learners should be treated as speakers in their own right, not as deficient native speakers.

The present study does not regard L2 learners as 'blank boxes', or suppress the use of L1 in L2 learning. The position of the present study is, as Cook (1999) puts it, 'to exploit the use of the L1 in L2 learning'. The knowledge and experience in the use of the first language are treated as tools and resources for L2 learning. With Vygotsky's sociocultural theory, the present study attempts to examine the potential role of L1 in second language learning.

To sum up, the present study explores the use of L1 by using authentic classroom data from two groups of adult learners in an attempt to see how learners make use of L1 in L2 learning and what role L1 plays in L2 learning. In spite of the fact that some educators are aware of the L1 use in the L2 classroom, very little is known about how adult learners make use of L1 in L2 learning and what role L1 plays in L2 learning. This lack of information indicates the significance of the problem and it initiates the point of interest of the present study.

1.3 Background and context

In the teaching of Chinese adult learners in the English for Speakers of Other Languages (ESOL) Course organised by a College of Technical and Further Education (TAFE) in Australia conducted in a Chinese Community Centre, it is obvious that the learners use their L1 in L2 learning. Many of them bring along a bilingual dictionary or an electronic bilingual dictionary for use in class, and they use Chinese for discussions. It seems inevitable that they have to rely on their first language, which is the old and existing knowledge, to build up the learning of the second language, which is the new knowledge for most of the learners.

The ESOL Course comprises four levels, Levels One, Two, Three and Four. After Level Four the students may continue the study of English Language in the Course of 'English for Further Studies' that prepares the students for studies in Colleges and Universities. The *Student Assessment Guide* states that the ESOL Course 'encourages students to transfer to English the skills and strategies they have developed in their own languages' (New South Wales Technical and Further Education Commission, 2002). This suggests a positive view towards students' use of their first language in second language learning. The ESOL Course used for the present study is conducted in a Chinese Community Centre for learners of beginning to pre-intermediate level, that is Level One and Level Two of the ESOL Course. In this particular ESOL Course, use of the first language for second language learning is

permitted and it is advertised in the flyer and in the newspaper that a bilingual teacher conducts this course.

The learners are mostly literate in their first language, that is, Chinese. Many of them have completed high school, college or even university in their country of origin. The two main Chinese dialects the learners speak are Cantonese and Mandarin. However, both dialect speakers understand the written form of Chinese language, which can be in original form or in simplified form.

The Chinese adult learners are diverse not only in their language proficiency, but also in their age, their learning ability, their experience and their background. They are adults migrants in Australia. Some of them have learned English as an academic subject in colleges or universities in their country of origin. Some of them have been in Australia for some years and have completed the English Course in Adult Migrant English Service (AMES), while some of them have gone through part of the English course but did not complete it for some reasons. Some of them may have very little contact with English language speakers, while others may have more contact. Some of them have a daytime job in a workplace where some English language is required for daily routine work, while some of them work at home where use of English language is limited. Some of them are housewives who need English language just for daily life.

The College of TAFE has organised the English course for Chinese adult learners in this Chinese Community Centre for almost ten years. These Chinese adult learners are keen on learning English language in this Centre despite the fact that the learning environment and available resources in the Chinese Community Centre are not so good as compared to that of TAFE or AMES. Some learners expressed that they had learned English language in other institutes but found it hard to communicate with the teachers and learners. They prefer learning English language in the Chinese Community Centre in which they are able to use L1 for L2 learning.

1.4 Purpose of the Study

The purpose of the study is twofold:

(1) to find out how two groups of adult second language learners make use of L1 in the second language classroom;
(2) to determine what role, if any, L1 plays in L2 learning.

Cook (1999, 2004) suggests regarding L2 learners as speakers in their own right, and exploiting the students' L1 rather than concentrating primarily on the native speaker model. Following the theoretical perspective of Cook, this study seeks to recognise L2 learners as speakers in their own right and to understand how adult learners make use of the L1 in L2 learning.

Researchers (e.g. Newmark, 1966; Krashen, 1981; Taylor, 1975; Upton, 1997) generally believe that L2 learners may not rely so much on the use of L1 when they have more L2 proficiency. The subjects of the present study are two groups of adult learners studying the ESOL Course organised by TAFE in a Chinese community centre, one group at ESOL Level One and another at ESOL Level Two. By investigating these two groups of adult L2 learners for a period of time, this study attempts to look into what, when, how and why the adult learners use their L1 for L2 learning, and to find out what role L1 plays in the process of L2 learning. Furthermore, this study also attempts to find out if there is any difference between the two groups of learners in the use of L1 in L2 learning.

It should be noted that this study investigates second language learning which involves a process of development. Process is 'a dynamic interaction of person-in-environment, including the interactions of the person with the social and physical environment that eventually resulted in a particular product (Ohta, 2001:3)'. Ohta explains that processes are sociocognitive events that occur along the road from novice to expert and process involves transformative interactions that are different for

each individual in each social setting, and that result in products that may, on the surface, look similar, but are produced through variable paths in different individuals. In the present study, the use of L1 in the dynamic learning process which might build into learners' growing abilities to use L2 is considered to be of interest.

The present study attempts to find answers to the following questions:

1. In what ways do the two groups of adult learners make use of the L1 in the L2 classroom?
2. What role does the L1 play in the process of learning the L2?
3. How do the learners perceive their own use of L1 for L2 learning? How do they feel when using L1 in L2 learning?
4. Is there any difference between the two groups of learners in the use of L1 in L2 learning?

1.5 Assumptions of the Study

From the observation during my teaching, the beginning and pre-intermediate L2 adult learners used L1 in L2 learning. This study therefore assumes that

(1) the L2 adult learners make use of L1 in L2 learning; and
(2) the L1 is used in L2 learning especially at a beginning stage of language development for adult learners.

1.6 Theoretical perspective

The present study is based mainly on the Vygotskian perspective and the ideas of Cook. As mentioned above, Cook (1999, 2004) recognises L2 learners as speakers in their own right and suggests exploiting the use of L1 in L2 learning. This idea of

Cook is essential for the present study. With this idea we are able to see L2 learners as independent individuals who are capable of using appropriate learning strategies for L2 learning.

The perspective of Vygotsky (1962. 1978) opens up a new way to understand language and thought in second language learning. The use of private speech, the zone of proximal development and scaffolding learning are some of the aspects which build up the theoretical framework of the present study. These are explained further in Chapter Two.

1.7 Delimitation of the study

The question of how the first language is used in the second language classroom is a broad one. In an attempt to consider the question in a framework of manageable proportions, the present study is intentionally limited to an analysis of how adult learners make use of L1 in L2 classroom by means of recorded protocols. In addition to the delimitation of use of L1 in L2 learning, the present study focuses on adult learners only, although young second language learners use L1 as well. Questions of young learner's L1 use are not treated in the present study.

The present study focuses on Chinese adult learners learning English language as a second language in a classroom situation. The L1 refers to Chinese language that includes Mandarin and Cantonese, and L2 refers to English language in the present study. The discourse data are obtained from two groups of Chinese-speaking adult learners, Level One and Level Two in English for Speakers of Other Languages (ESOL) class organised by TAFE in a Chinese Community Centre where the use of L1 is officially allowed. In order to fulfil research ethics, the learners are participating in the study on a voluntary basis. Basically, the lessons are conducted in English language to maximise the use of L2 in the second language classroom and Chinese language is used if and when the Chinese adult learners initiate the use of first language. Although the present study focuses on the Chinese language as the first

language and English as the second language, the findings of the present study can theoretically be applied to other first and second languages as well.

1.8 Organisation of the study

Chapter One aims to provide an introduction of the study. It presents the problem and its significance, the background and context, the purpose of the study, the assumptions upon which it is based, the theoretical perspective for the investigation, and the delimitation of the study.

Chapter Two reviews the literature related to the past and present views of the role of the first language in second language learning. The role of theories is important for theories provide a framework for data analysis. Cook's L2 user model gives a new insight of L1 use and Vygotsky's theory of language and thought provides a theoretical framework for the study.

Chapter Three outlines the research design and gives a detailed explanation of the method used in the present study. The tape-recorded classroom discourse data of two different groups of students provide the main source of information for the study, and the interview data shed light on the learner perspectives of L1 use.

Chapter Four reports the student background information which gives some ideas of the two groups of students. It also presents and discusses the interview data which serve to amplify the voices of individual learners of their L1 use.

Chapter Five examines the classroom discourse data that suggest the use of the first language for active construction of knowledge. Through detailed description and analysis of classroom discourse data, the findings in this chapter are that adult learners use L1 in active construction of knowledge, in metalinguistic awareness and in private speech.

Chapter Six addresses the classroom discourse data which indicate the use of the first language as a tool for thinking and learning. The selected episodes suggest that language and thought are closely related and the use of L1 to think of the meaning of L2 is inevitable in the process of learning. From the interviews, the majority of students also claims the use of the first language for understanding L2. That is to say, the findings from the discourse data are in line with the views expressed by the learners from the interviews.

Chapter Seven deals with the classroom discourse data which focus on the use of the first language for support and encouragement. The detailed description and analysis of the classroom discourse data provide visions of how adult learners used L1 to support and encourage others in an attempt to get through the stress and anxiety in learning a new language.

Chapter Eight attempts to draw together the threads of the investigations and to present the conclusions, implications and recommendations for further study on L1 use in L2 learning as it appears in the light of the data.

1.9 A summary of Chapter One

To sum up, Chapter One is an introductory chapter which addresses the discrepancy of L1 use. In theory, the use of L1 is discouraged, but in practice, adult learners do use L1 for their L2 learning. This chapter identifies and discusses the significance of the problem. As shown in the TESL-EJ Forum (2002), the use of the first language for second language learning is still a controversial issue. Despite the fact that adult learners make use of their L1 in L2 learning, many teachers do not see the needs of L1 use and many of them disagree with the use of L1. The first language issue has been ignored, and not being valued in the second language learning.

The purpose of the present study is to find out how adult learners make use of their L1, and to determine what role L1 plays in L2 learning by using authentic classroom discourse data from two groups of Chinese adult learners. The background and context give some ideas of the L2 learning of the study. This introductory chapter also outlines the assumptions of the study, the theoretical perspective, the delimitation of the study, and the organisation of the study. In short, the first chapter serves to set the stage for the rest of the chapters.

Chapter 2 Literature Review

The purpose of this chapter is to review the literature pertinent to the present study. Since the present study investigates how adult learners make use of the first language in second language learning in an attempt to determine what role L1 plays in L2 learning for adult learners, the relevant literature is found in the following areas:

1. The Role of the First Language: A Historical review
2. Recent Perspectives of the Role of the First Language
3. A Vygotskian Perspective – Towards a Current View on the Role of the First Language

This chapter starts with a historical overview of the role of the first language, reviewing the behaviourist views and the Contrastive Analysis Hypothesis. The behaviourist views of language learning assumed that language learning took the form of habit formation and L1 was regarded as playing a negative role. More recent perspectives indicated some changes on the role of the first language. The cognitive accounts in second language processing reveal a more positive role of L1 by considering how the learner's existing linguistic knowledge influences the course of L2 development. However, it is the social-cultural theory of Vygotsky which has scope for a more positive role of L1. The position of the present study is to consider the second language learning from a Vygotskian perspective, that focuses on consciousness, mediation, activity theory and private speech, and that provides a possible explanation of how and why L1 is used in L2 learning.

2.1 The Role of the First Language: A Historical Review

The role of the first language was not highly regarded in the history of the second language theories and research. L1 was seen as a determinant factor which played a negative role. Language transfer was often tied in with second language learning theories. In discussing the role of the first language in second language learning, the best starting point could be to refer to the Contrastive Analysis Hypothesis (CAH), which took the position that a learner's first language interfered with the learning of the second language and that it therefore comprised the major obstacle to successful mastery of the new language.

The Contrastive Analysis Hypothesis, the first language as interference and dissatisfaction with the notion of interference are discussed in the following sections:

2.1.1 The Contrastive Analysis Hypothesis and the First Language as Interference

The Contrastive Analysis Hypothesis (CAH) was predominant in 1970s. Bialystok (1991:3) states that the 'prevailing view at the beginning of the 1970s was based on the linguistic approach of "contrastive analysis," developed from Lado's (1957) early work and reported in *Linguistics Across Cultures*'. The CAH followed the theories of behavourist views of language learning. One of the key concepts in behaviourist theory was the notion of transfer. The term 'transfer' was used to refer to the psychological process whereby prior learning was carried over into a new learning situation. Based on that view, a linguistic comparison of two languages revealed the

sources of potential difficulty for the learner by identifying the aspects of the two languages that differed from each other.

In one of the earliest proposals, Fries (1945) described learning the second language as very different from the first language learning, its problems stemming not from the second language but from the 'set' created by habits of the first language. Lado (1957), with a similar view, remarked that:

> ...we can predict and describe the patterns that will cause difficulty in learning, and those that will not cause difficulty, by comparing systematically the language and the culture to be learned with the native language and culture of the students. (Lado, 1957:vii)

According to behaviourist theories, language learning was assumed to take the form of habit formation. When two languages shared habits, positive transfer occurred. When linguistic interference was found, negative transfer was the result. That is to say, learning was promoted with repeated responses to stimuli, and reinforcement was emphasised.

Following this theory of transfer, in learning the second language it was assumed that learners rely extensively on their native language. Lado (1957), in his book *Linguistics Across Cultures* stated this view clearly:

> ...individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture – both productively when attempting to speak the language and to act in the culture, and receptively when attempting to grasp and understand the language and the culture as practiced by natives. (Lado, 1957:2)

Lado's work of that time was based on the need to produce relevant language materials. In order to produce those materials, it was considered necessary to do a contrastive analysis of the native language (that is, L1) and the target language (that is, L2). In this contrastive analysis, detailed comparison of sound systems,

grammatical structures, vocabulary systems, writing systems, and cultures between the two languages was performed to determine their similarities and differences.

The assumption of the CAH was that second language learning resulted primarily from the acquisition of appropriate 'new habits', which included new phonological, morphological, syntactic, and semantic patterns as well as new lexical items. The basis of this interpretation was that language learners learned the second language by substituting target language forms and structures into what they already knew about their first language. Transfer, therefore, was the complete explanation for second language learning.

The CAH held that the first language was considered an 'interference' which played a negative role in learning a second language. The topic of 'first language interference' was identified and it was presumed that the only major source of syntactic errors in adult second language performance was the performer's first language (Lado, 1957). Interference was used to refer to two distinct linguistic phenomena, psychological and sociolinguistic. The psychological use of the term interference referred to the influence of old habits when new ones were being learned, whereas the sociolinguistic use of interference referred to language interactions, such as linguistic borrowing and language switching, that occurred when two language communities were in contact. (Dulay, Burt and Krashen, 1982:98).

Wardaugh (1970) distinguished between the Strong Version and Weak Version of CAH. The Strong Version claimed that a structural comparison of two languages could predict a learner's errors, and the Weak Version maintained that a comparison of the first language and second language could identify which errors are the result of interference. The role of the first language, however, maintained as a prediction or at least an explanation of learner's errors and difficulties.

2.1.2 Dissatisfaction with the notion of interference

CAH had its origins in behaviouristic psychology. The role of the first language was referred to as interference. This implied that the knowledge of our first language got in the way when we tried to speak the second language, and that L1 played a rather negative role. A number of critics (Ritchie, 1967; Wardaugh, 1970; Brown, 1980; Dulay, Burt & Krashen, 1982; Ellis, 1994) have criticised the theory of CAH. Newmark (1966) drew extensively on research in L1 acquisition in dismissing behaviourist accounts of L2 learning. He acknowledged 'interference' but saw it as of little importance, and argued that it reflected ignorance. Newmark and Reibel (1968) produced the *Ignorance Hypothesis*:

> ... a person knows how to speak one language, say his native one; but in the early stages of learning his new one, there are many things that he has not yet learned to do ... What can he do other than use what he already knows to make up for what he does not know? To an observer who knows the target language, the learner will be seen to be stubbornly substituting the native habits for target habits. But from the learner's point of view, all he is doing is the best he can: to fill in his gaps of training he refers for help to what he already knows. (Newmark and Reibel, 1968:159)

According to Newmark, it was not the result of the first language interfering with the second language performance, but the result of ignorance – the lack of acquisition of a target language rule that was needed in performance. Newmark (1966) proposed that first language influence was not 'proactive inhibition' but was simply the result of the performer being called on to perform before he had learned the new behaviour. The result was 'padding', using old knowledge, applying what was known to what was not known. Newmark, therefore, suggested that the 'cure for interference' was simply 'the cure for ignorance: learning'.

Krashen and Terrell (1983) supports the idea first proposed by Newmark (1966), who suggested that the first language did not interfere at all when we tried to use a second language. Rather, errors that showed the influence of the first language

were simply the result of 'falling back' on the first language when we had not acquired enough of the second language. 'The cure for interference is simply acquisition – pedagogy does not need to help the acquirer fight off the effects of the first language – it need(s) only help the acquirer acquire the target language (Krashen and Terrell, 1983:41)'.

Based on Newmark's proposal for a mechanism for first language influence, Krashen (1981:64) suggests the role of the first language as a substitute utterance initiator. He states that L1 may 'substitute' for the acquired L2 as an utterance initiator when the performer has to produce in the target language but has not acquired enough of the L2. First language influence may therefore be an indication of low acquisition. This assumption is in line with Taylor's(1975) finding of less first language influence with more proficiency. Krashen (1981) concludes that the 'silent period' observed in natural child second language acquisition (Hakuta, 1974; Huang and Hatch, 1978) corresponds to the period in which the first language is heavily used in 'unnatural' adult second language performance (Krashen 1981:67-68). Krashen's idea of 'first language influence as unnatural' certainly related to his L1 plus monitor theory which will be discussed later in this chapter. Both Newmark and Krashen attempt to explain the first language influence and they suggest that the use of first language is an indication of 'low acquisition' or is 'unnatural'.

Critics of Contrastive Analysis Hypothesis have attacked the theory for its assumption that L2 learning is resulted primarily from the acquisition of appropriate 'new habits'. Ellis (1994) states,

> 'According to behaviourist theories, the main impediment to learning was interference from prior knowledge. Proactive inhibition occurred when old habits got in the way of attempts to learn new ones. In such cases, the old habits had to be 'unlearnt' so that they could be replaced by new ones.' (Ellis, 1994:299)

The criticisms reflect an inherent dissatisfaction with notions of transfer and interference. In these views, L1 was regarded as prior knowledge that became

interference in learning a new language. In order to learn L2, L1 was suggested to be 'unlearnt'. Ellis (1994:299) comments that 'the notion of 'unlearning' made little sense, as learners clearly do not need to forget their L1 in order to acquire an L2'.

Corder (1992:19) disagrees with the notion of 'interference' in syntactic knowledge. He claims that 'as far as the acquisition of syntactic knowledge is concerned no process appropriately called interference takes place, if by that we mean that the mother tongue actually inhibits, prevents, or makes more difficult the acquisition of some feature of the target language.' He explains that what 'interference' is now most often used to mean is the presence in the learner's performance in the target language of mother-tongue-like features which are incorrect according to the rules of the target language. He comments that this usage 'carries no sense of an inhibiting process at work as a proper use of the term should', and that this usage 'should be abandoned' (Corder, 1992:20).

With the Chomskyan revolution in linguistics, the older behaviourist model of acquisition was discarded (Gregg, 1984). Subsequent empirical studies of errors made by second language learners led to the discovery that many errors were common to second language performers of different linguistic backgrounds but not traceable to the structure of the first language (Richards, 1971; Buteau, 1970). Following these findings the value of contrastive analysis was questioned and instead Error Analysis (EA) was developed. Cook (1999) points out that Error Analysis involves comparison with the native speaker rather than seeing L2 learners in their own right. The first language, however, was maintained as one of several sources of error.

To sum up this section, the study started with a historical review of the role of the first language. The Contrastive Analysis Hypothesis, which had its origin in behaviourist theory, compared second language learning to first language learning. The first language was regarded as playing a rather negative role for it was referred as 'interference' to second language learning. A number of criticisms reflected dissatisfaction with this interference theory. The Contrastive Analysis Hypothesis

appeared to have made little contribution to the understanding of the role of L1 in L2 learning, and more recent literature ought to be pursued concerning the first language issue.

2.2 Recent perspectives of the role of the first language

With the challenges to the behaviourist theory of language learning, there arise other theories which give some consideration to the role of the first language. Johnson (2004:30) comments that the field of second language acquisition embraced the cognitive tradition after rejecting behaviourism. In the sixties, linguistics experienced a theoretical revolution that began with Noam Chomsky's publication of 'Syntactic Structures' in 1957. Chomsky (1957) upset the prevailing belief from behaviourist theory that language was learned by imitating, memorising and being rewarded for saying the correct things. Chomsky (1965:47-59) argued that the central force guiding language acquisition was an innate language-specific 'mental structure' or 'language acquisition device'. Chomsky's language acquisition device, including Universal Grammar which was indispensable for the child's ability to acquire his or her native language, had great impact on language research. Universal Grammar is referred as the language faculty built into the human mind consisting of principles and parameters, and all human minds are believed to possess the same language principles, but differ over the settings for the parameters for particular languages. Cook (1996:30-32) suggests that it is important to relate Universal Grammar to the idea of multi-competence, the knowledge of two languages in one mind. Cook (1996:32) argues that each L2 user's mind 'has two grammatical systems somewhere within it, differing only in parameter settings and vocabulary. What teachers are trying to do is create this complex state of language knowledge, never to wipe the board clean and pretend that L2 learners do not have another grammar, another group of settings for the parameters present in their minds'. The present study posits that second language learners have two grammatical systems that they can use for comparison in L2 learning. However, it is not so simple to conclude that Universal Grammar exists in L2 learning. Many researchers in linguistics do not take a

Chomskyan approach and most of the criticism surrounds Chomskyan concepts of innateness. Johnson (2004:39) comments that L2 learner's access to Universal Grammar is 'controversial and inconclusive'.

Following Chomsky's criticism of behaviourist view, it became prominent that a behaviourist position with regard to language learning was untenable. Ellis (1994:26) comments that according to the behaviourist view of learning there is little room for any active processing by the learner. In the present study, viewing the learner as an active participant in the learning process becomes essential. Since it is observed in the second language classroom that many adult learners make use of L1 in the L2 development, L1 possibly plays a certain role in the processing and development of the second language.

The following sections review some of the revised perspectives on the role of the first language.

2.2.1 The L2 = L1 hypothesis

With the dissatisfaction of the notion of CAH, Dulay and Burt (1973) suggest a different view which claims that one learns a second language by starting all over again using the same processes that have guided first language acquisition and that there is no place for transfer. This proposal L2 = L1 is based upon the similarity of the errors produced by children in the course of acquiring a second language to those produced by infants acquiring the mother tongue. This proposal emphasises the contribution of universal process that was largely uninfluenced by such factors as the context in which learning took place, or the learner's L1 background. Gass and Selinker (1992:6) state that to show that the L2 = L1 hypothesis was in fact accurate, it is necessary 'to first show that language transfer was not and could not be a

significant factor in second language learning'. That is to say, learning a second language does not involve language transfer and the learner has to start all over again.

The L2 = L1 proposal tends to emphasise the similarity between L2 and L1 acquisition. Dulay and Burt (1972) have posited the existence of 'general processing strategies', that are seen as universal and are used by all language learners, including first and second. They identified a number of general production strategies to account for the various types of errors they observed. For example, the absence of grammatical functions is explained in terms of 'the pervasiveness of a syntactic generalization'.

There is little doubt that this L2 = L1 proposal is the result of dissatisfaction with the notion of transfer and interference. Ellis (1994:315) comments that this 'over-reaction was caused by the close connection between the ideas of transfer and behaviourism, which, as we have seen, had become discredited. In clambering on to the mentalist bandwagon, however, researchers like Dulay and Burt mistakenly dismissed transfer, often on the basis of flimsy evidence.'

In actual practice, this proposal of Dulay and Burt appears to be difficult to work out since the L2 learners already possess an existing language system to which they could refer, and with this existing language system in mind, it would be impractical to start all over again in L2 learning. Corder (1992:24) comments on Dulay and Burt's proposals that 'the whole functional aspect of language was ignored in these proposals. Second language learners not only already possess a language system which is potentially available as a factor in the acquisition of a second language, but equally importantly they already know something of what language is for, what its communicative functions and potentials are.' This L2 = L1 theory totally ignores the existing knowledge and experience of L2 learners, and does not seem to be a complete view of second language learning.

2.2.2 The role of the first language and the monitor model

The role of the first language is mentioned in Krashen's (1981) monitor theory, which is regarded as one of the 'most comprehensive theories' (Ellis, 1984:160). The monitor is said to be 'an important factor associated with L1 use in L2 acquisition' (Dulay, Burt and Krashen, 1982: 110). This section reviews Krashen's monitor model in an attempt to locate the role of the first language in second language learning.

The point to note is that Krashen's view of the first language is different from the behaviourist view of interference. Krashen supports Chomsky's position, and extends it to second language acquisition. Krashen associates the use of L1 with what he calls 'monitor' use. In his theory, Krashen presents five main hypotheses: the acquisition/learning hypothesis; the monitor hypothesis; the natural order hypothesis; the input hypothesis, and the affective filter hypothesis.

Among the five hypotheses, Krashen (1982) mentions that the acquisition – learning distinction is the most fundamental of all the hypotheses. In his view, language acquisition is similar to the process children use in acquiring first and second languages. Learning refers to conscious knowledge of a second language, knowing the rules, being aware of them, and being able to talk about them (Krashen, 1982:10). According to the natural order hypothesis, second language is acquired in a predetermined way and it unfolds along a natural path of development that cannot be altered.

In the monitor hypothesis, it is claimed that the monitor consists of learned knowledge which is conscious knowledge of rules. According to Krashen, this learned knowledge is used to edit utterances. It can only be used in production and it is not used in comprehension. The present study is of the opinion that it is of question if there is such a monitor exists. If it does exist, the question remains whether a monitor is only used in production of L2.

The input hypothesis claims that 'humans acquire language in only one way – by understanding messages, or by receiving "comprehensible input" (Krashen 1985: 1-2)'. Krashen's input hypothesis refers to acquisition, not learning, and he claims that if there is enough comprehensible input 'the necessary grammar is automatically provided' (ibid.). That is to say, there is no need to teach grammar deliberately because it can be acquired subconsciously.

In the affective filter hypothesis, the affective filter, which shields the Language Acquisition Device from input necessary for acquisition, is what differentiates one individual from another. It is intended to explain why some learners learn and others do not. It is also intended to explain child-adult differences. The filter is not present in children but is present in adults. But how does it work? Gregg (1984) gave the example of a Chinese native speaker with near native-like knowledge of English. This speaker, however, had not acquired certain rules, such as the adding of 's' to the verb of third person singular. In Krashen's view this incomplete knowledge of English would be due to the affective filter, but there is no explanation as to how the filter could let most of the input pass through and filter out third person singular.

In his monitor model, Krashen (1981) distinguishes second language learning from second language acquisition. In an attempt to explain the processing distinctions between acquisition and learning, Krashen (1981) presents the monitor model that illustrates the interaction of acquisition and learning in adult second language production. Acquisition is 'subconscious' and 'learning' is conscious. According to Krashen, there are three necessary conditions for operations of the monitor system. They are time, correctness or 'focus on form' and rule knowledge. The amount of processing time controls whether the second language user will perform in an acquisition mode or will use 'conscious grammar' in a learning mode. When the learner performs in a second language he /she initiates utterances by means of 'acquired' knowledge. Conscious learning is only available as a monitor. With these conditions of monitor use, Krashen (1981:3) comments that it is 'very difficult to

apply conscious learning to performance successfully. Situations in which all three conditions are satisfied are rare'.

In considering the role of the first language, Krashen attempts to associate the use of the L1 with the monitor use. Dulay, Burt and Krashen (1982:110) claim that the conditions under which the L1 grammar is used in L2 performance coincide to a certain extent with conditions in which conscious language processing is in effect, and this suggests that the monitor is an important factor associated with L1 use in L2 acquisition. Dulay, Burt and Krashen (1982) mention the use of the L1 in L2 acquisition as follows:

> When learners use first language structures in second language performance, they plug lexical items (vocabulary) of the second language into the surface structure of the first language. In other words, they 'think' in the first language and use words from the second language, much as one would handle word-for-word translations. In situations where the surface structure of both languages is similar, this is not a problem. In fact, when this happens, use of the L1 can be considered an asset. (Dulay, Burt and Krashen, 1982:110)

Dulay et al. state that when learners try to use first language structures that are not identical to second language structures, they make interlingual errors, and it is up to the monitor to repair these errors. In case of positive transfer, Dulay et al. regard the use of L1 as an 'asset'. The notion that L1 as an 'asset' and that the L2 learners may 'think' in the first language are of interest for the present study for it can possibly be developed as a positive role L1 can play in L2 learning. However, Dulay et al. only view L1 as word-for-word translations which do not help much in L2 learning.

Krashen and Terrell (1983:41-42) use 'L1 plus monitor mode' to refer to the 'falling back' on the first language as well as using the monitor or the conscious knowledge of the second language in second language performance. Two advantages and two disadvantages are then mentioned. The two advantages are, first that the use of an L1 rule allows performers to 'outperform their competence'. Second is the early

production allowed by the use of L1 rules also helps to invite output – it allows the performer to participate more in conversation, and this could mean more comprehensible input and thus more second language acquisition. The two disadvantages are, first that the L1 rule may not be the same as an L2 rule, and errors can result. The conscious monitor can note and repair some errors but not all. According to the theory, monitor correction of such errors will not produce acquisition or permanent change. Real acquisition comes only from comprehensible input. The constraints on monitor use are 'severe'. Use of L1 rules requires constant vigilance on the part of the monitor. Second, this is an extremely awkward and tiring way to produce formally correct sentences in the second language. It requires an immense amount of mental gymnastics that most people are not capable of.

Regarding the use of L1, Krashen and Terrell (1983) distinguish between the second language and foreign language situations. They state,

> Early production may be useful in second language situations, where the student is actually in the country and needs the second language for communication right away. In such cases, the advantages of the L1 plus Monitor Mode might outweigh the disadvantages. In foreign language situations, however, we have the luxury of waiting for acquired competence to build up via input, and a great deal of first language "transfer" can be avoided. (Krashen and Terrell, 1983:42)

The advantages of 'L1 plus monitor mode' are said to outweigh the disadvantages in second language situations but not in foreign language situations. In other words, 'L1 plus monitor mode' is useful in second language situations. However, with the hypothesis of acquisition-learning distinction of the Monitor Model, language learning is regarded as different from acquisition. Language learning is reduced to knowing the rules, having a conscious knowledge about grammar and only be useful as a Monitor. L1 is used with this monitor mode. Considering the above-mentioned 'L1 plus monitor mode', the present study is skeptical of the existence of the monitor and its functions.

Furthermore, Krashen (1989) has an extended view on the use of the first language when he mentions 'bilingual education' and 'making input more comprehensible'. He states,

> One advantage of bilingual education is that background information can easily be provided in the student's first language, a practice that makes English input more comprehensible and speeds second language acquisition. (Krashen, 1989: 28)

In his view, Krashen (1989:69) identifies 'the proper use of the first language' which 'can help the acquisition of English a great deal; well organised bilingual programs are very effective in teaching English as a second language, often more effective, in fact, than all-day English programs that "submerse" the child in English'. Krashen (1989) states that the benefits of first language education help second language acquisition in this way: CALP (cognitive academic language proficiency), a term coined by Cummins (1980) to refer to the ability to use language to learn and discuss abstractions, and knowledge, 'gained through the first language, make English input more comprehensible, and sometimes make it much more comprehensible (Krashen,1989:73)'. In a sample program, Krashen (1989) identifies 'Mainstream', 'Sheltered' and 'First language' as separate classes. Apart from the 'Mainstream' class, 'Sheltered' class is for ESL teaching with an emphasis of comprehensible input in L2 only, and 'First language' class is for solid subject matter teaching in the first language only. He states,

> ESL and immersion provide comprehensible input directly, and properly done bilingual education provides the background information that makes English input more comprehensible. (Krashen,1989:76)

By this, Krashen (1989:74-75) holds the view that the use of the first language is just for 'solid subject matter teaching' (without translation), and that using the first language or 'translation' discourages comprehensible input, and therefore is regarded as 'misuse of the first language'. Krashen explains that misuse of the first language occurs when 'concurrent translation' is used, a technique in which the teacher speaks a little in one language, then translates what was said into the other language. When

this happens, students quite naturally listen to the message in their own language and pay no attention to the English input. That is to say, the use of the first language is limited to solid subject matter teaching only, but not used for ESL teaching, or for mainstream subject teaching. Krashen (1989) seems to argue for a greater role of L1 in his view of bilingual education, but the use of the first language is limited in a particular way. The present study is of the opinion that the use of the first language should not be confined to such limitation and that the first language has more significant role to play in second language learning.

The problems with Krashen's monitor model are: first, his view of learning which 'has only one function, and that is as a Monitor, or editor (Krashen, 1982:15)'; second, his notion of 'acquired' knowledge as distinct and unrelated to 'learnt' knowledge, suggesting what has been learned cannot become part of the acquired system; third, his claim that there is no transfer of knowledge from one to the other, which he refers as the non-interface hypothesis. The question to ask is whether or not learners develop two independent systems, the acquired system and the learned system. If these two separate systems exist, as Gass and Selinker (2001:203) comment, 'this is clearly an inefficient way for the brain to cope with different kinds of information.'

Bialystok and Frohlich (1977) and Sharwood-Smith (1981), with a similar position, argue that sources of knowledge are related, and can be transferred from one source to the other. In other words, explicit knowledge can become implicit over time providing it is sufficiently practised. When a learner performs in a second language it will be hard to draw a line to say whether that is a result of 'acquired knowledge' or from 'learnt knowledge'. With constant practice and constant application, explicit knowledge can become implicit and conscious knowledge can become unconscious knowledge. Another objection to the distinction between acquisition and learning comes from consideration of those learners who learn language only in a formal setting. Many of the L2 learners in the present study have learned L2 in a formal setting. It would be hard to say whether these L2 learners have a learned system or an

acquired system. However, many of these adult learners attempt to use both L1 and L2 to comprehend and to acquire L2.

Gregg (1984:83-84) questions Krashen's theory and points out that the distinction between second language learning and acquisition becomes 'pointless' when one examines the three necessary conditions for using the Monitor. Condition 1, time, is fairly uncontroversial; one needs time to produce an utterance, and the more one relies on conscious knowledge of rules, the more time will be required. Condition 2, focus on form, is really a false distinction; .....Condition 3 'know the rule' is of course correct in a sense, but again only in 'a rather trivial way'.

Gregg (1984) attempts to show that Krashen has not presented a coherent theory of second language acquisition. Gregg (1984:94) comments that 'each of Krashen's five hypotheses is marked by serious flaws: undefined or ill-defined terms, unmotivated constructs, lack of empirical content and thus of falsifiability, lack of explanatory power. His second language acquisition theory is not a coherent theory; it is indeed incoherent to the point that it seems inappropriate to apply the word 'theory' to it.' Gregg (1984) comments that it is difficult to justify that distinct innate mechanisms like 'filter', 'organiser' and 'monitor' exist in the learning process. It is also hard to accept Krashen's theory that language learning and language acquisition are separate entities and that learned knowledge cannot be converted into implicit knowledge. Corder (1984:58) therefore comments this as 'the sticking point for many who otherwise accept his views'. Krashen's concept of the learned versus acquired systems seems to be an inadequate way of describing L2 knowledge.

To sum up, according to Bialystok and Frohlich (1977), Sharwood-Smith (1981), and Gregg (1984) mentioned above, there are reasons to be skeptical of the Monitor Model and of the substance of these hypotheses. Though L1 is mentioned a lot in the monitor model, L1 use is limited by the notion of monitor, and L1 is not considered as playing a constructive role.

2.2.3 The revised view of transfer and the first language as a heuristic tool

Since the late 1970s, research on the role of the first language or native language has taken on 'a different view, advocating a non-behaviourist position, and questioning the assumption that language transfer has to be part of behaviourism. That is, the assumption is that one can view transfer as much a creative process as any other part of acquisition (Gass and Selinker, 2001:118)'.

Gass and Selinker (2001) state that during the mid- to late 1970s, the view of transfer that began to predominate can be characterised as qualitative as opposed to quantitative. That is to say, the emphasis was on the determination of how and when learners used their native language and on explanation for the phenomenon. For example, Ard and Homburg (1992) introduce a different conception of language transfer, involving different learning patterns among learners of different native languages by comparing the responses of two groups of learners, Spanish and Arabic, to the vocabulary section of a standard test of English. The data suggest that Spanish learners did consistently better than the Arabic speakers and that the Spanish speakers could focus more of their learning time on the language because many cognates existed between the L1 and L2. Kleinmann (1977), in an investigation of Arabic speakers versus a group of Spanish/Portuguese speakers in the use of passives, present progressives, infinitive complements, and direct object pronouns, demonstrated that there were differential behaviour between his groups in the choice to use or avoid to use particular structures to express given concepts and the study claimed that difference between the L1 and the L2 were the major source of avoidance. The idea of the revised view is to broaden and to reconceptualise the term 'language transfer'.

Corder (1992) is one of those who questions the term 'transfer', and instead, he adopts the phrase 'a role for the mother tongue'. He states that the theory of transfer 'assigns too limited a role to the mother tongue' and recognises the difficulty in continuing to use theory-laden terminology:

> I have chosen the title of this paper deliberately, A Role for the Mother Tongue in Language Learning, because I do not wish to prejudice the nature of my discussion of that role by using the term 'transfer' or even less by using the term 'interference'. (Corder, 1992:19)

Corder (1992) points out that we should not limit the role of the mother tongue to the theory of transfer. In second language learning, Corder suggests that we should be looking for 'a more complex and richer picture of the influence of the mother tongue (Corder, 1992:20)'. In his article, he argues that the part played by the mother tongue in the acquisition of a second language is much more pervasive and subtle than has been traditionally believed. He claims that the mother tongue plays a part at the start of learning, in the process of learning, and in the use of the target language in communication. By this he probably means that the previous knowledge and skills are intimately involved in the acquisition of new knowledge and skills.

A number of issues are raised in Corder's article. First, knowledge of a language is thought of as an organically structured whole. In the process of acquiring a language it develops from a fairly simple structure to a highly complex structure in an organic way. Second, Corder (1992:23) differentiates between phonology and syntax. For the acquisition of pronunciation of a second language, it is 'a matter of progressively restructuring the mother tongue phonological system in the direction of the target language'. For syntax acquisition 'the starting point appears not to be the mother tongue system' . Corder (1992:29) further explains that the starting point is 'not the fully developed adult form of the language', but 'a basic simple, possibly universal, grammar'. Language acquisition is a process of elaborating this basic grammar in the direction of the target. The mother tongue comes in to act as a heuristic tool in the discovery of the formal properties of the new language,

facilitating especially the learning of those features which resemble features of the mother tongue. Corder explains that where languages are closest structurally, the facilitating effect is maximal.

In his article, Corder (1992) mentions how the mother tongue is used in the facilitation process. He states,

> The actual mechanism of facilitation may be by means of borrowing items and features from the mother tongue as a communicative strategy, which if communicatively successful, leads to an incorporation of the item or feature into the interlanguage system. This is structural transfer. (Corder 1992:29)

Structural transfer, according to Corder, is a learning process that results from borrowing, which is a strategy of communication. He uses 'successful' and 'unsuccessful' borrowing to refer to the results of borrowing which do or do not lead to error. Corder explains that borrowing may not lead to incorrect utterances, but both correct and incorrect utterances may be successful in communication. Ultimately most of the incorrect forms are eliminated in the course of further learning and the correct items are incorporated into the permanent structure of the interlanguage. In this way the borrowing of correct forms leads to facilitation, that is, the acquisition of forms similar in the two languages. Corder explains that items and features which have been borrowed but which are not similar to the target language may get wrongly incorporated into the interlanguage system giving rise to error which may sometimes be fairly persistent. The willingness of learners to borrow may be determined by learners' perception of the linguistic distance between their mother tongue and the target language.

Despite his effort to broaden and reconceptualise the concept of 'transfer', Corder still uses the term 'transfer' which is limited by its scope. The emphasis of the heuristic and facilitative role of the mother tongue seems to indicate a positive role of the first language. However, Corder's notion of the role of the mother tongue is

confined to 'structural transfer' and 'borrowing'. In this revised view of transfer, the first language remains to be playing a limited and superficial role.

To sum up, the revised view of transfer is of interest especially the notion of the first language to act as the heuristic tool suggested by Corder. However, the present study does not intend to limit the role of the first language to the theory of transfer. The position of the present study is that the part played by the mother tongue in the learning of a second language is a good deal more subtle than has been traditionally believed. It plays a vital part in the thinking and learning of the second language. The present study intends to go beyond the limit of positive transfer and to explore the more positive role of the first language in the learning of the second language. The first language can possibly be used as a mediator or as a tool for thinking, understanding, discussing and learning the second language.

2.2.4 Language processing and integration of first language material into second language comprehension

Wolf and Walters (1988) present a paradigm for 'Integration of First Language Material in Second Language Comprehension' basing on the models of Krashen (1982), McLaughlin, Rossman, and McLeod (1983) and Bialystok (1981). They argue that a person who is exposed to L2 material but who is not familiar with all of the linguistic components presented in that material cannot satisfactorily comprehend it using only the information given by the L2 text. Wolf and Walters (1988) attempt to reconstruct the fundamental idea of CAH and summarised the idea as follow:

> Insofar as L2 material corresponds to L1, L2 use will be successful. A strong 'mentalistic' implication can be derived here, that is, L2 use is characterised by the process of comparison between the features of L2 material that the user is exposed to and the relevant elements of his already established L1 linguistic structures. Essentially, this restatement provides a theoretical basis for our assumption that L1 knowledge is incorporated into L2 processing. (Wolf and Walters, 1988:183)

Wolf and Walters focus on the 'mentalistic' implication in which L2 use is characterised by comparison between L2 and L1. They therefore make the assumption that L1 knowledge is incorporated into L2 processing.

Wolf and Walters (1988) claim that the person is accustomed to using information from his first language and integrating the L2 linguistic components with the framework of the L1 information. This L1 information is assumed to serve as a substitute for the missing L2 information. Wolf and Walters (1988) state,

> It is well accepted that any new linguistic system (L2, in our case) operates on the basis of generalisations from an already acquired and functioning system (L1, in our case). On this basis, L2 processing can be characterised by a great reliance on L1 knowledge and on the L1 processing modes discussed above, namely, synthetic and analytic processing (Wolf and Walters, 1988:182)

Synthesis is defined as organising parts into wholes, further specifying it as an ability to maintain logical or meaningful order. Wolf and Walters (1988) define synthesis by means of tasks requiring completion of verbal and figural elements which demand closure on the part of the subject. Synthesis is evaluated by finding a class in a set of symbols. Analysis, the polar opposite of synthesis, is defined as a facility to break things down into their natural components. Wolf and Walters(1988) make the assumption that these two modes of processing involve the use of L1 during L2 processing. That is, 'the L2 user searches for similar L1 linguistic units (nodes, properties, etc.) and integrates information from both languages to produce understanding in L2 (Wolf and Walters, 1988:182-183)'.

It should be noted that the paradigm presented by Wolf and Walters focuses on information processing of the second language learning, and the L1 information is to serve as a substitute for the missing L2 information. The L2 processing assumes that L2 learning is functioning like the information processing of computers. Processes like input, output, storage and retrieving are the key issues in L2 learning. Johnson (2004:84) points out that the 'process of analysing the incoming information is viewed as being mechanistic, predictable, stable, and universal. The outside reality, or social context, is acknowledged indirectly, abstractly, and superficially, mainly in the stage associated with input or apperceived input. Input presented to the learner takes on the form of data entry, which is processed in a mechanistic and predictable fashion, according to a programmed sequence in which no individual variation is allowed to take place.' It seems to be oversimplified to reduce the complex processes of L2 learning to computer-like processes.

To sum up, the present study argues that the notion of input and output as a central organising metaphor is not sufficient for explaining the use of language. The mechanic information processing metaphor ignores the learner's role in active social and cognitive engagement in the second language learning. The present study assumes that other factors, such as affective aspect, social aspect and cultural aspect play important roles which have not been well-addressed in the above-mentioned paradigm.

2.3 A Vygotskian perspective – Towards a current view on the role of the first language

Vygotsky's theory has been used in L2 learning for children as well as for adults and in second language studies (see Donato, 1994; McCafferty, 1994; Diaz and Klingler, 1991; Johnson, 1991). Vygotsky's theory is a sociocultural theory of human

mental processing that gives a new understanding of second language development and helps to explain the dynamic use of L1 in L2 learning.

Vygotsky was convinced that no theory that aimed at explaining complex psychological functioning by reducing it to a single factor qualified as an adequate scientific account of the mind. Rather than view cognitive development as an evolutionary, quantitative process within a 'performistic model', Vygotsky argued for a 'stratificational model' (Vygotsky, 1981a:155). This cognitive view of Vygotsky assumes that in the course of child development, ontogentically prior, and thus lower order, biologically specified, mental functions are retained and developed into more complex, or higher order, socioculturally determined mental functions. Included among the lower order functions are input systems (that is, vision, hearing, tactile, and olfactory systems) as well as natural memory and involuntary attention. The higher order functions encompass logical memory, voluntary attention, conceptual thought, planning, perception, problem solving, and voluntary inhibitory and disinhibitory faculties (Lantolf and Appel, 1994:5). Vygotsky's cognitive view, which provides scopes for higher order functions, helps to explain the strategic use of L1 for L2 learning.

Vygotsky (1979) argued that because psychology had largely refused to study consciousness, it had deprived itself of access to 'some rather important and complex problems of human behaviour' (Vygotsky, 1979:5 cited in Lantolf and Appel, 1994:3). Vygotsky viewed consciousness as more than awareness of one's cognitive abilities. He conceived of it as comprised of the self-regulatory mechanisms that humans deploy in solving problems. This incorporates metacognition functions as planning, voluntary attention, logical memory, problem solving and evaluation. The Vygotskian theory is relevant to this study since consciousness exists in L2 learning and L1 can be used as a self-regulatory mechanism for thinking and learning.

The Vygotskian theory comprises various aspects: consciousness and L2 development, the activity theory, mediated mind and psychological tools, inner

speech and private speech, and zone of proximal development which are discussed below.

2.3.1 Consciousness and L2 development

The task Vygotsky (1962) set for psychology was to explain consciousness. Vygotsky saw the need for overcoming the cycle of explaining states of consciousness through consciousness itself, and he opposed the reduction of psychological phenomena to reflect-like behaviour. Vygotsky proposed that since thinking was the function of the cerebral organ, the explanation of the process was not to be found in the internal structure of the organ, but in the interaction between thinking bodies (humans) and between thinking bodies and objects (humans and socioculturally constructed artifacts). Consciousness 'arises, functions, and develops in the process of people's interaction with reality, on the basis of their sensuously objective activity, their socio-historical practice (Spirkin, 1983:153 cited in Lantolf and Appel, 1994:4)'. Vygotsky suggested that socially meaningful activity had to be considered as the explanatory principle for understanding consciousness, since it was only through activity that consciousness developed in the first place.

For Vygotsky (1962), consciousness is co-knowledge; the individual dimension of consciousness is derivatory and secondary. The Vygotskian perspective differs fundamentally from the view which maintains that social interaction provides opportunities to supply linguistic input to learners who develop solely on the basis of their internal language processing mechanisms. In contrast, the Vygotskian position assigns to social interaction a development status: that is, development is situated activity (Donato, 1994). Lave (1988), following the Vygotskian perspective, points out that what we call learning and cognition is a complex social phenomenon.

Recently some researchers have begun to recognise the dimension of consciousness and cognition in the language learning process. This shift in focus from subconscious to conscious cognitive processes is revealed in the studies of learner

strategies (Oxford, 1990). Research also focuses on conscious planning and interlanguage variation (Crookes, 1989), and consciousness raising through systematic attention to the formal regularities of second language structure (Rutherford & Sharwood-Smith, 1988).

The present study attempts to reveal consciousness in L2 learning in which verbal interactions, presumably including the use of the first language, are recorded in the process of second language learning. This will provide important insights into the second language development for adult L2 learners.

2.3.2 The activity theory

A basic principle of activity theory is the claim that human purposeful activity is based on motives. The theory specifies that to explain the activity of individuals requires uncovering the motive and the interrelationship of this motive with the selection of goal-directed actions and their operational composition. The individual's motive determines which actions will be maximized and selected and how they will be operationalised in a particular setting. Since the motive determines how actions will be constructed, the variability of activity, that is, the interrelationship of motives, goals, and operations, needs to be taken into consideration when investigating L2 interaction.

A number of studies support the notion of Activity Theory. Gillette (1994) conducted a study of 'the role of learner goals in L2 success' with six students of French as a second or foreign language as the participants. The study investigates the learning processes of effective and ineffective learners basing on the activity theory. It was found that both effective and ineffective learners have different personal orientations towards learning French, and their orientations affect their strategic approaches to language learning.

Coughlan and Duff's (1994) study 'Same task, different activities: Analysis of a SLA (Second Language Acquisition) task from an activity theory perspective' makes an important distinction between a task and an activity. In the study, one Cambodian and four Hungarian students were asked to perform the same task: to describe a picture that depicted a beach scene. Following the theory of Vygotsky, an activity consists of 'the behaviour that is actually produced when an individual (or group) performs a task. It is the process, as well as the outcome, of a task, examined in its sociocultural context' (Coughlan and Duff, 1994:175). The activity, in contrast to a task, represents a dynamic and unpredictable process that emerges as a result of the participation of an individual or a group in the task. The findings suggest that the data collected on the same task cannot be removed from the sociocultural context, and that the activity is a result of dynamic interaction among different factors such as participants' motives and objectives, their ever-evolving personal histories, their personalities, and the setting.

Roebuck (2000) produced a similar study 'Subjects speak out: How learners position themselves in a psycholinguistic task'. In the study, twenty-seven elementary and five intermediate students of Spanish at the university level were analysed. The study claims that the same task produced many different activities that reflected different participants' orientations to the task. In accordance with the theory of Vygotsky, the study claims that human activity is a complex and dynamic process that is determined by individual's personal goals, their sociocultural history, and the context in which the activity takes place.

Vygotsky's notion of motives is essential in explaining the role of L1 in the present study. With the use of L1 in L2 learning, it can help to develop understanding and interest in the L2 learning, and it enables the adult learners to become active learners and to generate motives which make a difference in L2 learning.

Apart from the notion of motives, another important concept relevant to learning in the social context in activity theory is internalisation. For Vygotsky (1978), social interaction is a mechanism for individual development. During

problem solving, the experienced individual is often observed to guide, support, and shape actions of the novice who, in turn, internalises the expert's strategic processes. The concepts of motives and internalisation emphasise the importance of attributing a more dynamic role to the social context than has yet been achieved in the literature on interaction and L2 acquisition (Donato, 1994:38). According to activity theory, the individual's creative construction process of knowledge acquisition suggests social mediated activity as well.

This activity theory of Vygotsky is useful for explaining the complex and dynamic process in the L2 learning. It also helps to understand the motives and internalisation of the adult learners in the use of L1 for L2 learning. It attributes a more dynamic role to the social context of learning. As Ellis (1994) has pointed out, simply counting conversational adjustments in search of understanding the process of input may be inaccurate. To provide a complete picture of the effects of social interaction on individual L2 development requires abandoning the barren notion that the function of L2 interaction is to give the learner access to the hidden black box.

2.3.3 Mediated mind and psychological tools

The most fundamental concept of sociocultural theory is that the human mind is mediated (Lantolf, 2000:1). According to Vygotsky, humans rely on tools and labour activities which allow us to change the world and we use symbolic tools, or signs, to mediate and regulate our relationships with others and with ourselves. Vygotsky extended the notion of instrumental mediation by drawing an analogy between the role of technical and mechanical tools, and what he called 'psychological tools' (Vygotsky, 1981a:136). Tools are created by people under specific cultural and historical conditions. Tools are used to accomplish something, to aid in solving problems that cannot be solved in the same way in their absence.

Psychological tools are artifacts, including mnemonic techniques, algebraic symbols, diagrams, schemes and language; all of which serve as mediators for the individual's mental activity. In the present study, language, especially the first language for beginning adult learners of English, serves as a crucial mediator or psychological tool for L2 learning.

According to the theory of Vygotsky, human consciousness is fundamentally mediated mental activity. Humans are to be regarded as consciously acting beings, whose acting brings about changes in their surrounding world, and humans, in general, and their activities in particular, cannot be adequately understood within a behaviouristic framework. Tools allowed individuals, in collaboration with other individuals, to shape their world according to their own motives and goals. Tools used in work function as mediators, as instruments which stand between the subject, that is the individual, and the object, that is the goal towards which the individual's action is directed. Vygotsky (1978:55) states that 'the tool's function is to serve as the conductor of human influence on the object of activity; it is externally oriented; it must lead to changes in objects. It is a means by which human external activity is aimed at mastering, and triumphing over, nature'.

Within the Vygotskian perspective, language is not just a means by which individuals can communicate ideas, it is also a means for people to formulate ideas, to think and to learn together. In the present study, the first language of the L2 learners can be used as a psychological tool to formulate ideas, to discuss the language use, to interact with others who share the same first language, to give support to others, to think and to learn together.

Just as individuals use technical tools for manipulating their environment, they use psychological tools for directing and controlling their physical and mental behaviour. However, unlike technical tools, which are externally oriented at the object of activity, signs are internally oriented at the subject of activity, that is directed at causing changes in the behaviour of other people or oneself (Vygotsky,

1978:55). Lantolf and Appel (1994:8) illustrates the psychological tool with the following example: In biologically specified memory, two stimuli are connected via a direct link, in an A to B relationship. Perhaps we can remember what we were wearing, whom we were with, and the time of day when we heard the news of John F. Kennedy's assassination. The link between A, the Assassination, and B, our attire at that particular time, is direct, that is, non-mediated. In higher order, or symbolically mediated memory, the two stimuli are connected via new links, A-X and B-X is thus replaced by the new connections. That is A is linked to B via X. This means that a new path is created so that in the case of retrieving information from voluntary, or mediated, memory, previously unrecoverable segments of information can be retrieved. The use of a mediating device functions as a heuristic element which helps to retrieve the information. Lantolf and Appel (1994:9) states that this is what happens 'when we tie a string around our finger in order to remember something, use paper and pencil to write down a phone number we wish to remember, or sketch an outline for a text to assist comprehension'. According to Vygotsky, mental and socio-cultural activity in humans are bound together in a dependent, symbolically mediated, relationship.

For the L2 learners, the use of L1 can act as a psychological tool or a mediating device to help memorising the pronunciation, the structure or the meaning of the new language.

2.3.4 Inner speech and private speech

Vygotsky's theory of thought and language is relevant to the present study. According to Vygotsky (1962) the human child is endowed at birth with two separate systems: thought and language. Thought refers to the system of biologically endowed

elementary functions and processes such as perception, attention, and memory that constitute the child's native intellectual endowment. The thought system can be understood as practical or preverbal intelligence. The language system refers to the system of communication that is present at birth in the form of cries and smiles. This separation of language and thought systems, according to Vygotsky, exists in the early infant. Very early in development, children begin to use language not only for communication but also as a tool to plan, guide, and monitor their activity in a self-regulatory fashion. The use of language as a tool of thought, called private speech, transforms the course of intellectual development and develops the verbal thought which is a form of intellectual activity. Vygotsky (1978) states,

> The most significant moment in the course of intellectual development, which gives birth to the purely human forms of practical and abstract intelligence, occurs when speech and practical activity, two previously completely independent lines of development, converge ... as soon as speech and the use of signs are incorporated into any action, the action becomes transformed and organised along entirely new lines. (Vygotsky, 1978:24)

According to Vygotsky (1978), the use of language as a tool of thought has three major consequences for one's intellectual development. First, one's cognitive operations gain greater flexibility, freedom, and independence from the concrete stimulus field. Through the use of language one can organise and restructure one's perceptions in terms of goals and intentions and can bring to problems solving. Second, through the use of speech, it allows the child to act reflectively according to a plan rather than responding impulsively to stimuli. Thirdly, through the use of speech as a tool of thought one can gain mastery and control over one's own cognitive processes. Diaz and Klingler (1991:186) states that Vygotsky's theory 'provides a most fascinating account of how language transforms the course of cognitive development.'

In Vygotsky's theory, the primary function of speech is its communicative or interpersonal function which serves to establish social contact. The secondary or egocentric function of speech is intrapersonal and cognitive. For Vygotsky, egocentric speech plays a central function in the development and conduct of mental activity. Piaget also mentioned about egocentric speech but claimed that it serves no specific function and merely represents an ontogenetic stage in the transition from individual to social speech and eventually disappears. Vygotsky's view of egocentric speech is different from that of Piaget. For Vygotsky, egocentric speech does not disappear, but goes 'underground' as verbal thought or inner speech, and it can resurface as private speech.

Vygotsky considered private speech to be the convergence of thought and language and to play a critical role in promoting intellectual growth and eventual psychological independence or self-regulation. Vygotsky found that children, when faced with difficulties encountered during the course of goal-directed activities, used forms of private speech or "thinking aloud" for gaining control over task performance.

Frawley and Lantolf (1985) argue that adult L2 learners use private speech in all its functional roles to help them in their effort to gain control in communicative tasks, over the task, over themselves and over the task situation. It is suggested that learners use strategies that derive from the development of self-regulation during childhood, which through continuous access remain available throughout ontogenesis. Frawley and Lantolf's belief is that too little attention has been paid in the field of second language acquisition to learners' intra-psychological strategies. In contrast to the notion that 'communication' is basically the passing back and forth of information, they claim that much of what goes on in supposedly communicative situations actually relates to the individual needs of the learners and their efforts to become self-regulated in the situation. That is to understand what is going on around and to present themselves in a manner in which they wish to be regarded by others.

Soskin and John (1963) in a naturalistic study that recorded adult subjects' vocalisations by use of a radio transmitter over a period of days at a summer resort, found that when they were involved in the unfamiliar task of making leather sandals, participants engaged in the use of private speech for the same functional purpose as identified by Vygotsky in his work with children. "How do I do this?" "The needle may be too thin to get through" are two examples cited in this study.

For private speech, Wertsch (1979) identifies three periods of development. They are object-regulation, other-regulation and self-regulation. Object-regulation is characterised by an inability to channel behaviour toward specific goals. Wertsch (1979:93) suggests that early forms of private speech reflect this orientation as they are concerned with 'describing and naming aspects of the environment.' As the children mature, Wertsch suggests that they are led through goal-directed activities by adults, a point at which they are heavily dependent on others for guidance. This stage is called other-regulation. For Wertsch's third level, self-regulation, the individual has progressed to the point where he or she can resolve task-related difficulties independently, no longer distracted by irrelevant features in the environment, and no longer overly dependent on the assistance of others.

McCafferty (1994) attempted to examine through empirical means the relationship between L2 proficiency level and the use of private speech. The study focused on 39 ESL students in University of New Mexico. It was found that learners at low levels of proficiency, because of their greater difficulty in expressing themselves in the target language, resort to the use of private speech to a greater extent than more advanced learners. The results are considered to have a link to Vygotsky's idea concerning the mediational function of private speech in the process of self-regulation as applied to L2 learning.

For adults, the most part of private speech may go 'underground' and become inner speech (Lantolf and Appel, 1994:118). The concept of inner speech is interpreted as the mechanism hidden from direct observation, comprising functional

structures for word storage, relations between words, semantic fields, grammatical rules, and rules for discourse production. (Ushakova, 1994:135). Vygotsky's formulation of the notion of inner speech suggests how the intermental and intramental perspectives are related and how the psychological perspectives on learning which focus solely on the individual and which have played such a significant role in western education can be addressed from a socio-cultural perspective.

It is important to point out that in the Vygotskian theory, the emergence of self-regulated activity does not signal the end of the developmental process. On the contrary, development is conceived of as dynamic and fluid. Once egocentric speech is transformed into inner speech and goes 'underground', it does not remain underground forever, but it can, and does, resurface as private speech whenever an individual engages in a task of enhanced difficulty. Private speech has a strategic function. The more difficult the task, the more fully structured private speech becomes. It represents an externalisation of the inner order as the individual attempts to regain control of his or her cognitive functioning to carry out the task.

From the Vygotskian perspective, an adult is not an autonomous, finalised knower, but an organism that recovers and utilises earlier knowing strategies in situations that cannot be dealt with by self-regulation alone. This is in direct contrast to a Piagetian model, which postulates the adult as some sort of cognitive debutant who starts at age seven, reaches the final stage of knowing, and forgets the knowing strategies of the past. (see Lantolf and Appel, 1994:15-16) According to the Vygotskian view of mental growth, in difficult knowing situations the adult reverts to child-like knowing strategies to control the situation and gain self-regulation. Lantolf and Appel (1994:16) refer to this dynamic quality of mental activity as the principle of continuous access.

In the present study, Chinese adult learners use L1 in the form of private speech in their L2 learning. The notion of private speech suggests that private speech

can have a strategic function, and it provides insights in understanding the classroom discourse data with private speech.

2.3.5 Zone of proximal development

Vygotsky states that the zone of proximal development (ZPD) is the difference between what a person can achieve when acting alone and what the same person can accomplish when acting with support from someone else and / or cultural artifacts (Lantolf, 2000:17). ZPD is not a physical place situated in time and space; rather it is a metaphor for observing and understanding how mediational means are appropriated and internalised.

Vygotsky (1978) explains the ZPD as follow:

> It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky, 1978:87)

Vygotsky was discontented with the static explanation of learning as proposed by Piaget, Thorndike, and other scholars of that period. He found that the explanation of the relationship between learning and development of Piaget and Thorndike inadequate. He stated,

> The problem encountered in the psychological analysis of teaching cannot be correctly resolved or even formulated without addressing the relationship between learning and development in school-age children. (Vygotsky, 1978:79)

Vygotsky commented that Reflexes theories had one thing in common with Piaget's theory: 'in both, development is conceived of as the elaboration and substitution of innate responses (Vygotsky 1978:80)'. Vygotsky disagreed that learning was separated from development and that the former was a condition of the latter. He also criticised the behaviourist view in which learning was viewed as a

series of habits, and development occurred when a new habit had been learned. He believed that the relationship between learning and development should be much more complex and dynamic. The progression within the zone of proximal development that relies on the dynamic role of the learner and the mentor is called scaffolding (Wood, Bruner and Ross, 1976). The metaphor implies that scaffolded help is not fixed but continually revised by the adult or more capable peer to accommodate the emerging abilities of the novice in the form of a co-constructed activity.

The ZPD is more appropriately conceived of as the collaborative construction of opportunities for individuals to develop their mental abilities. (Lantolf, 2000:17) Novices do not merely copy the experts' capabilities; rather they transform what the experts offer them as they appropriate it. The key to transformation resides in imitation, which along with collaboration in the ZPD, 'is the source of all the specifically human characteristics' of development (Vygotsky, 1978:210). Imitation in the ZPD, unlike copying, is a complex activity in which the novice is treated not as a repeater but as a communicative being (Newman and Holzman, 1993:151-152).

Donato (1994) conducted a study on the role of collective scaffolding in the acquisition of French. The findings of his study validate the importance of collective scaffolding for the learner's L2 development. It draws the conclusion that scaffolded help does not need to be created by the experts; it can be provided by the learners themselves. The knowledge acquired during the scaffolded interaction among the learners was retained long after the study took place and could be produced individually at a later time without the assistance of their peers. Johnson (2004:131) comments that these findings 'support one of Vygotsky's fundamental claims: that the individual's knowledge is socially and dialogically derived.' The use of L1 in the present study involves scaffolding learning which, according to the Vygotskian theory, can be helpful for learner's L2 development.

Ohta (2000) conducted a case study of two learners learning Japanese. Their collaborative interaction was documented and analysed in order to demonstrate its influence on the acquisition of L2 grammar within the ZPD. Johnson (2004:144) states that Ohta's study supports the importance for L2 development of negotiated assistance in the ZPD during collaboratively constructed interaction. In the present study, adult learners often use L1 for collaborative interaction, which probably helps in L2 development.

Vygotsky used evidence from child development to explain how the adult mind functions. The adult learners in the present study often use L1 for interaction with other learners, and they would like to repeat what they learn from the teacher or from other learners. Considering from the Vygotskian perspective, the learners might not merely copy from the modelling; rather they might be working with collaboration in the ZPD. By working in collaboration with other learners, the second language learners often use L1 as a tool for mediation in the zone of proximal development which results in scaffolding and co-construction of knowledge in L2 learning.

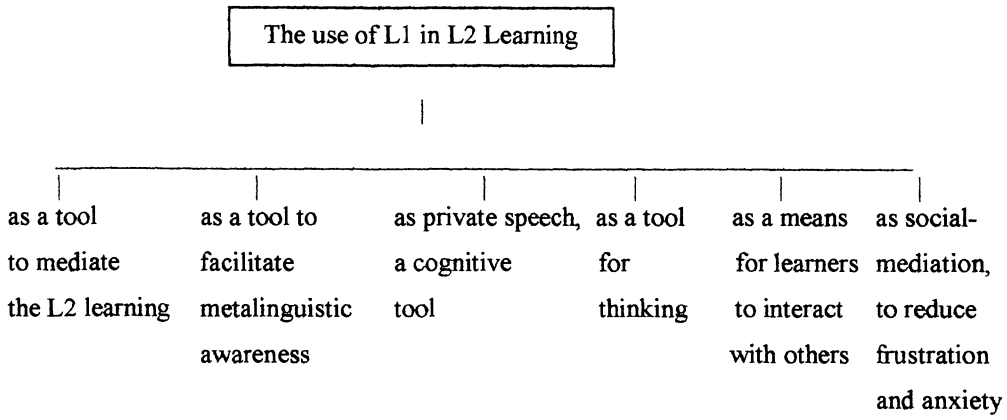
2.3.6 Towards a current view on the role of the first language in second language learning with the Vygotskian perspective

The literature review discussed so far focuses on the use of the first language in second language learning. The Vygotskian theory has been purposefully selected because it is relevant to the locus of interest in the role of L1 in L2 learning. The present study argues that a theoretical framework derived from Vygotskian theory is relevant for explaining the role of the first language in second language learning. The use of language, inevitably including the use of L1, has an important role to play. L1 can be used as a tool of thought, a psychological tool, to mediate the learning of the new language, or the L2 learning. The use of inner speech and private speech, which can be in L1 or L2, is a dynamic way of learning. They serve as self-regulated activities to shape the thinking of the learners and to construct the process of learning

and cognition. The theory of ZPD is relevant for explaining the use of L1 in collaborative learning in the second language classroom.

The following is a theoretical framework developed from the Vygotskian theory in an attempt to locate the possible role of the L1 in L2 learning. This is shown in figure 2.1.

Figure 2.1 A Framework of The Role of L1 in L2 Learning



It should be noted that the various aspects mentioned above can be inter-related, and in the present study they are identified as separate aspects in order to highlight the various functions of L1 use. They are discussed as follows:

(1) As a tool to mediate the L2 learning

The first language can be used as a tool to mediate the L2 learning. In Vygotsky's (1978:52-55) theory mentioned above, language, inevitably including the first language, can be used as a psychological tool. This psychological tool, as explained above, can serve as a mediator for individual mental activity. With this psychological tool of language, it can be used to comprehend the new knowledge, to

formulate ideas, to interact with others, to think and to learn together. In other words, the first language can be used as a tool for mediating the human mind in L2 learning.

Cook (1999:200), speaking from a perspective different from that of Vygotsky, states, 'L2 users have the L1 permanently present in their minds. Every activity the student carries out visibly in the L2 also involves the invisible L1. The apparent L2 nature of the classroom covers up the presence of the L1 in the minds of the students.' Cook indicates that L1 is 'invisible' but 'permanently present in the minds' of the students. With the notion of Vygotsky, the first language is not only 'present' in the L2 learner's mind but 'a psychological tool' for mediating the human mind.

Collingham (1988) mentions that what language learners already know are a positive resource in the learning of other languages. She broadens the definition of the bilingual approach by incorporating the classroom methodology of evolving ways of utilizing students' other languages and cultures in the learning of English. This implies that even monolingual teachers can adopt a bilingual approach and L1 can indeed play a significant role in the multilingual classroom. Collingham (1988) says that teachers 'are increasingly evolving ways of utilizing students' other languages and cultures in the learning of English. This has come to be known as a bilingual approach'. She states eight reasons for this 'bilingual approach' in the teaching of ESL. They are as follow:

1. Valuing and building on the knowledge that learners already have and bring to the classroom: the cornerstone of good practice in adult education.
2. Raising the status of the languages used by ethnic minorities in Britain, which in turn raises the self-esteem of the speakers of those languages, making them more confident and effective learners.
3. Raising language awareness. Learners already have some linguistic skills and knowledge; by thinking about their own and other languages (e.g. their history, structure syntax, writing systems), a class will learn more about language and languages in general. This can speed up aspects of learning and increase learners' tolerance of one another's

difficulties. In this way classroom cooperation is fostered and classroom dynamics are improved.

4. Using learners' first languages improves the pace of learning – an important feature for adult learners, for whom time is always at a premium.
5. There is less likelihood of the lesson content being trivial, patronizing or childish where the contributions students can make in their own languages are recognised as significant and valued.
6. Fostering cooperative and independent learning.
7. Reducing learner anxiety and therefore increasing confidence and motivation.
8. Enabling every learner, no matter how limited their knowledge of English, to contribute to the lesson in a variety of ways, depending on their previous experience.

(Collingham, 1988:82)

What Collingham suggests is that with the use of L1 the L2 learners can raise the language awareness, can improve the pace of learning and can reduce the anxiety in L2 learning. It is essential to point out that teaching 'bilingually' does not mean a return to the Grammar Translation method (Piasecka, 1986), but rather a standpoint which accepts that the thinking, feeling, and artistic life of a person is very much rooted in their mother tongue (Piasecka, 1988). At the initial stages of learning a new language, the students' repertoire is limited to those few utterances already learned and they must constantly think before speaking.

Piasecka (1988) suggests the use of L1 in L2 learning and having a bilingual teacher in the ESL classroom. She says that a person who is able to speak both languages can monitor the process of referring back to mother-tongue equivalents that goes on in learners' minds. She is of the opinion that if there is a common cultural heritage, there is bound to be a closer understanding and sympathy between the students and the teacher. The teacher is better able to understand not only their linguistic problems, but also their predicament. Furthermore, a knowledge of the routes students will be taking in their search for jobs, housing, etc., will enable the teacher to focus on essential areas of access, and to discard those which will not

apply. Based on the views of Vygotsky and other theorists, the present study argues that L1 can be used as a tool or as a resource in L2 learning.

(2) As a tool to facilitate metalinguistic awareness

Metalinguistic awareness refers to one's ability to consider language not just as a means of expressing ideas or communicating with others, but as an ability to think about language. For example, judging whether a given sentence is grammatical in one's native language or transferring from one language to another requires thinking about language as opposed to engaging in pure use of it. Metalinguistic awareness is not uncommon in L2 learning. This metalinguistic awareness includes not only awareness and knowledge about grammatical rules, but also awareness of the non-communicative uses and functions of language.

Gass and Selinker (2001: 302) point out that non-native speakers in a classroom setting often spend more time on metalinguistic activities (e.g. studying rules of grammar or memorising vocabulary words) than on activities of pure use. The ability to think about language is often associated with an increased ability to learn a language. This is supported by Bialystok (1988) that bilingual children have been known to have greater metalinguistic awareness than monolingual children.

Vygotsky (1962) suggested that bilingualism facilitates certain types of language awareness. He cites:

> The child can transfer to the new language the system of meanings he already possesses in his own. ... The child learns to see his language as one particular system among many, to view its phenomena under more general categories, and this leads to awareness of his linguistic operations. (Vygotsky, 1962:110).

Vygotsky means that bilingual children would have an advanced awareness of language processing because of their rich and unique experience of interacting with the world through two linguistic systems. This finding has been supported by a number of researchers (e.g. Bialystok, 1988; Galambos and Hakuta, 1988; Ben-Zeev, 1977). Bialystok and Ryan (1985) point out that the traditional conceptualisation of metalinguistic skill as a unique linguistic ability has proved less than useful. They argue that the term metalinguistic should be applied 'not to a specific mental accomplishment but rather to a set of problems which share certain features. The theoretical issue, then is to determine what cognitive skills underlie the solutions to this set of problem' (Bialystok and Ryan, 1985:230-231). Metalinguistic awareness is treated as the ability to successfully approach and solve certain types of problems. Following the idea of Vygotsky, the adult L2 learners presumably have linguistic awareness because of their rich and unique experience of interacting with the world through the two linguistic systems. The first language may certainly be used to facilitate metalinguistic awareness that could result in approaching and resolving certain problems in L2 learning.

(3) As private speech – a cognitive tool

Vygotsky's (1962) theory of thought and language is relevant to the present study, especially his emphasis on the self-regulation of cognitive functions through the use of language in private speech. The language, whether L1 or L2, can be used as private speech which helps to promote a transformation of the course of cognitive development. Vygotsky considered private speech, which eventually becomes inner speech, to be the main vehicle of higher mental functions such as planning and

monitoring of activity. Private speech signals the learner's attempt to self-regulate and to take control of the cognitive development.

There has been a growing number of studies of private speech and inner speech in the second language literature. DiCamilla and Anton (2004) conducted a study of language for thought in the collaborative interaction of language learners. The study analysed the speech of English-speaking college students of Spanish working in pairs to produce compositions in Spanish, and it revealed that private speech of the participants facilitated two fundamental cognitive operations, focusing of attention and the creation of psychological distance. The use of L1 was not acknowledged in DiCamilla and Anton's study, but the data revealed that the students had used their L1 for private speech. Centeno-Cortes and Jimenez (2004) conducted a study on the importance of the L1 in private verbal thinking and found that the L1 manifested itself as a key factor in the process of reasoning in an L2 language classroom.

In the present study, the L2 learners might use private speech, which includes L1 and L2, in L2 learning. The use of L1 and L2 as private speech could help to promote the transformation of the course of cognitive development in L2 learning.

(4) As a tool for thinking

Vygotsky's (1962) notion of language as a tool of thought and his concept of verbal thinking may be relevant for explaining this bilingual cognitive flexibility. Other theorists and researchers have mentioned the use of L1 in the course of cognitive development in L2 learning. For example, Wolf and Walters (1988) attempt to reconstruct the fundamental idea of Contrastive Analysis Hypothesis and state that L1 knowledge is incorporated into L2 processing.

A more positive role of the use of L1 is suggested by Cook (1999) 'Going beyond the native speaker in language teaching' in which he argues that language teaching would benefit by paying attention to the L2 user rather than concentrating primarily on the native speaker. The article suggests ways in which language teaching can apply an L2 user model and exploit the students' L1. In the classroom, teachers can incorporate goals based on L2 users in the outside world, bringing L2 users' situations and roles into the classroom, deliberately using the students' L1 in teaching activities. Cook (1996:3) states that a crucial component in L2 learning is 'what the students bring with them into the classroom', and L2 learners, with the exception of young bilingual children, have 'fully formed personalities and minds when they start learning the L2, and these have profound effects on their ways of learning and on how successful they are'. This is to say that we have to use what the students bring with them into the classroom, including the students' L1 in L2 learning. Although Cook does not speak from a Vygotskian perspective, his way of seeing the student's L1 is worth noting.

Cook (1999) suggests that teachers have to see the L1 as a positive factor in the class rather than as a negative factor to be endured. He identifies two ways of using the L1 in the classroom. One is for presenting meaning: when students need the meaning of a new word or grammatical structure, they can access it through translation into their L1, which can come from the teacher or a dictionary, or through an explanation in the L1, from the teacher or a grammar book. The other main use of the L1 is for communication during classroom activities. He even suggests introducing activities that deliberately involve both languages. The two ways of using L1 in L2 learning certainly are some of the ways of using L1. In fact, the L1 is always present in the mind of the learners. In the present study, since many of the learners expressed that they used L1 for L2 learning, L1 might possibly be used in the learning for the comprehending and understanding of L2.

(5) As a means for learners to interact with others

L1 can be used as a means for learners to mediate with other learners or with the teacher, in an attempt to understand the word meaning or to discuss the language use, if they speak the same language. The zone of proximal development, which means the difference between what a person can achieve when acting alone and what the same person can accomplish when acting with support from someone else, is an essential development which involves mediating with the teacher or with other learners. By working in collaboration in the zone of proximal development, L1 is often used as a tool for learners to mediate with teachers and learners in the L2 learning. Through the talk and discussion with the help of L1, the second language learners are able to explore the L2 meaning and understanding, and therefore have the opportunities for potential development in L2 learning.

Switching to L1 to interact with other L2 learners who share the same L1 is common in second language classrooms. Code-switching is a bilingual mode of communication that is frequently and extensively used by members of bilingual communities (Malakoff and Hakuta, 1991; Gumperz, 1982; Zentella, 1981). It is used to enhance or complement communication to bilingual speakers. Code-switching takes advantage of a larger bilingual vocabulary, playing on subtle differences between the two languages in connotative, denotative, or sociolinguistic meaning. As a sociolinguistic strategy, code-switching is used for signalling group boundaries, conveying emphasis, role playing, and establishing sociocultural identity. It may also be used when a particular word or phrase has a more specific denotative or connotative meaning in the other language, and when a word is more salient in the other language or unknown in the current language (Malakoff and Hakuta, 1991).

Cook (1996) argues that 'codeswitching proper' can be exploited as part of actual teaching methodology. He states that when 'the teacher knows the language of the students, the classroom itself is often a codeswitching situation. The lesson starts in the L1, or the control of the class takes place through the L1, or the L1 slips in in other ways (Cook, 1996:86).' Cook argues that codeswitching can be exploited as part of the teaching methodology. By the same token, it is not hard to extend to the L2 learners who have L1 at hand and would certainly use codeswitching or use L1 as a learning strategy for L2 learning.

In L2 teaching, Cook (1999) recommends going beyond the native speaker and viewing L2 users as multicompetent language users rather than as deficient native speakers. The term multicompetence was coined to refer to the compound state of a mind with two languages (Cook, 1991). Multicompetence covers the total language knowledge of a person who knows more than one language, including both L1 competence and the L2 interlanguage. Competence is a neutral term in linguistics for the native speaker's knowledge of language; it does not involve a judgement about whether such competence is good or bad according to some outside criterion (Cook 1999:190).

During language processing, multicompetent language users have the L1 constantly available to them. L2 users tend to switch from one language to another for their own private purposes. According to a study by Cook (1999), 61 % prefer the L1 over the L2 for working out sums, and 60% prefer it for praying whereas 61% use the L2 for keeping their diary, and 44 % for remembering phone numbers. A distinctive process that multicompetent users engage in is code switching. When multicompetent users are talking to other people who know both languages, they may alternate between languages (Cook, 1999). The findings of Cook show that L1 is a useful and preferred tool for mediating one's thinking for various functions.

In the second language classroom if the second language learners are able to use their first language, such as codeswitching, for interactions, they are able to take more active participation in thinking and learning of L2 and have the potential of L2 development in ZPD.

(6) As Social mediation - help to reduce frustration and anxiety

According to Vygotsky (1962), language or speech can be functioning in social-mediational situation. The use of L1 may help to guide an individual to understand the teacher's instructions, to solve the problems or to complete the learning tasks. That is to say, the use of L1 helps to reduce anxiety and frustration.

Piasecka (1988) points out that adult learners already have at their disposal a first language and tend to have an instinctive desire to know the mother tongue equivalent of new words or phrases in the target language. If the adult learners have to abandon the use of L1 as a resource in the second language learning process it will be frustrating for adult learners.

For L2 learners, it is essential to have an environment where frustration is reduced and self-esteem can be built up. Beebe (1983) says that the 'healthy self-esteem' of most good learners keeps them from thinking that their errors make them look foolish. Brown (1977) suggests that 'a person with high self-esteem is able to reach out beyond himself more freely, to be less inhibited, and because of his ego strength, to make the necessary mistakes involved in language learning with less threat to his ego' (1977:352). In Krashen's theory (1981), self-confidence is specifically identified as an important aspect of the 'affective filter' in that it enables

the learner to encourage intake, or useful input. Conversely, lack of self-esteem or self-confidence would be an inhibiting factor for learners.

Wigglesworth (2003:244) comments in her study that the first language plays an important role on the levels of functional, conceptual and social, and concludes that 'their first language is the tool through which they can communicate their innermost desires, their needs, and their thoughts and their hopes for the future. It is the tool through which they can express the pains and joys of their past experiences. These things they may never be able to do to the same degree in their second language'. To deny the students' L1 in second language learning has a negative effect. Halliday (1968:165) says that a speaker who is made ashamed of his own language habits suffers a basic injury as a human being.

In the present study, the class dynamics of a linguistically homogeneous group are completely different from those of a multilingual group. People get to know each other very quickly, feel less restrained, and more inclined to be open about sensitive problems. When the students speak the same L1, they are able to give each other advice and support, and discuss different ways of coping with all the tensions of second language learning. In this way they may help to reduce learners' frustration and anxiety.

To sum up, in L2 learning L1 can play an important role at least in six different areas. First, L1 can work as a psychological tool which serves as a mediator for the individual's mental activity. Second, L1 can be used to facilitate metalinguistic awareness. Third, L1 can be used as private speech to help the learners in cognitive development. Fourth, L1 can be used as a tool for thinking. Fifth, L1 can be used to mediate with other learners and teachers. Sixth, L1 can be used as a social mediator to reduce frustration and anxiety.

2.4 A summary of Chapter Two

The literature review starts with a historical review of the role of the first language, followed by a review of the recent perspectives of the role of the first language. Finally it provides an overview of Vygotsky's theory in an attempt to give a new understanding of the role of the first language in second language learning.

The Contrastive Analysis Hypothesis has been discussed in an attempt to locate the role of the first language in second language learning. The first language was regarded as interference and playing a negative role in second language learning. Some critics disagreed with the Contrastive Analysis Hypothesis and turned to focus on Error Analysis. However, L1 was regarded as one of the sources of error in second language learning.

The recent perspectives of the role of first language have also been reviewed. These include the L2 = L1 proposal, the monitor model, the revised view of transfer and language processing. The L2 = L1 proposal assumes that L1 does not play any essential role in second language acquisition. It is assumed that there is no need for any explanation in the learner's first language and that the learner can infer meaning from situations and contexts. This disregard for L1 has negative connotations for second language learners, and may create frustration and anxiety, especially for adult learners. Salzberger-Wittenberg (1983) points out that adult migrants can be considered one group of people among those at risk on the point of transition. They may find the new beginnings in a new country particularly stressful when they lack an inner sense of security. The use of L1 offers something familiar to the adult learners and is conducive to the building up of a sense of security and self-confidence among the learners. The use of L1 in L2 learning is supported by a number of researchers such as Wolf and Walters (1988), Collingham (1988) and Cook (1999).

The Vygotskian view of L2 learning is reviewed and considered as relevant to the present study. Vygotsky's theory of language and thought, the consciousness in

L2 learning, the psychological tools, the activity theory, the zone of proximal development and the private speech are relevant to the explanation of how and why adult learners use L1 in L2 learning. The Vygotskian perspective focuses on the individual's potential level of development rather than the current level of development; the gap of which, called the zone of proximal development, is an essential feature of learning. The language, inevitably including the first language, plays a mediated role in the development of human higher mental functions which may possibly contribute to L2 learning.

It should be noted that the historical view, including the Contrastive Analysis Hypothesis and Error Analysis, regards L1 as interference in second language learning. It is with the Vygotskian perspective that the literature sheds more light on the constructive role of L1 in L2 learning. More recent research shows that L1 has its role to play in L2 learning. One should therefore not 'forget' their L1 in L2 learning and L2 learners should not be regarded as 'blank boxes' in L2 learning. Based on the framework developed for the role of the first language in the second language learning, the present study attempts to investigate how L1 plays its role in the various aspects, as a tool to mediate L2 learning, to facilitate metalinguistic awareness, as private speech, as a means for learners to interact with other learners, and as social mediation which helps to reduce anxiety.

Chapter 3 Method and Procedures

The aim of this chapter is to discuss the methodology used in the present study, taking into consideration a range of methodological options. This chapter argues that the approach is congruent with the aim of the research. Since the aim of the present study is to investigate the actual practice of two groups of Chinese adult learners to find out how they make use of their first language in learning English as a second language, the study needs to consider collecting data from an authentic second language classroom setting rather than in a laboratory setting, and the method used needs to focus on the language use in L2 learning.

What is 'language' and how do we study 'language in use'? A way to explain language is that it is a method of communicating ideas, feelings and desires by means of words and expressions. Wetherell, Taylor and Yates (2001:6) explain that there are two problems with the common-sense strategy that rests on a particular model of language as a static system, which can be broken down to its component parts, such as vocabulary and grammatical forms. One problem with the model of language as a system is that the system is not static but is constantly changing, and language is constitutive which means that meanings are created and changed. Another problem with the static system model relates to the uses of language which means that language is an important means for doing things, and to understand what is being done with language it is necessary to consider its situated use within the process of an ongoing interaction. These two problems show that the model of language as a static system is over-simplified.

The present study takes into consideration that language is not static, but is constantly changing and related to its usage. This study makes no attempt to isolate or manipulate the phenomena, but tries to obtain authentic data from Chinese adult learners learning English as second language in an on-going interactive second language classroom, in an attempt to find out the uses of the first language.

3.1 Methodological approach and its rationale

This section is to consider the methodological approach and its rationale, and to consider what kind of research is appropriate for the present study. Brumfit and Mitchell (1990) identified three types of research, description, intervention, and experiment. Descriptive research aims at providing as accurate an account as possible of what current practice is: how learners do learn, how teachers do teach, what classrooms do look like, at a particular moment in a particular place. In practice, descriptive studies will usually look at classrooms in relation to the purpose of the research. Interventionist studies are those in which some aspect of teaching or learning is deliberately changed so that the effects can be monitored. Experimental studies are similar, but usually involve a much more formal control of variables, thus stopping the classroom from being at all typical.

In conducting research, some researchers may consider descriptive studies as an inefficient way of exploring theories of teaching and learning, while some may argue that the apparent rigour of interventionist and experimental studies obscures the close relationship between learning and social context, and that rich descriptions of learning experiences are essential in building up a satisfactory theory of language acquisition. Considering the types of research, the present study belongs to classroom research, focusing on how Chinese adult learners learn and how they make use of their first language in L2 learning, that needs to take into account the social context. Descriptive research seems to be more appropriate for the study.

The debate on descriptive or experimental research is often couched in terms of 'qualitative research' or 'quantitative research'. Quantitative research, which was often described as objective, obtrusive and controlled, outcome oriented and generalisable, was regarded as opposed to qualitative research, which was often described as subjective, holistic, and ungeneralisable since there was a clash between competing philosophical positions. The conflict between quantitative and qualitative methods as competing models of social research raged across many fields in the past

and continues in some even today (Hammersley and Atkinson, 1995:2). When discussing about the debate on quantitative or qualitative research, Brumfit and Mitchell (1990) point out,

> However, a careful consideration of these concepts will make it clear that they cannot really be opposed to each other. If we are examining something that can be objectively described (either numerically, or by explicit and economical records of other kinds), there is no sense in not making use of such data. On the other hand, if the questions we are interested in cannot be quantified simply, we should not avoid them solely on those grounds. We cannot limit observation to what can be measured without ignoring most of the areas that teachers and learners are interested in. (Brumfit and Mitchell, 1990:13)

The present study maintains that research paradigms should not be viewed as competing but seen as useful for different research purposes. The present study aims to analyse the process of second language development and attempts to obtain a holistic view rather than obtaining quantitative data. It may incline towards qualitative in nature, yet it does not intend to claim that it is more powerful than or superior to quantitative research. The present study attempts to focus mainly on how the learners use their first language in the learning of second language. Tape-recording as a device is used to obtain the second language classroom discourse data which bear the characteristics of language in use, and to obtain the learners' perspective by using interviews with small groups of learners and individual learners.

Apart from the types of research mentioned above, in the past two decades, there has been a shift in research perspectives in language. Converging research from anthropology, linguistics, psychology, and education has given rise to new models of language and literacy development. The common element is a social and functional approach, replacing earlier behaviourist and nativist models. Vygotsky's Thought and Language (1962) and Mind in Society (1978) are foundations for a new model of language and development (John-Steiner, Panofsky and Smith, 1994:1).

In considering the approach to be used, this study attempts to explore the potential of a sociocultural perspective, based upon the work of Vygotsky, for

developing a comprehensive understanding of second language phenomena. Vygotsky (1978) believed that an understanding of mediated forms of human behaviour could not be achieved through exclusive reliance on phenotypic, or descriptive, research alone. Although he saw descriptive research as necessary, he considered genotypic analysis to be indispensable. For Vygotsky, genotypic research was a means of understanding mental processes through disclosure of their emergence and subsequent growth. Genotypic analysis means that a phenomenon is explained on the basis of its origin rather than its outer appearance.

Lantolf (2000) states that this sociocultural perspective is a 'holistic perspective' on developmental questions in second language acquisition. He states,

> The approach entails use of a holistic qualitative methodology which sheds light on learning processes as they occur in interactive settings. (Lantolf, 2000:53)

The present study is developmental, to the extent that it seeks to uncover the process of how the adult learners make use of the first language in second language classroom and what role L1 plays in learning a second language. The methodological approach used in the present study involves the use of a qualitative methodology which sheds lights on learning processes in interactive settings.

This study inclines towards ethnographic research. Ethnography is an in-depth, analytical description of a specific cultural situation (Wiersma, 1986:16) Ethnographic research relies heavily on observation, description, and qualitative judgements or interpretations of whatever phenomena are being studied. It takes place in the natural setting and focuses on processes in an attempt to obtain a holistic picture. The present study will involve ethnographic techniques including observation, description, and qualitative interpretations, and it focuses on processes of using L1 in L2 learning in a natural classroom setting.

Chaudron (1988) identifies ethnography as one of the four major traditions in applied linguistic research. He characterises ethnographic research as a qualitative, process-oriented approach to the investigation of interaction, and points out that it is a rigorous tradition in its own right, involving 'considerable training, continuous record keeping, extensive participatory involvement of the researcher in the classroom, and careful interpretation of the usually multifaceted data' (Chaudron, 1988:46). Watson-Gegeo and Ulichny (1988) identify the following key principles of ethnographic research. These include the adoption of a grounded approach to data, the use of 'thick' explanation, and going beyond description to analysis and interpretation. 'Explanation takes the form of 'grounded' theory, which, as we have seen, is theory based in and derived from data, and arrived at through a systematic process of induction' (Watson-Gegeo and Ulichny, 1988: 76). The present study, which is to describe what goes on in the second language classroom focusing on the use of L1 in L2 learning, belongs to ethnographic research. The main concern is to focus on learning rather than teaching. The data thus collected are used to construct a rich descriptive, analytic and interpretive picture of the role of L1 in L2 learning.

Ethnography differs from the method of offering the subject simple stimuli to which we expect a direct response. Ellis (1990) states that ethnography is an alternative to formal experiment and it has been stimulated by skepticism over the ability of psychometric data to produce 'the definite answers that some researchers expect' (Ellis, 1990:67). Ellis states two reasons for this skepticism. First, the relationship between instruction and learning is extremely complex. It is not a linear relationship, and there is no one-to-one relationship between teaching and learning. Experimental research can therefore only provide us with an understanding of individual pieces of the language learning jigsaw, but not the whole puzzle. Second, the relationship between findings from a formal experiment conducted under laboratory conditions, and classroom practice is complex and indirect. LeCompte and Goetz (1982) argue that ethnography is defined by the use of participant and non-participant observation. It is a focus on natural settings, use of the subjective views and belief systems of the participants in the research process to structure that

research, and avoidance by the investigator of manipulating the study variables. This study is in favour of using natural settings and involving a participant rather than a non-participant investigator in the research process.

The assumption of this study is that examining the language classroom is essential to the field of second language learning. Long (1980) argues that what goes on in the classroom and the teacher's role in the classroom, may be the most important factors in second language acquisition in an instructed context. Beretta (1986) also argues that what goes on in a laboratory setting may have little relationship to what goes on in a real classroom. Van Lier (1988), Ellis (1990) and Nunan (1992) express similar ideas on second language research and argue that research findings cannot provide the whole picture if they are based on abstraction and investigation under controlled conditions. The present study is of the idea that what really matters about any new idea or theory of language learning is not what the research might find out about it, but what the students in the classroom actually do with it.

The type of research setting in this study is not of an experimental type but a natural classroom setting. It describes what is currently taking place in a second language classroom in the Chinese Community Centre. The data were collected from the real-world situation in a second language classroom, not a laboratory setting. In other words, this is a non-experimental classroom research which falls into the naturalistic paradigm (Lynch, 1996; Schachter and Gass, 1996). The naturalistic perspective has the belief that the context in which behaviour occurs has a significant influence on that behaviour. If we want to find out about behaviour, we need to investigate it in the natural contexts in which it occurs, rather than in the experimental laboratory.

In this study, the L1 and L2 are Chinese and English respectively. That is to say, this study investigates Chinese adult learners learning English as a second language in a classroom setting. 'Chinese' and 'English' are, however, the first and

second language used here for exemplification rather than the subject matters themselves. The result of this study is expected to provide insight not only to the learning of English for Chinese adult learners, but to apply to the learning of other second languages for other first language adult learners.

3.2 Discourse as Data

The present study collects data from a second language classroom which involves discourse as data. Discourse analysis is defined as 'the close study of language in use (Wetherell, Taylor and Yates, 2001:5)'. Discourse analysis is the study of talk and texts. It is a set of methods and theories for investigating language in use and language in social contexts. Bloome, Carter, Christian, Otto and Shuart-Faris (2005) provide a rich discussion of classroom discourse and show through the microethnographic perspective that we cannot know what uses people are making of language without seeing it and understanding it in its immediate context.

There are some issues in discourse as data that need to be addressed. Discourse analysis involves the search for patterns within language in use. One debate involves the status of language as topic or resource. The issue is whether the analyst is studying talk or language itself as the topic of study or using the language as a resource for studying something else. The present study uses the language as a resource to find out the use of L1 in L2 learning. Treating the discourse data as a resource, the present study tries to generalise about the role of L1 in L2 learning.

Another debate concerns whether the analyst should investigate process or content. Some discourse analysts are concerned with an ongoing, probably spoken, interaction, and with how speakers talk and what they do through talk, while other analysts may focus on the content in which language use may be analysed as a completed whole. The present study investigates the process of learning L2 and focuses on isolate extracts to explore the recurring elements in the discourse.

One of the processes by which material becomes data is selection. Taylor (2001:24) points out that in selecting a sample, most quantitative research, particularly surveys, uses a sample which is large enough to be representative of a population as a whole and which also permits generalisation, based on assumptions about the frequency and regularity of features or phenomena. It is part of the efficacy of quantitative work that large amounts of data can be analysed and summarised. In contrast, the analysis of qualitative data, including qualitative discourse data, is relatively inefficient and labour-intensive. It is often difficult to put the data into a succinct form for either analysis or presentation. The researcher is therefore likely to use a much smaller sample which may be designed to be as broad and inclusive as possible.

In the selection of data, the sample size of the present study has been considered to be of a manageable size, with particular focus on the use of L1 in the L2 learning, and to be as broad and inclusive as possible. Taking these into consideration, the present study therefore uses two groups of students from two different levels for data collection, and from each group four two-and-a-half-hour lessons are used for the discourse data.

In the present study, the sources of data are threefold. The classroom talk, which is tape-recorded during the lessons in the authentic classroom setting, constitutes the main part of the data. Another source of the data is the context or background information of the learners which serve to inform the analyses. The third source of the data derives from the interviews in which learners express their personal views regarding the use of L1 in L2 learning.

An important process by which talk becomes data is through transcription. Doing transcription is a time-consuming process. Transcribing an hour of recorded material can take four or more hours. For eight two-and-a-half-hour lessons, the transcription for the present study took at least eighty hours or more. A transcript 'constructs a certain version of the talk or interaction which is to be analysed. This

does not, of course, mean that it is false or misleading, but simply that it is not neutral. It selects out the features which the analyst has decided are relevant, that is, what the analyst counts as data. (Wetherell et al., 2001:38)'. Decisions about the detail and the forms of notation used in the transcript are ultimately based on the theoretical approach. The present study has to make deliberate decisions about what to include and what to leave out in order to fulfil the aim of the study.

3.3 Teacher as Researcher

Considering the question 'how far the researcher can be separated from the research', Taylor (2001:16) coined the concept of reflexivity which suggests that separation is impossible. In the research tradition associated with positivism or postpositivism, the researcher aims to be neutral, conducting the research efficiently but exerting no bias on the processes of data collection and analysis. This neutrality is essential to one of the conventional criteria for evaluating such research: replicability which means a different researcher should be able to repeat a research project and obtain the same or similar results. Taylor (2001:17) argues that such neutrality is impossible because the researcher and the research cannot be meaningfully separated, and that a basic feature of social research is its reflexivity which means the way that the researcher acts on the world and the world acts on the researcher in a loop.

In the present study, the researcher is not in the 'service' role of a faceless technician, but in a visible position. Detachment is impossible so the researcher's influence must be taken into account and even utilised (Hammersley and Atkinson, 1995:19). It is considered necessary to address the identity of the researcher and how the researcher influences the situation in the present study.

The present study involves the teacher being the researcher as well as the interviewer, avoiding the presence of a non-participant investigator in the classroom. The main reason is that many second language adult learners, especially Chinese

adults, are cautious of non-participant investigators or outsiders in the classroom. When the Chinese adult learners are being observed by an outsider in the classroom research they probably would not express their problems and do not respond in the usual way as they normally do in the classroom. They would prefer to keep silent because 'Silence is gold' ('*Chen mo shi jin*') which means silence is being highly valued.

Another reason is that it is necessary for teachers to adopt a research orientation to their own classroom and to engage in some research projects in order to bridge the gap between theory and practice. In teaching and learning, there often seems to be a gap between theory and practice. Carr and Kemmis (1983) cite evidence purporting to show that teachers regard theory and research as esoteric activities that have little to do with their everyday practical concerns. Beasley and Riordan (1981) state that,

> ... the gulf between research bodies and the teaching profession has ensured that many research programs are not related to the professional concerns and interests of teachers and students. Priorities for research too often reflect the interests of academic researchers or central office administrators not school people. Teachers and students in the classroom are rarely actively engaged in the research. Within the experimental framework the researcher protects his or her independence for the sake of 'objectivity'. The tacit knowledge of teachers is devalued. (Beasley and Riordan, 1981:60)

Brumfit and Mitchell (1990:17) state that one way of 'bridging the gap between theory and practice is to encourage teachers to adopt a research orientation to their own classroom, and to engage in research projects of one sort or another'. Walker (1985) sees research by teachers as a useful way of ensuring the relevance of teacher education programs, and suggests that immersion in real research has the advantage of 'providing strong criteria of relevance' and that the teacher 'will be the people who have first-hand experience of the problem and its context' (Walker, 1985:6). In the present study, the reason for the teacher as the researcher is that the teacher is the person who has first-hand experience of the problem and its context.

The research conducted by the teacher will have the advantage of providing strong criteria of relevance. The role of L1 in second language learning has long been seen as playing a negative role. Second language learners are often told not to use L1 in learning L2. However, in practice many second language learners make use of L1 in their L2 learning. Research so far has not been able to investigate in a deep level of exactly how and why the second language learners use L1 in L2 learning. In the present study, the research conducted by the teacher is to have the advantage of involving directly in authentic second language classroom with adult learners actively using L1 in the second language learning.

Being a teacher for many years and seeing how the adult learners use L1 as a valuable resource for L2 learning, I feel the need to conduct a research in my own classroom to see how these learners use their first language in second language learning. I am the one who has the understanding of the Chinese customs and culture and has the same language background as the adult learners. Therefore I would be the most appropriate person to engage in the research project. It is hoped that this study conducted by the teacher as the researcher will have strong criteria of relevance and will be able to bridge the gap between theory and practice.

Beasley and Riordan (1981) list the following advantages of teacher-initiated research:

It begins with and builds on the knowledge that teachers have already accumulated through research.

It focuses on the immediate interests and concerns of classroom teachers.

It matches the subtle organic process of classroom life.

It builds on the 'natural' processes of evaluation and research which teachers carry out daily.

It bridges the gap between understanding and action by merging the role of the researcher and practitioner.

It sharpens teachers' critical awareness through observation, recording and analysis of classroom events and thus acts as a consciousness-raising exercise.

It provides teachers with better information than they already have about what is actually happening in the classroom and why.

It helps teachers better articulate teaching and learning processes to their colleagues and interested community member.

It bridges the gap between theory and practice. (Beasley and Riordan, 1981:36)

Beasley and Riordan (1981) and Walker (1985) argue for the teacher-initiated research within a general educational context. Long (1988), however, examines the role of the second language teacher as classroom researcher. In making a call for a greater role for classroom-centred research in graduate programs, Long (1988) points to three principal roles. Firstly, classroom-centred research has provided and can provide a great deal of useful information about how classes are taught. Secondly, classroom-centred research can promote self-monitoring by classroom practitioners. By training teachers in the use of observation schedules of one sort or another, they will be equipped to monitor their own classes. Thirdly, descriptive studies of what actually goes on in classrooms will help teachers evaluate the competing claims of different materials, syllabuses and methods.

In the present study, there are advantages for the teacher being the researcher in second language classroom research. One of the advantages is that the teacher can contribute with real issues and with profound understanding of the learning context. The teacher is the one working in the classroom, facing a world of real people, real motives and real needs of the learners. It is the teacher who comes across real issues that are fruitful to research. Much has been written recently on the relationship between research, theory, published articles, and teachers (e.g. Pennycook, 1989; Clarke, 1994). Many educators criticise published academics that dictate teaching practices when the writers of such articles are rarely language teachers themselves. Clarke (1994) argues,

Research reports and theoretical speculation, even those which focus on classroom issues, are limited in depth and detail. No matter how diligently researchers work to include all the variables that teachers deal with in a typical day, the data they collect and the conclusions they draw are, by necessity, less complex than the reality that teachers confront every day. Such speculation is, therefore, reductionist and inaccurate. (Clarke, 1994:16)

Another advantage for the teacher being the researcher in the present study is that the researcher in fact is an adult migrant sharing the same culture with the subjects, and the researcher speaks and writes the same L1 as the subjects. These are essential resources for the researcher to understand the problems the subjects are facing and to appropriately interpret events and analyse the data collected in the second language classroom.

Wiersma (1986:235) points out that an 'important part of observation relates to the idea of contextualization; that is, to understand behaviour, the observer must understand the context in which individuals are thinking and reacting. The observer must have the option of interpreting events. Thus, observation extends beyond objective recording of what happens. The participant-observer attempts to assume the role of the individuals under study and attempts to experience their thoughts, feelings, and actions'. For the present study, it is essential for the researcher to understand the context in which Chinese adult learners are thinking and reacting, to be competent to interpret events and to be able to go beyond the objective recording of what happens.

Furthermore, the teacher as the researcher will have the advantage of avoiding having non-participants or outsiders in the classroom. The teacher can act as a 'participant-observer' who is unobtrusive and who does not interfere with the activities in the second language classroom. Schachter and Gass (1996) point out that these are human, social and political issues involved in carrying out research in classrooms. Larsen-Freeman (1966) identifies some of the problems in conducting second language classroom research, such as the uncooperativeness of the teachers or students, and the complaint that teachers do not always do what is expected of them. In the present study, since the teacher is being the researcher, such problems including uncooperativeness of teachers can be avoided.

However, despite the above-mentioned advantages, there are limitations and disadvantages of teacher being the researcher. It may be argued that taking the dual roles as being the teacher and the researcher there can be potential problems. The

possible problems of the teacher as the researcher are that the data collected might be subjective, the research might be affected by the student-teacher relationship, and the teacher might teach differently with deep knowledge of topic of research. In the present study, the limitations and disadvantages of teacher being the researcher have been considered, and some procedures have been taken in an attempt to minimise the problems thus arise.

Some people argue that the student-teacher relationship may affect the research. In the present study, this issue has been resolved by explaining clearly to the students verbally and in the form of an official letter before starting the data collection. The points to clarify are that the research is on a voluntary basis which means there is no obligation for the students to be involved in the research, and that opting to take part or not to take part in the research would not affect the assessment of the course. In the present study, both groups of students agreed to take part in the study.

In order to avoid a dilemma in the dual identity for being the teacher and the researcher, the present study has been designed to use audio-tape-recording to record what actually goes on in the classroom. In an attempt to eliminate disturbances, the audio-tape-recorder is an instrument which is placed in the classroom to be used for all lessons, and its operation is simple and easy. The teacher just needs to press the recording button to start the recording and the students do not need to do anything special for the recording. In the present study, the tape-recorder was observed to be an unobtrusive but a powerful device for it picked up classroom discourse as well as private conversations among learners in the classroom. Even though the students were told that the lessons were being tape-recorded, the data indicated that during the lessons the students were busily engaged in the L2 learning and no one seemed to mind about the tape-recording.

Apart from the classroom discourse, an in-depth interview was used to find out the learners' view on the use of the L1 in L2 learning: why they used L1 and how

L1 has helped them in L2 learning. Since the data are authentic and are from two different groups of learners for a couple of lessons, the present study aims to obtain a more holistic picture by comparing and contrasting the data obtained from the tape-recording of two groups of learners, and from the one to one interviews and interviews in the form of small group discussions.

My position for being the teacher and the researcher in this study is based very much on my personal experience and my own language background. I was trained as a second language teacher in Hong Kong following the British system that 'English only' or only L2 was to be used in the teaching of L2. The use of L1 (Chinese language) was prohibited in English class. This 'English only' policy had been introduced in the Hong Kong education system for quite a while. I could still remember my first year of learning English in Primary School Grade Three when my English teacher taught us the direction 'left' and 'right' by using his hand to show us this is 'left' and that is 'right', and then giving a series of instructions like 'Turn left', 'Turn right', 'Turn right' and 'Turn left', expecting us to carry out all the instructions correctly. We did not understand the meaning of 'right' and 'left', and we did not understand *the* relative rather than absolute position of left and right. We ended up very confused and frustrated and did not know which way to turn that made the teacher very angry and told us to have detention. If the teacher could have explained the concepts in the first language and told us that 'left' is '*zo*', 'right' is '*jau*', we would not have made such a mess.

I taught English as a second language first in a primary school and then in a secondary school. During the teaching of English as a second language in schools, English was the only medium of instruction and the students had to respond merely in English. L1 was not encouraged in L2 learning. I could still remember some of the language teachers set up a penalty system that a student who had used L1 in English language class had to be fined for fifty cents or so. After completing an Honours Degree and a Diploma in Education in England, I taught in a College of Education in Hong Kong in which the medium of instruction was English only. At that time, the

native-speaker model was pre-dominant and it seemed to be the only 'correct' model for L2 teaching and learning .

After migrating to Australia I started teaching adult learners English language in a College of TAFE using English as the medium of teaching. In Australia the adult learners in my classes were mainly migrants who learned English language for daily needs or for survival needs. Soon I found that these adult learners relied a lot on their L1 as a tool for their English language learning and that using English only for instruction had not been effective.

The language backgrounds of the adult learners I had taught were varied. They included migrants from different parts of the world, such as Hong Kong, Japan, Korea, Vietnam, Malaysia, China, Pakistan, India, Yugoslavia, and Lebanon. No matter what their first languages were, the adult learners always brought along bilingual dictionaries for checking the meaning in their first languages when they came across English words they did not understand. The learners made references to their first language and used it as a resource for learning L2. For those who had the same language background they naturally gathered together to share, to discuss and to clarify the meaning of words in their first language. They often used L1 for explaining the meaning of L2 and for discussing how the use of L2 was different from the use of L1 for certain words or expressions.

For more than ten years I have been teaching a TAFE ESOL course to Chinese adult learners in a Chinese Community Centre. This ESOL course has been designed to have a bilingual teacher teaching English language to Chinese adult learners with the use of L1 where and when necessary. Because of the design of the course it was obvious that the Chinese adult learners used their L1 for L2 learning. These Chinese adult learners came from various Asian countries, but no matter where they came from they all could speak and understand the Chinese language (either Mandarin or Cantonese, or both). The language of instruction, I maintained, was English language with the assumption that I had to maximise the exposure of L2 in

class. Chinese language was used when the learners asked for explanation in Chinese or when the learners indicated that they did not understand what were being taught. Even though most of the adult learners worked in the day-time and might have opportunities to speak English, many of their colleagues were also migrants who might not speak English in a proper way. The students often used L1 to ask me to explain some English words they came across in their workplace. They talked in their L1 to clarify the actual meaning of the English words and they even attempted to find out the Chinese equivalent for the words from the teacher or from other learners. Through the experience of teaching these adult learners, I began to realise that L1 plays a significant role in the L2 learning for these adult learners and this triggered me to conduct the present research.

To sum up, there are disadvantages for the teacher being the researcher, and the present study has taken them into consideration. However, in spite of the disadvantages of the teacher being the researcher discussed above, the present study has at least the following advantages:

1. With the above-mentioned background and experience of the teacher / the researcher, the present study focuses on the real issue, the use of the first language in second language classroom, and addresses the immediate concerns of the second language classroom.
2. It bridges the gap between theory and practice by merging the role of the researcher and practitioner.
3. It helps to avoid introducing non-participants or outsiders into the language classroom.
4. It helps to avoid uncooperativeness of teacher by merging the role of the researcher and the teacher.
5. It enables the researcher to have a better understanding of the learning context.
6. By conducting the research, it provides the teacher with more information about what is actually happening with the use of L1 in the second language classroom.

One point needs to be noted is that in order to identify the particular role in different contexts, in interpreting the data the transcription of the present study uses 'the researcher', 'the teacher' or 'the interviewer' where appropriate to identify the particular role instead of using the first person 'I'.

3.4 The Research Design

As mentioned in the first section of this chapter, the purpose of this study shapes the choice of the approach. By the same token the purpose of the study also shapes the design of the study, including the choice of the subjects, the design of the procedures and the kind of analyses used.

In the research design, the present study assumes the sociocultural approach initiated by Vygotsky, and it aims at collecting authentic data in a natural second language classroom setting in an attempt to understand how adult learners make use of their L1 for L2 learning. As mentioned in the above section, the present study has been designed to collect data through the use of audio-taped recording, and two groups of Chinese adult learners learning English as a second language are used for data collection. Four lessons from each group were taped in order to capture the use of the first language during the classroom learning. Apart from the tape-recording, in-depth interview was used to find out what the students do with their first language in the second language learning in the classroom, and how and why they use their L1 in L2 learning

3.4.1 The Subjects

The subjects were part-time students in the Level One and Level Two of ESOL (English for Speakers of Other Languages) Course which was organised by a College of TAFE (Technical and Further Education) but conducted in a Chinese

Community Centre where the use of L1 for teaching L2 was encouraged. The class size was small, about 15 students to be enrolled in each class. There were two lessons per week, each lesson lasted for two-and-a-half hours.

The subjects had Chinese as their first language. They were adult migrants from Mainland China, Hong Kong, and Taiwan. The subjects spoke Chinese, either in Cantonese or in Mandarin. Some could manage both Cantonese and Mandarin and other Chinese dialects such as Shanghai Dialect, Dong Guan Dialect. Although the spoken dialect might be different, they all understood each other in the written form of Chinese, which might be in original form or in simplified form. Most of them were literate in their first language. Some of them might have completed high school or colleges in their country of origin.

The age range of the subjects was wide, ranging from above twenty to over fifty. Since the classes were conducted in the evening, most of them were working in the daytime at home or in a workplace, as an employee or being self-employed.

The English language proficiency of the subjects varied. Some might have just completed the five-hundred-and-ten hours of English language course organised by AMES (Adult Migrant English Services). Some might have been in Australia for many years but had not attended any formal English language classes. Some might be able to manage some simple dialogues in English, while some might have learned English language in their country of origin and could manage written English language but found spoken English difficult to speak and to understand.

The subjects were relevant to the present study because they all had Chinese as their first language. They were literate in the Chinese language and could manage the first language in spoken and written form.

3.4.2 The Setting

The data were collected in a normal classroom setting. The classroom was situated in the Chinese Community Centre with about fifteen seats. Students were sitting around two long tables. Since the classroom was not spacious, rearrangement of seats and tables in the classroom was not possible. The learners were not fixed in the seating arrangement. They were free to take any seat they liked once they came into the classroom. However, very often the learners grouped themselves according to the dialect they spoke. Although the classroom was small, individual or small group work was possible. The teaching equipment and resources were very limited in the Chinese Community Centre. A white-board, a TV-Video set and a audio-tape-recorder were available for use in class. Photocopying was available for teacher reproducing teaching materials. The room temperature could be controlled by the air-conditioner/heater which made the classroom quite comfortable in both summer and winter.

Hot boiling water was available in the small kitchen for making a cup of tea or coffee during tea-break if the learners organised to bring in tea and coffee. At the front office, there were various Chinese or Chinese/English publications including journals, newspaper and information booklets. There were also various flyers advertising various activities organised by the Chinese Community Centre and the learners were free to take any of those flyers. Some learners would like to spend time reading the daily Chinese newspapers during the tea-break or before the lessons started.

The resources, the facilities and learning environment in the Chinese Community Centre were not so good as compared to that of College of TAFE or AMES. However, the learners did not seem to mind so much about these. Many of them said that they liked studying in the Chinese Community Centre because L1 could be used in the L2 learning.

3.4.3 Rationale for planning of lessons

On each of the data gathering occasion the lessons were presented as part of the normal class routine. The lessons were tape-recorded and then transcribed.

The topic of the tasks was on *Health and Lifestyle*, a topic which was of immediate interest and needs of the subjects or the Chinese learners. According to the Activity Theory of Vygotskian theory, the motive and goal constitute a 'kind of vector', determining the direction and amount of effort an individual exerts in carrying out the activity (Lomov, 1982:69 cited in Lantolf and Appel, 1994:21). Introducing the topic *Health and Lifestyle* that was of the subjects' immediate concern would help to initiate the motive and goal for the L2 learning.

The lessons for data collection included the four language skills, listening, speaking, reading and writing. The inclusion of the four language skills was to cater for the varied needs of language skills of the learners. As mentioned above the language proficiency of the subjects varied. Some could manage some speaking in English but found writing and spelling hard to manage. Some could manage written English but found listening and speaking hard to manage. The inclusion of listening, speaking, reading and writing tasks was to meet the needs of individual learners and would part satisfy the requirement of the course.

Most of the tasks were designed to be done collaboratively in pairs or in small groups in order to enable interactions among learners. According to the ZPD (Zone of proximal development) of the sociocultural theory, people working jointly are able to co-construct contexts in which expertise emerges as a feature of the group (Lantolf, 2000:17). However, there were also tasks that required learners to work individually, especially the writing tasks.

3.4.4 Issues of data collection

The data collection was planned to start from 2001 and to finish by 2002. Recordings were to be made during scheduled classes. The lessons to be recorded were the normal lessons in the second language classroom and were not to be presented as being in any way special. The students would be told that they were to be recorded, but in order to minimize any self-consciousness or anxiety they were not asked to hold a microphone or to speak deliberately in the direction of the tape recorder. It was hoped that the recordings would thereby capture the students' most normal interactions in which L1 would likely be used in processing L2 learning.

However, there might be some issues concerning data collection. First there might be limitations in tape-recording. Tape-recording could only record the words or sound produced in the lesson, but cannot capture what they were thinking about, and how they were thinking or feeling. Another issue was that tape-recording regarding language learning behaviour were generally limited to students who spoke out loud. It would not tell us much about those who remained quiet. Because of these limitations, the in-depth interview was therefore designed to collect data from participants in an attempt to understand what and how the learners were thinking and feeling in the use of L1 in L2 learning.

A student learning a new phrase might go through a thought process something like this:

> What does 'What a shame' mean here? I know that 'shame' means '*xiu kui* (distressed feeling for doing something wrong)'. But why is it that someone is unable to go to the party and the other person responds with 'What a shame.' What does it really mean in Chinese language?

The L2 learners might use L1 as a strategy to learn the new phrase, yet the thought process might not be revealed in the tape-recording. If appropriate, during the interview, the researcher might use 'think aloud' method to let the learners voice their

thought process. During the interview the researcher might ask specific questions like how the phrase 'What a shame' in L1 helps the learner in learning L2.

3.4.5 Issues of transcription

After data collection, the next procedure was planned to be the transcription of the recorded data, which would perhaps be more problematic than the data collection. The vast amount of data and information would involve conscious choices on the part of the transcriber, choices about what to transcribe, how much to transcribe, what to include, what to leave out, and how to represent spoken language with the written language.

For the present study, there would be the transcription of the classroom discourse data and the transcription of interview data. For the transcription of classroom discourse data, participant columns rather than linear script would be used to present the interactive nature of the protocol and the ways the learners constructed knowledge together with the help of L1.

In the transcription, the conventions used are shown below in Figure 3.1

Fig. 3.1 Conventions used in the transcription.

Italics	Represent L1 in Cantonese
Italics	(with underline) Represent L1 in Mandarin
[?] [.] [,]	Punctuation marks are used to indicate whether the sentence is a statement or a question.
...	Indicates an utterance which has been interrupted or has not finished.
S1 etc	For ethical reason, name of students are not mentioned, but for indicating particular learner who speaks, S1 (Student 1), S2, S3, etc. are used.
Ss	A number of students are responding.
1. etc.	Each turn is numbered, as in the example below.
Episode 1.2.3	The first number, 1, represents Group One Level One students The second number, 2, represents Lesson Two of Group One

The Third number, 3, represents the Third episode in the lesson

[Laughing.] Learner's action.

The following is an example of transcription of classroom discourse data:

Figure 3.2 An example of transcription of classroom discourse data

Students	Teacher	Comment on the use of L1
1 S1: Ache *he* pain *you shenme bu tong*? (What's the difference between 'ache' and 'pain'?		S1 uses L1 to find out the difference between ache and pain.
2 S2: *Liang ge dou shi tong* (Both of them mean pain).		S2 uses L1 to explain.
3	'Ache' means a dull and continuous pain; *teng tong* (ache). 'Pain' means suffering in great pain; *tong ku* (suffering in pain). Ache is used with tooth, ear, head, stomach, heart, tummy. We say back pain [touching the back], a pain in the knee [touching the knee].	The teacher attempts to explain the use of 'ache' and 'pain' in L1
4. S1: *Yuan lai* pain *shi tong ku* (Now I know that 'pain' is suffering in great pain).		S1 uses L1 to talk about her understanding of the word 'pain'.

Since the purpose of the study is to investigate the use of L1 in L2 learning, in the transcription of the classroom discourse data, apart from the columns 'By the

teacher' and 'By the students', an additional column 'Comment on the use of L1' is set up to explain the use of L1 if and when necessary. By classifying the data into three distinct columns, it shows clearly if the use of L1 is initiated by the students or initiated by the teacher, and how L1 is used for the interactions among students in the learning of L2.

For the transcription of interview data, simply linear script would be used. For example:

Interviewer: How does the use of Chinese language help you to learn English?

S3: *Na yong Zhongwen lai jiang gen qing chu*. (Using Chinese to speak is clearer.)

For the ethical concern, the learners' name would not be revealed in the script. Instead they would be identified as S1 (Student 1), S2 (Student 2) etc. When responses were from a number of learners, Ss (Students) would be used. The script was written in a form that was easy to comprehend. Conventional punctuation marks were deliberately used to indicate statements, questions or exclamations. Gestures, actions and explanation were shown in square brackets, [ ]. In order to highlight the use of L1 in the data, italics were used to indicate the use of Chinese language in the script followed by an English interpretation in curved brackets ( ). In the present study, two forms of spoken Chinese languages, Cantonese and Mandarin, had been used in the language classroom. In the script, in order to distinguish Cantonese from Mandarin, Cantonese was shown in italics and Mandarin was shown in italics with underlining.

To sum up, the above section is to focus on the design of the research. It provides an explanation and rationale for the method and procedure. The method used in the present study was designed according to the purpose of the research. In the research design, the lessons included group work as well as individual work, and the lessons focused on the four language skills. Tape-recording would be used to capture how the learners used L1 in L2 learning. A background information sheet would be used to obtain general information of the participants. In-depth interviews would be

conducted regarding how the adult learners thought about the use of L1 and what the reasons were for the use of L1 in L2 learning.

3.5 Collecting the data

As scheduled, the classroom discourse data were collected during the period from August 2001 to July 2002. The lessons of two different groups of adult Chinese learners, one group being in the TAFE ESOL Course Level One and the other being in the TAFE ESOL Course Level Two, were audio-taped and transcribed, focusing on the use of L1 in L2 learning.

For Group One, the four lessons were recorded in March 2002, which was at the beginning of the ESOL Level One Course. In other words, the group was at the entry level of Level One. For Group Two, the four lessons were recorded in September, October and November in 2001, the months towards the end of the ESOL Level Two Course. In other words, the group was at the exit level of Level Two. The purpose of using these two groups was to see if there were any differences in the use of L1 in L2 learning for students at different language levels.

The language level of the learners was assessed by the TAFE teaching staff according to the Australian Standards Language Proficiency Ratings (ASLPR) levels with reference to learners' speaking, listening, reading and writing skills before they were enrolled for the course. The learners were asked to complete a writing task and attend a face-to-face interview to determine their language level. Some learners might have reasonably good listening and speaking skills but not reading and writing skills. Some learners might be able to write and understand but were not confident enough to speak the language. Level One included students with 'Zero Proficiency' to 'Formulaic Proficiency', or in other words, students from beginners to learners with limited written or spoken English language. Level Two included students with 'Minimum Creative Proficiency', or students with some spoken and written skills but were not yet fluent in English language.

The data comprised of (1) the background information of the students, (2) audio-taped recording of the lessons and (3) the audio-taped recording of the interviews with some of the students.

The following table shows the various types of data collected in the second language classroom during the period from August 2001 to June 2002 for the present study.

Figure 3.3: A summary of data collection

	Group 1 ESOL Level 1 N=15	Group 2 ESOL Level 2 N=15
Background information of students	From each of the 15 participants	From each of the 15 participants
Number of lessons audio-taped and transcribed	Four lessons	Four lessons
Number of Interviews with participants audio-taped and transcribed	One group discussion and five face-to-face interviews	One group discussion and one face-to-face interview

3.5.1 Background information of students

As designed, the participants were asked to fill out a background information sheet for obtaining general information including country of origin, native language, age, sex, years of education, number of years in Australia, and previous studies of English. The student background information is listed and discussed in Chapter 4.

3.5.2 Classroom discourse data

The classroom discourse data were collected during the normal lessons by means of audio-taped recording in the authentic second language classroom which was used as opposed to a laboratory setting classroom. Genuine classroom discourse by the teacher and students was recorded. The size of the classroom was not big, about 5 square meters. The cassette was powerful enough to pick up speaking from every corner of the room. The lessons were conducted in whole-group teaching or in small-group discussion. It was inevitable that there were background noises in a genuine classroom. However, it was interesting to note that it picked up responses or comments from the learners that one might have ignored if they had not been recorded by the cassette recorder.

In the lessons, since L1 was permitted to be used in class for L2 learning, the learners used it for questions, explanation, responses and discussion. The lessons underlined the rationale that the teacher attempted to use English more often to maximise the students' exposure to L2. For students from Hong Kong and Guangzhou, Cantonese was their L1. For students from Taiwan, Shanghai, Beijing or other provinces of Mainland China, Mandarin was their L1. The complication was that some students were multi-linguals who spoke Shanghai dialect as well as Mandarin or Cantonese, but whatever dialects the Chinese students spoke, the written forms for both Mandarin and Cantonese speakers were in common, with the slight differences of simplified form or original form.

For the use of L1, since the teacher's L1 is Cantonese but is also competent in Mandarin and is able to write both simplified from and complex form of writing, at times, the teacher used Cantonese and Mandarin interchangeably to ensure both Cantonese and Mandarin speakers got the message. The ability to speak both spoken forms of Chinese and to write both forms of characters is regarded as a resource for the teaching of L2 as well as for conducting the study.

The use of L1 by the teacher or by the students in the classroom was not preplanned. The teacher's use of L1 was mainly initiated by the request or the indication or needs of the students. It was impossible to predict the frequency of students' use of L1. Sometimes the lesson went on for a long while only in L2. Sometimes there were a lot of interactions in L1. For the purpose of the present study, because of the irregularity of the use of L1 in the lessons, it was the episode, but not the lesson, which served as the basic unit for interpreting and analysing of the data. In one lesson there might be many episodes which involved the use of L1 while in another there might not be so many. However, what was of interest in this study was not the quantity of L1 use, but the kind of meaning created in the use of L1. Detailed discussions of such kind of meaning revealed from the classroom discourse data are presented in Chapters 5, 6 and 7.

3.5.3 Interview data

Eight interviews were conducted during the data collecting period, two with the Group Two students and six with the Group One students, to enable the subjects to talk about their views about L1 use in L2 learning. Each of the interviews was tape-recorded, the length being from twenty to thirty minutes. For each group, one interview was in the form of group discussion which provided opportunities for learners to give their views of L1 use if they wanted to. The rest of them were one-to-one interviews which allowed opportunities to focus on particular use of L1. The one-to-one interviewees were those students who inclined to frequent use of L1 for L2 learning. The interview data are to be discussed in Chapter 4.

3.5.4 Transcribing the data

The transcription of the data is to meet the objectives of the study which is to focus on the use of the L1 in L2 learning. The vocal tape was first transcribed into script in English language or in Chinese language as they were spoken by the teacher or learners. Through the use of English translation for the script in Chinese language, it is hoped that the data are accessible to the reader unfamiliar with Chinese language. Since the Chinese language is different from the English language in its structure and word order, some problems might arise in the English translation. Although the present study is not using a word-for-word translation, the choice of words and expressions for English translation is to get as close to the first language as possible, in order to illuminate the excerpts in L1.

Four lessons of classroom discourse data from each of the two groups were transcribed, and it ended up with 186 pages of transcribed classroom discourse data. Adding 11 pages of interview data to the 186 pages of classroom discourse data made up to nearly 200 pages of transcribed data which required a lot of work and effort.

The interview data, comprising six one-to-one interviews and two group interviews, were tape-recorded and then transcribed. For the convenience of analysis, the interview data were broken up into parts according to the reasons given by the interviewees for the use of L1 in L2 learning. The idea was to include one reason in each part of the interview data. However, sometimes it was impossible to separate the data and one part of the interview data might include more than one reason given by the interviewees.

The transcribed classroom discourse data were true recordings of the on-going lessons, and with the great amount of data, it posed some problems for analysis. In order to work out some form of organisation, the utterances were broken up into episodes according to their topics or their purposes. A lesson was made up of a number of episodes, with each episode used to refer to a unit of discourse which

comprised of one or more aspects of the use of L1 in L2 learning. A new episode in this study was usually marked by a signal word or a discourse marker by the teacher such as OK, All right or it indicated the changing of topic or activity. The episodes were then numbered to indicate the sequence of events.

It should be noted that the utterances were transcribed in the order as they were spoken, and episodes were used just for the convenience of analysis. Some episodes could be rather long because the conversation went on for a while on the same topic, while some episodes could be rather short because that was all that had been spoken. Some episodes carried just one single purpose while some episodes might carry more than one purpose.

It has been mentioned earlier in this chapter that discourse analysis involves the search for patterns. As a result, not all of the transcribed data were selected for analysis. In the present study, utterances in L1 should certainly be included in the transcription. However, utterances in L1 which stand alone as single speech acts might not convey their actual meaning. They need to be presented in contextual dialogues which could include L2 as well. Therefore, speeches in L2, that could be part of the context to initiate the use of L1 or as consequences of using L1, were considered to be necessary to be included in the script. The inclusion of both L1 and L2 enabled one to see the flow of speech and the interactions among students, and between the teacher and students.

In transcribing the audio-taped data, the researcher's literacy skill in Chinese language has been a crucial tool. The audio-taped data were in spoken form. Since some of the spoken language, especially that of Cantonese, might not have proper written form, the data were therefore transcribed into alphabetic system of Pinyin (that is for Mandarin) or pronunciation of the spoken Cantonese rather than into the written form of Chinese. For Mandarin, in spite of the fact that there are different pronunciation systems used in different places such as Taiwan, Singapore, the pronunciation in the present study followed the standard pronunciation or pinyin used

in Mainland China. For Cantonese, since there has not been any standard pronunciation system, this study followed the pronunciation used in the Chinese Dictionary published by Overseas Chinese Languages Publishing Company in 1979 (29th Edition). No matter the L1 was Mandarin or Cantonese, it would be followed by the English translation in brackets.

Based on the script, the data were then typed into the computer in a form of a table which was to incorporate three columns, namely, Students, Teacher, and Comments on the use of L1, in order to accommodate the needs of the study. The use of the three columns was considered to be relevant for the study.

In the present study, the classroom discourse data were able to display the utterance-building process of the two groups of students. Donato (1994:35) states that 'to understand L2 production, we must observe the utterance-building process as it unfolds in real time. Trusting "hard" data from interaction studies, as Forman and Kraker (1985:27) insist, obscures the cognitive processes that are enacted on the social plane during an experimental treatment.'

The use of tape-recording was to pick up utterances in an authentic second language classroom and to see how L1 would help the development of L2. It recorded not only the utterances among learners but also the private speech that students spoke to themselves. The audio-taped recording was observed to be an unobtrusive device. Although the students had been informed verbally and in the form of a letter that a number of lessons would be tape-recorded, the students seemed not to mind about the device being used and the lessons were carried out as usual. The tape-recorder was evidenced to be a powerful device. It was able to pick up the classroom talk and it even picked up the private conversation between two learners that appeared to be an interesting piece of data.

3.5.5 Data analysis

In analysing classroom talk as data, the present study is looking for patterns of L1 use for L2 learning in the data. In the beginning it was not entirely clear what the patterns will look like or what their significance will be. It took a long period of time going through the data again and again, noting features of interest. Wetherell et al (2001:39) gives a detailed description of conducting analysis which 'involves going over data again and again, whether listening to recordings or reading transcripts or documents, noting features of interest but not settling on these. It involves working through the data over quite a long period, returning to them a number of times.'

In the present study, the initial categorising of the discourse data was according to the functions of the L1 use, and 18 different functions were identified from the classroom discourse data. However, this initial categorising seems to be too broad and superficial. The 18 functions of L1 use were then grouped into 6 categories, with reference to the framework derived from the Vygotskian theory. Finally, the 6 categories were sorted into three aspects regarding the use of the first language for second language learning, namely, for active construction of knowledge, for thinking and learning and for support and encouragement. The transcribed discourse data were then grouped under these three aspects in the three chapters, Chapters 5, 6 and 7, for analysis and discussion. The sorting and categorising of the discourse data had been a time-consuming but an interesting process. The selected way of grouping and categorising of the discourse data was to identify patterns of L1 use in L2 learning.

The interview data were direct views of various learners about their L1 use. The grouping and categorising of the interview data were according to the L1 use expressed by the adult learners. Four aspects of L1 use were identified, namely, for understanding L2, for thinking, for knowing the meaning at once and for memorising the pronunciation.

When some kind of sorting and categorising to identify patterns have been completed, it is necessary to write up the analysis. For the present study, the writing of the analysis also took a long period of time, going through the data again and again to find out appropriate details related to the patterns of L1 use in L2 learning, and to leave out redundant data. The final presentation of the analysis 'is not a record of the process but a summary of selected findings (Wetherell et al, 2001:39)'. For the present study, selected findings of the L1 use grouped under the three topics are to be discussed and analysed in Chapters 5, 6 and 7.

To sum up, discussions above focus on the method used in the present study, taking into considerations of various types of research. Due to the great amount of collected data, it had been a challenge to work out some ways to deal with the data. The classroom discourse data would be compared to the learners' perspective obtained from the interview data, and data from both groups of students, ESOL Level One and ESOL Level Two, would be compared to see whether there would be a greater need for use of L1 for Level One students.

3.6 Ethical Issues

The present study attempts to ensure that human research subjects are treated ethically. All researchers are expected to take into account the ethical issues raised by their research. In 1980, the TESOL Research Committee published a set of 'Guidelines for Ethical Research in ESL' in TESOL Quarterly (Tarone, 1980). This set of guidelines states very strongly that 'All research on humans should proceed only with the uncoerced, informed consent of the subjects, in writing if possible' (Tarone, 1980:384)

The main ethical issues and concerns in this study were related to privacy and confidentiality. The potential participants or subjects were the adult Chinese learners who studied the English for Speakers of Other Language Course organised by the

College of TAFE in a Chinese Community Centre for the period of 2001 and 2002. The learners were asked to indicate their willingness to take part in the research to be recruited as the participants of the research. Identity and names of participants would be removed from the thesis in order to maintain privacy and confidentiality.

Interviews were conducted with the consent of the students, and names were not mentioned. For interviews, participants could choose to be interviewed in Chinese language (Cantonese or Mandarin) or English language in order to minimise possible embarrassment, anxiety or discomfort.

3.7 A summary of Chapter Three

To sum up, in this chapter the method and procedures used in the research are discussed and justified. The method has been designed according to the purpose of the research design which is to capture the use of L1 in L2 learning in an attempt to systematically analyse the data collected in a normal classroom setting. The issues discussed include the rationale of the methodological approach, the teacher as researcher, the research design, collecting the data, transcribing the data, data analysis and ethical issues involved in the research as appropriate.

The following chapters focus on the collected data, including the background information of the learners, the interview data and the classroom discourse data, which suggest various aspects of the role of L1 in the L2 classroom. With the use of L1, it enabled the L2 classroom to become a dynamic classroom involving social and individual processes in the co-construction of knowledge, in thinking and learning, and in support and encouragement that are to be discussed in details in the latter chapters.

Chapter 4: Background information of the learners and the learner perception of L1 use

4.1 Background information of the learners

The students in Group One were enrolled in the course English for Speakers of Other Languages (ESOL) Level One and the students in Group Two were in ESOL Level Two. The background information of the two groups of students gives us some idea of the sex, the age, the country of origin, the years of education, the number of years in Australia and the previous years of study of English language.

With the background information data of the two particular groups of adult learners used for the study, the questions to consider include: 'what contribute towards second language acquisition? Is it related to the age of study, the length of study, the place of study or is it simply related to the individual aptitude for language learning or the motives to learn?'

4.1.1 The background information of Group One students

Figure 4.1 Background information - Group One (ESOL Level One):

Students (Male/ Female)	Country of Origin (L1) N.B. (M):Mandarin (C):Cantonese	Age range	Years of Educ-ation	No. of years in Australia	Previous studies of English
S1(F)	China, Dongguan (C) with Dongguan accent	51 and above	7	6	AMES (510 hrs.)
S2 (F)	China (C)	41-50	12	5	AMES (510 hrs.)
S3 (M)	China (C)	31-40	10	3	Not any
S4 (M)	China (C)	41-50	9	6	AMES (510 hrs.)
S5 (M)	Hong Kong (C)	41-50	12	7	/
S6 (M)	China, Guangzhou (C)	41-50	12	2	High School

S7 (M)	Taiwan (M)	41-50	10	15	High School AMES
S8 (F)	China (M)	31-40	12	6	High School
S9 (M)	Hong Kong (C)	51 and above	9	10	High School AMES (510 hrs.)
S10 (F)	China (C)	41-50	12	3	Not any
S11 (F)	China (C)	41-50	17	2	High School
S12 (F)	China (C)	41-50	13	13	Not any
S13 (M)	China (M)	31-40	/	1	/
S14 (F)	China (C)	41-50	/	/	AMES
S15 (M)	China (M)	31-40	/	12	/

4.1.2 Pattern of the Group One Data

Among the Group One students, 7 are female and 8 are male. Most of them are from China. Out of the 15 students 12 of them are from China, with 2 from Hong Kong and 1 from Taiwan. Regarding their language background, most of them are Cantonese speakers, 9 from the Southern part of China and 2 from Hong Kong. There are only 4 Mandarin speakers, 3 from China and 1 from Taiwan. Out of these four Mandarin speakers, they all claimed that they could 'understand' Cantonese but could not 'speak' it (*Sik 'teing' ng sik 'gong'*). This explains why the L1 use for Group One students are mainly in Cantonese, and Mandarin is used only when necessary.

The age of the Group One students are mainly above 40 years old. 11 out of 15 are above 40, including 2 of them who are above 50. Only 4 of them range from 31 to 40. This gives an idea of the average age of the adult second language learners in this particular group. 9 of the Group One learners had 10 or more years of education, which means that they are up to high school level. However, this may only give a general idea of their education level, with the understanding that some learners did not have much academic learning, especially during the period of Cultural Revolution in China. The number of years in Australia varies a lot, with 5 of them who have come to Australia for 3 or less years, and 4 of them for 10 or more years.

Regarding the previous studies of English, 3 of them do not have any previous studies of English. 5 of them have studied English in high school, and 6 of them have studied English in AMES (Adult Migrant English Service).

4.1.3 The background information of Group Two students

Figure 4.2 Background information - Group Two (ESOL Level Two):

Students (Male/ Female)	Country of Origin(L1)N.B. (M):Mandarin (C):Cantonese	Age range	Years of Education	No. of Years in Australia	Previous studies of English
S1 (F)	China,Beijing (M)	41-50	15	9	AMES (510 hrs.) /TAFE
S2 (F)	China, Shanghai (M)	41-50	16	9	High School /College / AMES(510 hrs.)
S3 (F)	China (M)	31-40	20	8	High School / University
S4 (F)	China (C)	41-50	6	11	TAFE (3 months)
S5 (F)	Hong Kong (C)	41-50	17	11	AMES / ESOL
S6 (F)	China, Guangdong (C)	31-40	12	2	AMES / ESOL
S7 (F)	China, Beijing (M)	31-40	12	8	AMES
S8 (M)	China (M)	41-50	10	12	ESOL (4 months)
S9 (F)	China, Wuhan (M)	21-30	17	3	University
S10 (M)	China (M)	31-40	/	8	/
S11 (F)	China, Nanchang (M)	41-50	16	4	AMES (510 hrs.)
S12 (F)	China, Guangzhou (C)	41-50	12	7	AMES (510 hrs.)
S13 (F)	China, Shanghai (M)	31-40	12	4	AMES (510 hrs.)
S14 (M)	China, Guangzhou (C)	51 and above	15	9	AMES (300 hrs.)
S15 (M)	China, Guangzhou (C)	41-50	6	4	AMES

4.1.4 Pattern of the Group Two data

Unlike Group One, the Group Two comprises more female learners than male learners: 11 of them are female and 4 are male. 14 out of 15 are from China and 1 from Hong Kong. The majority are Mandarin speakers: 9 Mandarin speakers and 6 Cantonese speakers. Since most of the Group Two learners originate from China,

even though they have claimed to be Cantonese speakers, they are competent in Mandarin as well. The L1 use in Group Two is mainly in Mandarin.

Quite similar to Group One, a great number of Group Two learners are over 40 years of age. 9 out of the 15 students are above 40, including 1 who is 51 or above. 5 are in the range of 31 to 40 and 1 is in the range of 21 to 30.

Considering the years of education, 12 out of 15 have 10 or more years of studies, including 3 who are up to College or University level. Many of the Group Two learners have been in Australia for a couple of years. 13 out of 15 have been in Australia for 4 or more years.

Regarding the previous studies of English, nearly all of them have prior study of English in Australia, except one did not give the information. Among the Group Two learners, 10 out of 15 have studied in AMES.

4.1.5 Discussion of the background information data

The data reveal that there are a lot of variations regarding the background information of the learners. They vary in their years of formal education, years of arrival and prior learning in English language. The targeted learners are adults who speak a Chinese language but come from various places or provinces of China, including Hong Kong, Guangzhou, Dongguan, Shanghai, Wuhan, Nanchang, Beijing and Taiwan. They are migrants who came to Australia from less than two years to over ten years.

The age of the two group of learners ranges from over 20 to over 50. However most of the students are over-forty years of age (20 out of 30 are above 40). That means in both Groups One and Two, only about 3% of the students are between 21 to 30, 30% of the students are between the age of 31 to 40, about 57% of the students are

between the age of 41 to 50 and 10% of the students are over 51. That is to say at least 67% of the targeted learners are 41 or above in age.

The years of formal education, mainly in their native country, varies from 6 to 20 years. Many of the learners, 17 out of 30 students indicate that they have attended AMES English Course which comprised 510 contact hours when completed. However, some of them stated that for some reasons they did not complete the course.

With the understanding that the English language learning in different high schools and colleges in the learners' native countries might be very different and might not be of the same standard, it is not reliable to determine the learners' English language level just by the years of education or the years of previous English studies. In other words, the prior English learning in high school or colleges is not helpful in assessing the English language level of the learners. It was observed that some might have learned some grammar points that they would like to refer to when they were learning some new sentence structures. Some might not be able to recall much of what they had learned before. Some might be able to write some simple English, but were reluctant to pronounce the words or to speak the language.

For example, S1 from Group 1, in spite of her seven years of education in China, she said that she had to start from 'A B C' when she studied the AMES English Course. S1 stated that she had completed the 510 hours of AMES English Course but when S1 started the TAFE Level One, she still had difficulty recognising some of the letters or the alphabet. This shows an example that the years of formal education or the previous studies of English might not be a reliable guide for determining the language level of the students.

For enrolling students into different levels of the TAFE ESOL Course, the students' ability in reading, writing, listening and speaking requires face-to-face assessment according to the TAFE assessment standard, rather than just relying on their previous learning or qualification. This explains why some students who have

completed the 510 hours in AMES might be able to enroll in Level Two, while some of them might need to start from Level One. It should be noted that since many students had studied English in AMES before they joined the TAFE English course held in the Chinese Community Centre, when they talked about L2 learning, it was inevitable that they were comparing their previous learning, that was the study in AMES, with the learning organised by TAFE in the Chinese Community Centre. To quote the learning from AMES is simply to refer to the learner's previous learning experience, and the present study has no intention to compare the L2 learning or the teaching pedagogy of the two institutes.

To conclude, data of the background information listed above at least suggest that the second language acquisition is not directly related to the prior learning or the length of study, with the understanding that English learning in different countries or different institutions might be very different. The data also suggest that the second language learning varies with individuals: some students may require a shorter period of time to develop L2 and some students may require a longer period of time. Since 67% of the targeted learners are 41 or above in age, the data might suggest that there could be some effect of age in terms of learning preferences. However, the data do not give any idea of the aptitude of individual learners, the motives to learn, or the opportunities for interactions and learning.

The wide range of variables of the adult learners suggests some interesting points to be noted in the present study. The adult learners of the two targeted groups might have gone through very different life experiences, including some political hardship, for example during the Cultural Revolution. Each of the learners might have a very different story to tell, and have a very different way of seeing things. The variations in the background suggest that they are not uniform groups of learners and they may pose some difficulties in trying to generate some uniform conclusions about their background. However, with such variations, learners have the potential of seeing their L1 use from different perspectives and could possibly give some interesting insight of their L1 use.

Furthermore, the background information just serves to provide some general information of the target groups, but it does not suggest any particular role of the first language in the second language learning. The views expressed by the learners during the interviews, which could possibly provide some ideas of the role of L1, are discussed in the following sections.

4.2 Discussion of data from the interviews

In an attempt to understand the learner perception of the L1 use, eight interviews were conducted. The data obtained from the interviews were to find out how the adult learners see their use of L1 in L2 learning. The interview data were collected from both Group One and Group Two students. Two modes of interview were used: one was group discussion and another was one-to-one interview. Group discussion was more like informal conversation guided by the intended questions and it provided opportunities for students to give their opinions if they wanted to, while one-to-one interview focused on more specific use of L1 by individual students.

The language media used for the interviews depended very much on the interviewees. If the interviewees could manage in English, English was used. If the interviewees felt more comfortable to speak in Cantonese, Cantonese was used. If the interviewees preferred to speak in Mandarin, then Mandarin was used.

In transcribing the talk, the written form of Chinese is not used because it does not indicate whether the spoken form of Chinese was in Mandarin or in Cantonese, and Mandarin Pin Yin and Cantonese pronunciation are used instead. Cantonese is printed in italics followed by transcription in English in parentheses. Mandarin is printed in italics with underline followed by transcription in English in parentheses.

From the interviews, a couple of views have been given, and for the purpose of analysis, they are discussed under the following headings: (1) Using L1 for understanding L2; (2) Using L1 for thinking; (3) Using L1 for knowing the meaning at once; and (4) Using L1 for memorising the pronunciation.

4.2.1 Using L1 for understanding L2

From the interview data, a number of learners express that using L1 is for understanding L2. In Text 4.1, S1 from Group One Level One advocates the use of L1 for L2 learning. When she is asked how L1 helps, she admits that using L1 to explain therefore she understands. That is to say, using L1 is for understanding L2.

Text 4.1
Interview 4(a):
Interviewee: S1 from Group One Level One (One-to-one interview)

1. Interviewer: *Nei gok dek wan dou dik gai sik wak ze ho neng gak lei wa bei nei tsing dim gai wa ze sin sang gong, jau mou bong zo?* (What do you think, knowing the meaning in Chinese, either the student next to you told you or the teacher told you, is it helpful?)
2. S1 *Jau.* (Yes.)
3. Interviewer: *Jau la, dim joeng bong zo?* (Yes, how does it help?)
4. S1: *Dim Joeng bong zo? Jung Zungmen gai sik, so ji zau ming bak la.* (How it helps? Using Chinese to explain therefore [I] understand.)

From the interview, S1 expresses that using L1 is for understanding L2 (Line 4). She says, 'Using Chinese to explain therefore [I] understand.' From what S1 says it underlines an assumption that to learn a new language it is essential for the learners to understand the meaning, and L1 is a tool that helps her understand the meaning of L2.

In Interview 4(b), S1 again indicates her preference for using L1 for L2 learning. When S1 is asked whether the teacher who speaks English or the teacher who speaks Chinese can help her learn English better, she gives a definite answer. 'of course when there is a Chinese teacher'. The tone of S1 suggests that S1 is determined that a teacher who speaks the same L1 as hers can help her learn L2.

Interview 4(b):

Interviewee: S1 from Group One Level One (One-to-one interview)

1. Interviewer *Nei ji tsin duk gwo AMES la, hae a? Go dik gong Jingmen ge lou si, tung jau jet go gong Zungmen ge lou si bei gao hei soeng lae, dim joeng bong dou nei hok Jingmen ne?* (You have studied in AMES before, yes? Compared the teacher who speaks English with the teacher who speaks Chinese, who can help you to learn English better?)

2.S1: *Geng hae jau jet go Zungmen ge lou si ga la.* (Of course when there is a Chinese teacher.)

3.Interviewer: *Gem jy gwo Jingmen lou si ne?* (So what if you have an English speaking teacher?)

4.S1: *Jingmen lou si, dim teing dek dou ne? Nei gong Jingmen ngo dou teing ng dou.* (English speaking teacher, how can I understand? Even when you speak English I don't understand.)

5.Interviewer: *Gong Jingmen nei dou teing ng dou, gem nei go si teing ng ming gem jau dim a?* (Using English you can't understand. So at those days what did you do when you did not understand?)

6.S1: *Ngo dou hae hok dou go go dek go go a. Ng tung ne tsyn ban lae zau nei me!* (I only learn those I could learn. You couldn't ask the whole class to slow down because of you!)

7.Interviewer: *Bin zo hou do si zau teing ng ming.* (So sometimes you didn't understand.)

8.S1: *Hae lo, teing ng ming go ji si.* (That's right, [I} can't understand the meaning.)

From S1's point of view, having a teacher who is able to use the same L1 to explain helps her understand the L2. The reason for her preference is that she could not understand a teacher who speaks only English. This is the view of an adult learner who would like to use the L1 for the understanding of L2.

Considering the background of the learner, the mother tongue of S1 is Dongguan Dialect, but she could speak Cantonese. During the lessons, S1 brought along her bilingual electronic dictionary, and she said that she understood the Chinese writing shown in her bilingual electronic dictionary. She had difficulties in pronouncing the English words and in understanding the meaning of L2 words. S9, who usually sat next to S1, often explained the L2 words or instructions to S1 in L1.

S1 from Group One is an example of an adult second language learner who prefers using L1 to help in second language learning. For S1, the use of L1 is like a tool for her to understand the second language.

The point to note is that learners like S1 may have problems in understanding the L2 learning in class and this may result in frustrations. Learners may act like S1 who chose to keep quiet and put up with it, and who did not raise her problems in class. When S1 is asked what she did when she did not understand the L2, in Line 6, S1 says, 'I only learn those I could learn. You couldn't ask the whole class to slow down because of you!'

However, not every learner is like S1 who would just learn what she could learn. S7 from Group One chose to walk out of the class when he did not understand the English-speaking teacher. In Text 4.2, he says, '*Bu Ming wo jiu zou*' (Once I didn't understand, I walked out of the class).

Text 4.2

Interview 5(a):

Interviewee: S7 from Group One Level One (One-to-one interview)

1. S7: *Zhongwen* (Chinese) *Zhe ge Yingwen wo dou bu dong.* (This English, I don't know.) *Ni [Lao shi] jie shi wo dou zhi dou la ma. Lao shi bang wo men ma.* (You [The teacher] explain [in Chinese] then I know. The teacher helps us.)
2. Interviewer: Yes. *Ni xi huan, tong chang dou xi huan Zhongwen lao shi jie shi* (You like, usually like, Chinese teacher to explain)?
3. S7: *Ni [Lao shi] gou su wo yi si wo jiu ke yi yi chu lai la ma.* (You [The teacher] tell me the meaning [in L1], so I can translate them.)
4. Interviewer: *Dan shi quan ge wen zhang dou ming bai ma?* (But do you understand the whole passage?)
5. S7: *Quan wen zhang, eh dou cha bu duo liao jie. Cha bu duo.* (The whole passage, is more or less understood. More or less.)
6. Interviewer: *Zheng de dou liao jie?* (Really understand?) *So yi*... (So...)
7. S7: *You shi hou zhe go gui lao jiao xue bu ming. Bu ming wo jiu zou.* (Sometimes this western teacher was teaching, I didn't understand. Once [I] didn't understand [I] walked out [of the class].)
8. Interviewer: *Bu ming jiu zou.* (Once [you] didn't understand [you] walked out.)
9. S7: *Jiu xiang yi ge ben man yi yang.* (Just like a stupid savage.)

S7 welcomes the teacher using L1 to explain the meaning of L2 words. In Line 3, he expresses that the teacher explains the meaning in L1 therefore he can translate them. The response in Line 5 suggests what S7 says 'can translate them (Line 3)' could possibly underline the meaning 'can understand them'.

Data from the background information show that S7 had studied English in High School and in AMES. During the interview, he said he had studied English for

three years in *Guo Zhong* (secondary school in Taiwan) with two periods of English per week. In Australia he had also attended the AMES English Course but he did not like learning English, the reason given was that he did not understand what was taught in class. In the class, I observed that S7 was a bit reluctant in writing or spelling English. He tried to find excuses and avoided doing the written work. However, his day time job required him to communicate in English. After a few months of study, S7 showed interest in English learning and attended class more regularly. At times, he used L2 to share his jokes in class. In the mid-year assessment, he managed to make a speech for two minutes on an every day topic in English but his spelling skill was still poor.

In the interview, S7 expressed the frustrations he had in his previous study of English. When he was not able to understand the English-speaking teacher, he just walked out of the class. Looking back, he commented himself as '*ben man* (a stupid savage)'. That is to say, S7 had acted like 'a stupid savage' when he did not understand the L2 used in the L2 classroom.

By the end of the interview, S7 again admits that using L1 in L2 learning helps in understanding and it makes him feel good (*Hen shuai*).

Interview 5(b):

Interviewee: S7 from Group One Level One (One-to-one interview)

1. Interviewer: *Xian zai yong Zhongwen lai jie shi, shi bu shi dui ni lai shuo hen you bang zhu* (Now using Chinese to explain, is it very helpful for you)?
2. S7: *Xian zai ne, Yingwen ne, you xie ting de bu xing.* (Now, for English, some of the listening [I] can't understand.)
3. Interviewer: *Bu ming bai* (Don't understand)?

4. S7: *So yi ne, yong* Chinese *hen shuai ne, ji hen hao la. Hen shuai, ji shi hen hao la.* (So, use Chinese is great, that is very good. '*Hen shuai*', that means very good.)

Apart from S1, S7 is another Group One student who advocates the use of L1 for L2 learning and the reason given is that the use of L1 helps in understanding the new language. From the observation, with the use of L1 in the second language classroom S7 has a change of attitude towards learning English. In interview 5 (a), he describes himself as 'a stupid savage', but in 5 (b), S7 uses the Taiwanese expression '*Hen shuai* (very good)' to describe his good feeling for learning in the Chinese Community Centre. That is to say he feels great for using L1 in L2 learning.

The view of S9 from Group One Level One also supports the notion of using L1 for learning L2. S9 thinks that L1 is necessary for understanding L2. In Text 4.3, he says that L1 helps him know those L2 words he did not know.

Text 4.3
Interview 6(a):
Interviewee: S9 from Group One Level One (One-to-one interview)

1. Interviewer: [Looking into S9's notebook.] *Nei bun loi Jingmen dou hou lek ga. Dim gai jiu se gem do Zungmen ge?* (Originally your English is quite good. Why do you need to write so many Chinese words?)
2. S9: *Ng sik a, ne dik.* ([I] don't know, all these.) [Pause.] *Ne dik gai sik ho ji bong zo, ho ji sik fan ne dik ng sik. Dan hae tsin bin ne dik ne, hae jen wae ngo si gwo jung Zungmen gai.* (All these [Chinese] explanations can help, can help to know those I did not know. But the writing in the beginning of the note book [that have not got Chinese meaning], is because I have tried to explain in Chinese before.)

3. Interviewer: *Se go go Zungmen wui ng wui hae bong zo nei gei dek?* (Writing those Chinese would they help you to remember?)

4. S9: *Ngo ng se Zungmen, ngo ng zi hae me zi wo. Ngo ji ga zi dou hae me ji si. Jy gwo nei mo go Zungmen, nei ng zi dou key hae met.* (If I don't write the Chinese [meaning], I don't know the [English] words. Now I know what they mean. If you don't have the Chinese, you don't know what they are.)

During the lessons, S9 seemed to be coping very well with the L2 learning, and he often gave relevant L2 responses. He usually sat next to S1 and he often helped to explain the meaning to S1 in Cantonese whenever S1 had problems in learning. It was surprising that S9 wrote a lot of L1 words to explain the L2 words in his notebook. From the interview, S9 expresses that L1 provides the foundation for learning L2, and he has the opinion that if he does not use L1 to explain he does not know the L2 words. What S9 says in Line 4, 'If you don't have the Chinese, you don't know what they are'. That is to say, for S9, L1 is the foundation to build up the understanding of L2, and if without L1, he does not understand what the L2 words are. This also suggests that using L1 is for understanding L2.

The point to note is that S9 admits he has to rely on L1 to explain the L2 words. He has the opinion that L1 is necessary for explaining the meaning of L2. He says that for those L2 words that he has not written the L1 meaning, he has checked for the L1 meaning before. In other words, whenever he sees a new L2 word, he would check for the L1 meaning from his dictionary, and write it down in his note book.

To sum up, some second language teachers hold the view that L1 is a hindrance to L2 learning, and therefore L1 should be avoided in L2 learning. However, the above texts suggest that some second language learners have a different view: L1 has not been regarded as a hindrance, but a means for explaining and for understanding L2.

The above texts also suggest that some L2 learners regard using L1 for understanding as important for L2 learning. For some second language learners, L1 is the 'old' language that can be used for understanding the 'new' language', and it seems that nothing can replace the role of L1 in L2 learning. For example, S9 from Group One says, 'If I don't write the Chinese [meaning], I don't know the [English] words. Now I know what they mean. If you don't have the Chinese, you don't know what they are.'

The interview data above seem to suggest that L1 is necessary for L2 understanding. With the use of L1, some students have built up their interest and have developed motives in L2 learning, and these may help to empower them to become competent learners and make them feel good. The Taiwanese expression '*Hen shuai*' tells us the great feeling of S7 for using L1 in L2 learning.

4.2.2 Using L1 for thinking

Some adult second language learners express that they use L1 for thinking in L2 learning. In Text 4.4, S7 from Group Two expresses that she uses L1 to think of the L2 words. Text 4.4 is in the form of group discussion which comprises opinions of various learners, with the understanding that learners are free to express their views if they want to.

Text 4.4
Interview 1(a):
Interviewees: S1, S2, S5, S7, S8 from Group Two Level Two (Group discussion)

1. Interviewer: What do you think, exactly how do you use the Chinese language? Just like before you always use Chinese language to explain

something, isn't it? So every time you switch to Chinese language and say this or that...

2. S5: So, it's not right?

3. Interviewer: No, nothing right or wrong, but I'm just interested in knowing why you've used it.

4. S7: *Na yong Zhongwen lai jiang gen qing chu.* (Using Chinese to speak is clearer.)

5. Interviewer: Chinese *gen qing chu yi dian?* (Chinese is a bit clearer?)

6. S7: *Hen duo shi hou ni hui fa xian zai Yinyue dang zhong, yong Yinyue lai xiang hen kun lan. Zhe shi hou ni hen zi ran jiu zhi you yong Guoyu lai xiang ba.* (Very often you will find that in English, using English to think is very difficult. At this time you will naturally have to use Mandarin to think.)

7. Interviewer: So it's something related with the thinking, isn't it?

8. S8: You can't find the right word to express what you want to talk. Then you need it.

9. Interviewer: Yes, sometimes it's difficult to find the word.

10.S8: Yes.

11.S1: To find the word.

12.S7: *Ni yong Zhongwen de shi hou ni hai hui zhao. Ni yong shen me ci gen qing xi biao da ni de xiang fa? So yi ne, zai Yingwen li ni hen zi ran hui yong Zhongwen lai biao da ni de xiang fa. Zhe shi wei shen me jing cheng yong Zhongwen lai jiang.* (When you use Chinese you also will find [the words]. Which words you can use to express your thinking clearer? So, in [learning] English you will naturally use Chinese to express what you think. This is why [we] always use Chinese to speak.)

13.Interviewer: But do you think that will help you in learning English?

14.S7: Eh?

15.Interviewer: Does that help in learning English?

16.S7: *Dang ran la, yi ding yao you yi ge yu yan gou da. Dui yu yi ge ren lai jiang, bu guan shi Zhongwen ye hao shi Yingwen ye hao, dang ni ling wai you yi ge yu yan de shi hou, ni jiu you yi ge yu yan de ji chu lai xue ling wai yi ge yu yan. So yi ne, ni de Zhongwen de cheng du hao ba ni jiu xue Yingwen hao ba. Ni de Yingwen reng ran ke yi gai bian ni de Guoyu de cheng du.* (Of course, must have a language that is wide enough. For a person, no matter it is Chinese or English, when you have another language, you have a language to base on for learning another language. So, if your Chinese is good you can learn English well. Your English still can change [improve] your Mandarin [Chinese].)

The opinions expressed by S7 include, firstly, the reason for using L1 is because using L1 to speak is clearer (Line 4), secondly, using L1 to think because it is difficult to use L2 to think (Line 6), and thirdly, using L1 to find the best words to express the thinking (Line 12). In the discussion, S8 supports S7's idea of using L1 to think (Line 8). Swain and Lapkin (2005) also support the idea of using L1 to think or to solve problem by saying, 'when our L2 or L3 proficiency is low, or when the concepts are particularly complex, we turn to our L1 because it is the best resource many of us have for working through complex problems (Swain and Lapkin, 2005:178).'

One interesting point to note is that the conversation switches from L2 to L1 in Lines 4, 5 and 6 and then it switches back to L2, but in Line 12 and in Line 16, the conversation switches from L2 to L1 again. The switch to L1 and then to L2 suggests that the learner, that is S7, has been using both L1 and L2 for thinking.

Similar to the view expressed by S9 from Group One in Text 4.3, S7 from Group Two also has the opinion that L1 is required for L2 learning. She says that it is necessary to have a language to base on in L2 learning. She makes some interesting points that if your L1 is good you can learn L2 well, and that the L2 can improve the L1. This is a view from a learner who sees L1 as the foundation (*ji chu* in Line 16) for

learning L2, and who thinks that having a good foundation of L1 can help to learn L2 well. Furthermore, the L2 can in return help to improve the L1.

Auerbach (1993:19) suggests that 'contrary to the claim that use of the L1 will slow the transition to and impede the development of thinking in English, numerous accounts suggest that it may actually facilitate this process'. In the second language classroom, teachers are cautious of allowing the use of L1 because they think that the learners may rely too much on L1 which may affect their progress in L2. Text 4.4 suggests that some learners hold a contrary view. For S7 and S8, using L1 for L2 learning seems to be just fine. L1 seems to be a perfect tool and support, that these learners feel comfortable to use for thinking of the L2. Not only that the L1 can help in L2 learning, and at the same time L2 can help to improve L1. That is to say, instead of the idea that L1 'will impede the development of thinking' in L2, some learners have the opinion that the two languages, L1 and L2, are facilitating and supporting each other.

Text 4.5
Interview 1(b):
Interviewees: S1, S2, S5, S7, S8 from Group Two Level Two (Group discussion)

1.S7:	To understand.
2.Interviewer:	You are using your Chinese language to help you...
3.S7:	To understand.
4.Interviewer:	To understand.
	[Pause]
5.Interviewer:	How many of you think that you are ...eh...the time thinking in Chinese and then put it in English?
6.S1,S2:	Yes. Yes.
7.S1:	*Jiang wan Zhongwen zai zhuan la*. (After speaking Chinese then change it [to English]).
8.S8:	Not really.

9.S5:	Not really.
10.S8:	Something you get used to it. You never use Chinese in thinking.
11.S5:	Yes. If you get used to, you say it like that, but if you don't get used to it you have to think from Chinese way and then translate to English. Something if you get used to say, you just say it.
12.S8:	Yes.
13.S5:	Depends on... Depends on like interview. You have a lot of interview so you don't do it like that, but some sentences you seldom say it.
14.S8:	That's right.
15.Interviewer:	More complicated, then you have to.
16.S8:	Yes, you have to think it first, then you ...
17.Interviewer:	But do you think in Chinese?
18.S5:	There are different way.
19.Interviewer:	When it is complicated do you think in Chinese?
20.S5:	Chinese, I don't think I need to think.
21.S8:	Sometimes I do. Just like when I'm talking to you I think in Chinese whichever way is better for you.

S7 from Group Two goes on further to explain why L1 is used. The reason she gives is 'to understand'. S7 from Group Two has a similar view with that of Group One students S1, S7 and S9 discussed above, that L1 use is for the understanding of L2. That means some of the Group One Level One students and Group Two Level Two students have expressed that using L1 is for understanding L2.

From Lines 5 to 21, when the learners are asked whether they use L1 to think before putting in L2, two slightly different views have been expressed. S1 and S2 admit that they first think in Chinese before putting in English, but S5 and S8 have a slightly different view, and say that for those expressions they have got used to, they just say them, and there is no need to think in L1. S5 admits that for those L2 words or expressions that one does not get used to, it is necessary to first think in Chinese

before putting in L2. This suggests that to use L1 or not to use L1 for thinking depends on the needs. The learners need to use L1 for thinking of the L2 expressions that they do not get used to saying.

Wigglesworth (2003: 224) mentions that a 'potential result of increased use of the L1 is that the advantage of using English communicatively in the classroom context will be lost'. From what S5 and S8 say, it seems that the second language learners use L1 as a tool for thinking and acquiring L2 if and when they need it. If the learners can manage to use L2, they do not need to think in L1; but if the learners need to think in L1, they just use L1. The learners have the full control of when to use L1 and when not to use it.

Text 4.5, which is conducted mainly in L2, is an example of this kind of use of language. The data show that throughout the conversation, S7, S5 and S8 speak in L2 without using any L1, and only in Line 7, S1 elaborates her opinion in L1. This switch to L1 indicates that S1 feels more comfortable to use L1 to express her opinion and that she may not be able to express it the same way if using L2. From Line 8 onward, the switch back to L2 indicates that the use of L2 is not 'lost'.

S11 from Group One also talks about using L1 for thinking. From what S11 says, she seems to have very precise steps and procedures for using L1 in her L2 learning.

Text 4.6
Interview 3(a):
Interviewees: S2, S11 from Group One Level One

1. Interviewer: *Ngo soeng zi dou nei dei dim joeng jung Zungmen bong zo nei dei hok Jingmen a?* (I want to know how do you use Chinese to help you learn English?)

2. S2: *Zik hae zi dou dim jeong zou ming bak tsyn gey ge ji si la.* (That is, knowing how to do, understand the meaning of the whole sentence.)

3. S11: *Zik hae ne gey Jingmen, tsa zo dik sang zi tsoet lae nei zau zi dou key ne jet gey men nei dik hae me ji si,, key gong dik hae me. Zik hae pei jy nei men ngo dik men tae, gem ngo jiu zi dou nei Jingmen men ngo dik men tae ngo jiu zi dou. Ngo zau sin fan zo hae Zungmen nei men ngo hae me ji si ne. Ngo jau sang tsi, ngo zau tsa zo tsoet lae. Ngo jau zi dou nei men ngo me men tae, Jin hou ngo sin sik dap*. (This sentence of English, after checking the new words from the dictionary you will know what the question is asking, what it is saying. For example you ask me a question, I have to know what you are asking in English. First I translate in Chinese to see what you are asking me. When I have new words, I will check it in the dictionary. Then I will know what you are asking and I can answer you.)

4. Interviewer: *Zik hae liu gai zo, jung Zungmen liu gai zo, nei jung Jingmen men dik hae met je.* (That means first [you] understand, use Chinese to understand, what is asked in English.)

5. S11: *Hae a. Ngo dik Jingmen dik tsi wui tai siu la.* (Yes, my vocabulary in English is too little.)

6. Interviewer: *Jiu tsa sai dik zi?* (Have to checked all the words?)

7. S11: *Jin hou sin lem dim dap.* (Then think of how to answer.)

8. Interviewer: *Nei dou hae jung Zungmen lae lem bo.* (You are thinking in Chinese.)

9. S11:[Laughing]. *Jung Zungmen lae lem, jin hou jung Zungmen se zo tsoet lae. Jin hou lem jung Jingmen hae dim joeng pai dik.* (Using Chinese to think, then use Chinese to write it out. After that, think of how to put it in English.)

This is another learner who expresses that L1 benefits the L2 learning in understanding. When S2 and S11 from Group One are asked how the second language learners use L1 for L2 learning, S2 talks about using L2 for understanding the meaning of the whole sentence, which helps to know 'how to do', or in other words, which helps to understand the instruction.

S11 then verbalises the steps she takes in using L1 to understand what is asked in L2. S11 states how she uses L1 for translation which helps her to understand what is asked, and how she uses the dictionary to check for the L1 meaning. S11 admits that she uses L1 to think of how to answer the questions, and she even uses L1 to write it out before putting it in L2.

The data seem to suggest that L1 is a tool for S11 to understand and to construct the L2. Like the other Group One students mentioned above, S11 also advocates L1 as a tool for acquiring understanding. S11 uses the first language as well as the second language in a process from thought to word and from word to thought. S11's idea of using L1 to think is worth noting. Some learners may find this process of language and thought helpful for L2 development. This idea is supported by Behan and Turnbull (1997), who conclude their study that 'L1 use can both support and enhance L2 development, functioning simultaneously as an effective tool for dealing with cognitively demanding content' (Behan and Turnbull, 1997:41, cited in Swain and Lapkin (2005:179).

To sum up, some second language learners express that sometimes they need to use L1 to think and sometimes they do not need it. Vygotsky's (1962) notion of language and thought helps to explain this use of L1 to think and to make sense of one's own experience. The first language is a means for transforming experience into cultural knowledge and understanding before being put in L2. The use of L1 provides second language learners a tool through which they can make sense of their experience. Using L1 to think is just like a process that one might go through in L2 learning. In this process, there is a continual movement back and forth from thought

to word and from word to thought, and through this process, the relation of thought to word undergoes changes and development, and it is this process of development that is of interest in L2 learning.

4.2.3 Using L1 for knowing the meaning at once

From the interviews, some students express that using L1 is 'faster' which possibly means using L1 for knowing the meaning at once. S5 from Group Two is one of them. In class, S5 used L1 to write down many of the L2 words in her notebook. She brought along a bilingual dictionary and she kept checking L2 words from the dictionary and wrote down the L1 meaning in her note book. S5 had great interest to learn English. In class, she took the initiative to ask and to discuss the L2. She managed to speak in L2 but she also used L1 in class.

However, S5 is very sensitive to the issue of using L1 to learn L2. This can be evidenced in Text 4.4 Interview 1 (a) Line 2 that her response to the use of L1 is: 'So, it's not right?' In Text 4.7 Interview 2 (a), S5 again talks about her use of L1 for understanding L2 (Line 4). However she also expresses her concern of using L1, that the progress of L2 would be slower (Line 4).

Text 4.7
Interview 2(a):
Interviewee: S5 from Group Two Level Two

1. Interviewer: *Gong ha nei dik bet gei.* (Let's talk about your notes.)
2. S5: *Met je?* (What?)
3. Interviewer: *Nei dik bet gei, nei se hou do di zi. Pei jy nei wa 'respect', nei se' zyn ging' la, 'despise' zau se 'hing si' la. Gem kei set gem joeng hae bong zo zo nei di met je ne?* (Your notes, you've written many words [in Chinese]. For example you say 'respect' you write '*zyn*

ging'. 'Despise' you write '*hing si*'. In fact, how has this helped you?)

4. S5: *Bong zo zo ngo liu gai zo ne go zi lo, zi dou zo ne go gai sik dim gai lo.* (This helps me to understand the words, knowing what is the meaning for the words.) *Bet gwo jau hou jau wai lo, jen wae jung Jingmen lae gai sik, ngo dei zau hok dou zo dik Jingmen. Jy gwo jung Zungmen lae gai sik, Jing men di zoen dou zau man zo dik lo.* (But there are advantages and disadvantages, because if using English to explain, we could learn more English words. If using Chinese to explain, the progress of English would be slower.)

5. Interviewer: *Jung zo Zungmen se hae mae zou tsing tso di ne? Pei jy 'cranky, angry'.* (When using Chinese to write next to the words is it clearer? For example: 'cranky, angry'.) [Pointing to the words in S5's notebook.]

6. S5: *So ji lo, zik hae hok zo loeng go sang zi . Joek gwo jung Jingmen dik wa, zou wui zoeng go Jingmen jing sik hou hou do lo. Jen wae ngo dei bun sen dik gei tso dou hae Jing fan Zung dik si hou , bin zo hok zap zoen dou man zo dik lo. Zik hae jau lei jau bae lo.* (So this is like learning two new words [in English]. If using English [we] will get to know the English word better. Because if we are basing on English being translated in Chinese, the learning progress is slower. That means the good and the bad.)

S5 points out that using L1 can help her understanding of L2, but it also slows down the learning progress. This is what she refers as the good and the bad. Using L2 to explain L2, she is exposed to more L2 words and therefore will learn L2 better.

When S5 is asked why she always uses L1 to write down the meaning of L2 words, she admits that it is '*bei gao fai dik* (faster in comparison)', which possibly means that using L1 to explain is faster than using L2 to explain.

7.Interviewer: [Looking in S5's notebook] *Dan hae nei hou do si dou se Zungmen.* (But you always write down the Chinese [for the English words]).

8. S5: *Hae ah, Jen wai, ngo dou hou do si hou jung Zungmen, bei gao fai dik ah ma.* (Yes, I always use Chinese because it is faster.)

9. Interviewer: *Tsa Zungmen bei gao fai dik?* (Checking [from the dictionary] the Chinese [meaning] is faster?)

10. S5: *Zungmen hae bong zo go gai sik go sang zi a. Hou do gai sik a dik sang zi.* (Chinese is to help to explain the meaning of the new words. The new words can have many different meanings.) [Pause.] *Zey zy jiu Zungmen zau hae bong zo liu gai a ma. Bet gwo zen zing hok Jingmen, ziu gae zau jing goi jung Jingmen dik. Zau fai dik ne.* (The most important is that Chinese helps to understand. But really learning English, in principle [we] should use English. It is faster.)

11.Interviewer: *Dan hae wui jau dik zi jung Jingmen gai zo dou hae ng hae hou sik ge.* (But there are some words that are still not well-understood even after using English to explain.)

12.S5: *So ji go dik, Jy gwo hae lae zi Zungmen zau jet ding jiu jung Zungmen bong zo lo.* (So for those words, if they know Chinese, [they] have to use Chinese to help.)

Considering what S5 says, S5 has the opinion that using L2 to learn L2 is a 'faster' way to acquire L2 (Line10). In Line 4 and Line 6, S5 talks about the advantage and disadvantage of using L1 in L2 learning, and she states that using L2 to explain will result in learning more L2 words and will help to build up a wider L2 vocabulary, while using Chinese to explain the progress of English will be slower. However, S5 also explains her frequent use of L1 in her notebook is because 'it is faster'.

The point of interest is that what S5 has said contradicts what she did in class. During the lessons, even though S5 spoke English reasonably well in simple social exchange, she often switched to L1 to ask for the meaning of individual L2 words. In her notebook, the frequent use of L1 to explain the meaning of the L2 words also contradicts with her belief that using L2 to learn is better and faster. In other words, S5's view of L2 learning contradicts with her practice. This raises an interesting question in researching the role of the first language.

Current research into L1 use in the classroom investigates the functions of L1 just by asking the opinions of the learners. The question thus arises is 'Is it valid just to ask the learners to give their views on the topic?' The inconsistency of what S5 said and what S5 did suggests that second language learners can present one view but do the other. In other words, what the learners say may not be consistent with the practice.

Regarding the opinion that using L1 is 'faster', the following interview of S9 from Group One also includes a similar idea. In Text 4.8 Interview 6 (b), S9 is comparing his previous English learning in AMES, where there was an English-speaking teacher with adult migrants learners from different cultures, with the present learning in the Community Centre. In Line 4, he comments, 'That means over there is slower. Here is faster.'

Text 4.8
Interview 6(b)
Interviewee: S9 from Group One Level One

1.Interviewer: *Nei jau mo hae AMES hok Jingmen?* (Have you studied English language in AMES?)
2. S9: *Jau, Jau, Jau. Ng bak jet sep go zung.* (Yes, yes, yes. Five hundred and ten hours.)

3. Interviewer: *Go dou soeng tong tung hae ne dou soeng tong jau me ng tung a?* (What is the difference between learning English here and there?)

4.S9: *Go dou ne, zau jau go dou at bik dou nei. Zik hae, ne dou nei zau fai tsey. Ng sik zau men zau ho ji gai sik. Go dou zau man. Zau jiu men, tae sin sang se lo. Hae a. Nei ng sik go go zi a ma, zau jiu tsa fai jik tung. Zik hae go dou zau bei gao man dik. Ne dou zau fai dik lo.* (There. They can 'pressure' you to learn. That is, here [learning] is fast. If not knowing just ask the teacher. Then [we] know the meaning. [Learning over] There is very slow, have to ask, watch the teacher write. Oh yes, if you don't know the words you have to check the electronic dictionary. That means over there is slower. Here is faster.)

5.Interviewer: *Zik hae hae go dou nei dou dai go gei hey.* (That means you brought along the electronic dictionary.)

6.S9: *Hae a. Dai go gei hey. Jen qae jau hou do zi ng sik ga. Lou si gao jau gao dek hou fai.* (Yes. Brought the electronic dictionary along because there were many words I did not understand. The teacher was teaching very fast.)

7.Interviewer: *So ji bin zo nei zau dou hae kao zi gei tsa Zungmen.* (So you had to rely on checking the Chinese [bilingual dictionary] yourself.)

8.S9: *Tsa Zungmen lo. Zy jiu ming bak go go zi. Sey jin dou ming, dan hae ming dek ng hae gem tsing tso.* (Checked the meaning in Chinese, mainly to understand the words. Although I had an idea of the meaning yet not too clear.)

9.Interviewer: *Zik hae ng hae gem tsing tso.* (That means not very clear [about the meaning]?)

10.S9: *Hae a. Nei joeng jau tsea. Go joeng jau tsea a ma. So ji zey hou dou hae tsa zi din.* (Yes. It seemed to be meaning this and it seemed to be meaning that. So at last [I] had to check the dictionary.)

11.Interviewer: *Zey hou dou hae tsa zi din.* (At last [you] checked the dictionary.)

12.S9: *Dan hae nei dou zau fai tsey a ma. Zik hak ho ji zi dou a ma. So ji geng hae hou dik la.* (But here it is quick. Knowing it at once. Therefore of course this is better.)

S9 raises a few points which are worth noting. Firstly, when S9 was taught in an English only classroom, he had to bring along an electronic dictionary so that he could check for the L1 meaning (Line 6). Secondly, even though he had an idea of the meaning, he still had to check for the L1 meaning because the meaning was not too clear (Line 8). He says, 'It seemed to be meaning this and it seemed to be meaning that.' (Line 10). Thirdly, using L1 means 'knowing it at once' and therefore it is quick (Line 12). S9 comments that the present learning with the use of L1 is 'better' (Line 12).

In Interview 6 (c), S9 goes on to comment that even in AMES the learners did not speak English all the time because of the low proficiency of the learners.

Interview 6(c)

1. S9: *Go dou dou ng hae tsyn bou gong Jingmen ge. Bet gwo go dou hae jau dik ng tung ge jet dik ge peng jau. Dou hae gong siu siu. Jen wae gong dek dim dou ng sae lae la.* (There, not speaking English all the time. But there we had some different friends. Only spoke a little [English]. Because if [they] spoke well, they didn't need to come [to learn English].)

In Interview 6 (d), S9 again makes the point that the use of L1 helps to know the meaning. Using L2 to explain, S9 still had to check for the L1 meaning.

Interview 6(d)

1. Interviewer: *Zik hae Zungmen hae bong zo zi dou go ji si.* (That means using Chinese helps you know the meaning.)

2. S9: *Zik si ho ji zi dou hae me. Zey geng jiu hae zik si gai sik dou go go ji si hae me.* (Immediately [I] can know what it is. The most important is to explain the meaning straight away.)

3. Interviewer: *Zik si ho ji hou tsing tso zi dou hae met lae ge.* (Immediately [you] can know clearly what it is.)

4. S9: *Jingmen ne, gai zo go go zi zung jiu tsa zi din lo. Gem zau ne dou bei gao hou dik lo.* (Using English to explain, after explanation we still have to check the [bilingual] dictionary. In this way it is better to study here.

The view of S9 here is that it is better to learn in a class where L1 can be used for explanation because immediately he can know clearly what it is. Using L1 means 'knowing it at once' and therefore it is 'quick'. Using English to explain gives him an idea of the meaning, but he still has to check for the L1 meaning to make sure he has not misunderstood the meaning.

To sum up, the two learners, S5 from Group Two and S9 from Group One have mentioned that using L1 is 'faster' than using L2, and it is 'quick' because of 'knowing it at once'. These views can help to understand some of the L1 use from the classroom discourse data which are discussed in Chapters 5, 6 and 7.

4.2.4 Using L1 for memorising the pronunciation

For adult second language learners, speaking with correct pronunciation appears to be a problem for them. In the interview, S11 talks about her problem in speaking English, and she mentions that her daughter learnt to speak and read English very quickly with the help of phonetics in an English-speaking-only learning environment. The point to note is that S11 comments that her daughter can read, but does not understand the meaning.

Text 4.9

Interview 8(a):

Interviewee: S11 from Group One Level One

1. S11: *Ng zi dim joeng hey biu da?* (Don't know how to express [in English].)

2. Interviewer: *Dou hae gong ng dou?* (Still can't speak well?)

3. S11: *Dan hae tsoet zo lae zi hou, key hey zo go dik Jingmen ban. Key zau hok dek hou fai tsey. Hae ji men ban zau gao dou key dim joeng gong, zau hok dek hou fai.* (But when my daughter came out [from China], she went to the English class. She learned very fast. In the immigration class she learned how to speak. She learned very fast.)

4. Interviewer: *Zau hae soeng bou tung dik ji men ban?* (Go to the ordinary immigrant [English] class?)

5. S11: *Key go dik hae giu zou me Jing jy ge..* (They are called what English...)

6. Interviewer: Ah, Intensive Language Centre.

7. S11: *Go dou tsyn bou Jingmen ga, mou Zungmen ga. Ngo go ney hok go di tsyn bou Jingmen ge. Mou Zungmen ge. Ng bei fan jik.* (Over there all are in English, no Chinese. My daughter learns only in English. No Chinese. Translation is not allowed.)

8. Interviewer: *Hou fai zau hok dou.* ([She] learns very fast.)

9. S11: *Hou fai zau hok dou. Hou tsoi hey hok zo go dik gwok zae jem biu. Jet tae dou zau sik duk. Key sik duk dan hae key ng ming go ji si. Key sik duk.* (She learns very fast. Luckily she has learned the phonetics. Once she looks at the words she knows how to read. She knows how to read but she does not understand the meaning. She can read.)

The comment made by S11, that her daughter knows how to read but does not understand the meaning, is of interest. According to Vygotsky (1962:5), word meaning is both thought and speech. A word without meaning is an empty sound, no longer human speech, and meaning is an inalienable part of word or language. Smith (2004) emphasises the priority of meaning in reading. In his article 'Texts, Textoids and utterances: writing and reading for meaning, in and out of classrooms', he thinks of the notion of meaning not just as something in texts or language, but as a social event (Smith, 1993). The present study argues that learning the second language is not just learning how to read out the words, but the second language learner needs to be able to understand the meaning, which enables them to use the language for application in appropriate context.

When S11 is asked why her daughter 'learns so fast' but she learns so slowly, S11 explains that she is an adult learner who has bad memory. She then talks about how she tries to memorise the L2 words with the use of L1. For each syllable of the L2 word S11 uses one Chinese word that has similar sound for memorising. She demonstrates how she uses three individual L1 words to memorise a three-syllabled L2 word 'one-hun-dred'.

Interview 8(b)

1.Interviewer: *Gem dim gai key hok dek gem fai nei jau hok dek gem man ne?* (So why is it that she could learn so fast and you learn so slowly?)

11.S11: *Dai jen ne. Sae lou go wen ding hou do. Gei dek hou tsa. Hou tsa a. Ngo hae uk kei se zy 'bing soeng' a, gem joeng bui. Tung mai jau go Zungmen jik jem gem joeng gei, sou zi a.* (I'm adult. Children are more steady. [I have] bad memory, very bad memory. At home I wrote down 'fridge', to recite [the word]. I also use Chinese to help to remember the sound, such as numbers.)

12.Interviewer: *Jik go go jem 'bing soeng' gem bo?* (To write down the sound for 'fridge'?)

13.S11: *'One hundred' gem, ngo mae se 'wen', 'dai hun' go 'hun', 'dred' zau se go 'zoek', one hun-dred. One thou-sand. Gei zy go go jem. Jung bak wa gei zy go go jem.* ('One-hun-dred', I write 'revise [wen]', 'boss [hun]' from 'big boss [dai hun]', 'dred' I write 'wear [zoek]', 'one-hun-dred'. One thou-sand'. Memorise the sound. Memorise the sound with Cantonese.)

Many adult learners claim to have a bad memory which makes them unable to remember the correct L2 pronunciation. L1 is like a resource to help them memorise the sound or the pronunciation. S11 is one of those second language learners who finds it hard to memorise the pronunciation and does not feel confident in speaking English.

Vygotsky (1978:51) uses an analogy to talk about the process of memorising. He states that when a human being ties a knot in her handkerchief as a reminder, she is constructing the process of memorising by forcing an external object to remind her of something; she transforms remembering into an external activity, and this demonstrates the fundamental characteristic of the higher forms of behaviour. This notion of memorising is helpful in understanding why the second language learners make use of the L1 to help remembering the L2 words. With the use of L1, the learner constructs the process of memorising, and L1 is a temporary link through which the learner remembers the L2.

From the learners' point of view, using L1 to help memorise some of the L2 pronunciation is a strategy that they could use to solve their bad memory problem. The point to note is that this might not be the only strategy to solve the problem but this could possibly help to relieve some of the anxieties of adult learners in L2 learning.

4.3 A summary of Chapter Four

To sum up, from the learners' view, the use of L1 at least benefits in four aspects, for understanding, for thinking, for knowing the meaning at once, and for memorising the pronunciation. Among these four aspects, many of the learners express that L1 is necessary for the understanding of L2. Even though S5 from Group Two holds the view that using L2 to learn L2 is better, she keeps on using L1 to ask for the L2 meaning. Language and meaning are inalienable. Knowing the meaning is essential for learning a language. For second language learning, there are many different ways to get the meaning through to the learners, but from the learners' view discussed above, the use of L1 to explain or to know the meaning is preferred. The reasons given are that using L1 is 'faster' and 'clearer'.

For the use of L1 for thinking in L2 learning, two slightly different views are expressed. Some learners expressed that they needed to use L1 for thinking, while other learners expressed that they only used L1 for thinking for those words or sentences they did not get used to, but not for those that they had already got used to. This indicates that L1 is just like a tool for the learners who can choose to use it when they need it and can also choose not to use it if they can do without it.

From the learners' view, L1 seems to be a useful tool for learning L2. In fact, all of the interviewees, including those from Group Discussions, welcome the use of L1 for L2 learning except S5 who says that using L2 to learn L2 is better (Text 4.7 Interview 2 (a) Line 6). However, in practice, S5 often uses L1 for word meaning. This raises the concern that what the learners say can be different from what the learners do in practice. The following chapters, Chapter 5, Chapter 6 and Chapter 7, discuss the classroom discourse data which give an authentic view of how the second language learners use L1 in practice.

Chapter 5 The use of the first language for active construction of knowledge

The present study investigates how the first language is used and how it builds into the second language development. After the discussion of the background information of the learners and the learners' view of L1 use, it is necessary to discuss and analyse the classroom discourse data. Careful attention is given to the use of L1 for potential development of L2, and after taking into consideration all of the data, Chapters 5, 6 and 7 have been developed for analysis and discussion of data. Each chapter looks at some particular ways of using the first language. Chapter 5 focuses on the use of the first language for active construction of knowledge, Chapter 6 discusses the use of the first language as a tool for thinking and learning, and Chapter 7 investigates the use of the first language for support and encouragement. Episodes from various lessons are used as examples for illustration and for discussion. For the purpose of discussion, the present study attempts to use different examples from the data to illustrate different points. The point to note is that although certain episodes have been selected for illustrating certain L1 use, these episodes are not exclusive of other L1 uses.

The data of the present study suggest that with the mediation of L1, some learners are able to work out the meaning of the L2 words and to actively construct the knowledge of L2. Some of the learners have some prior knowledge of the language structure, and with the use of L1, the learners are able to raise questions about the L2 language structure. This linguistic awareness is shown to be an attempt to bridge the gap between the prior knowledge and the new knowledge of L2. The data also suggest that some students use L1 in the form of private speech with which the learners attempt to understand the L2 words.

In this study, the Vygotskian theory, which is based on the concept that human activities in cultural contexts are mediated by language and other symbol

systems, is used in the explanation and understanding of the data of this study. The Vygotskian perspective provides a rich and multifaceted theory to explain the role of L1 in the active construction of knowledge in the L2 learning. 'The power of Vygotsky's idea lies in his explanation of the dynamic interdependence of social and individual processes..... In contrast to those approaches which focused on internal or subjective experience and behaviourist approaches which focused on the external, Vygotsky conceptualised development as the transformation of socially shared activities into internalised processes (John-Steiner & Malin, 2002: 3)'. The notion of social and individual processes provides a new perspective in explaining learning and development and it provides insight for the use of L1 in the learning of L2

Based on the work of Vygotsky, Mercer (1995) is interested in the guided construction of knowledge, how language is used to create shared understanding, and how teachers and students go about helping each other in the classroom. Mercer explores interaction in the classroom from a historical, social and cultural perspective. Following the Vygotskian perspective, the present study, which uses data collected from the second language classroom, is to argue that the adult learners use their first language to interact and to create shared understanding that helps to construct the knowledge of L2.

In order to find out how the first language is used to create shared understanding and to construct knowledge in L2, some episodes from the data have been selected for scrutiny. In this chapter, for the convenience of discussion, the data are discussed under the topics of (1) Active construction of knowledge in L2 learning; (2) Metalinguistic awareness, and (3) Using L1 as private speech, a cognitive tool.

5.1 Active Construction of Knowledge in L2 Learning

From the data, social and individual processes are carried out in the second language classroom. The use of L1 appears to be not just an end in itself, but part of

the learning process for active construction of knowledge in the learning of L2. Construction means that 'new knowledge is acquired on the basis of old knowledge structures. Already available knowledge provides the categories, schemata, strategies and skills needed to understand new information and to integrate it into the existing knowledge structures' (Leseman, Rollenberg, and Gebhardt, 2000:104).

In the present study, it is argued that the construction of knowledge is developed through social and individual processes with the mediation of L1. In order to discuss further the use of L1 for active construction of knowledge, the following episodes from the data are used for discussion .

From the data of Group One (Level One), the following episodes have been selected for discussion of the use of L1 for active construction of knowledge in L2 learning.

Text 5.1.1

Episode 1.1.3

Students	Teacher	Comment on the use of L1
1.	This one, the whole thing is called hand [Pointing to the hand.]and then the whole thing [Pointing to the arm.] is called arm.	The teacher goes through the different parts of the body by pointing at the appropriate parts.
2.S12:Arm		
3.	Actually this part is called upper-arm	

	[Pointing to the upper part of the arm.]	
4.S12:Upper arm, 'upper' *zik hae* ? (what is 'upper')		S12 asks the meaning for 'upper'.
5.	Upper *zik hae soeng min ge* (is upper).	The teacher responds to S12.
6.S12:*Soeng min a?* (Upper?)		S12 makes sure that she has got the correct meaning.
7.	This part [Pointing to the lower part of the arm.] is called lower arm.	
8.S1:Upper *zik hae bin do a*? (which part is 'upper'?)		S1 asks which part upper arm is.
9.	This part. [Pointing to the upper arm.]	
10.S4:[To S1] *Soeng min a*! (Upper!) *Zik hae sau bei a.* (That means upper arm.)		S4 tells S1 the location and the meaning of 'upper arm'.
11.	This part [Point to the upper arm.] upper arm. This part [Pointing to the lower arm.] is called lower arm. So the whole: arm. This is called upper arm. This	The meaning of 'upper arm' seems to have been established, and then the teacher switches to L2 to repeat the words and to give applications in the context of 'health

	is lower arm. If you want to say I have pain in my upper arm or I have pain in my lower arm. [Pointing at the appropriate parts.]	problems'.
12.S6:Lower arm. [Touching his lower arm]		S6 says 'lower arm' and could indicates the appropriate part.
13	Yes.	
14.	So upper mean *soeng, shang, shang bian* (upper, upper, upper part).	The teacher gives the meaning of 'upper' in both Cantonese and Mandarin.
15.S8: [calls out excitedly] *Shang! Shang!* (Upper! Upper!)		S8 responds in Mandarin.
16.	*Shang bian* (Upper part), and lower is *xia, xia bian* (lower, lower part).	The teacher gives the meaning of 'upper' and 'lower' in Mandarin.
17.S4:*Sau bei*(arm) lower *ne go sau gwa* (this one is '*sau gwa*'). *Ne go bei.* (This [upper one] is '*bei*')		S4 further explains the particular names for 'lower arm' and 'upper arm' in Cantonese.

In Episode 1.1.3, with the use of L1 the students construct the meaning of 'upper arm' and 'lower arm'. The point of interest is that in the context that L1 does

not usually make a distinction between upper arm and lower arm, and without the prior knowledge of the word 'upper', students have had difficulty understanding the word 'upper' or 'upper arm', even though the teacher has used gesture to point towards the upper part of the arm.

In the teaching of L2, the use of gesture is a common teaching strategy used by L2 teachers, who try to link terms to the objects by pointing to the objects, but sometimes it may not be clear enough just by pointing, especially when linking terms that are more subtle or abstract in nature. In this episode, the use of gesture seems to be unsuccessful and the use of L1 is evidenced to be a more effective tool.

With the use of gesture, the Chinese adult learners could possibly understand the meaning of the physical object, 'arm' (Line 2), but not the meaning of 'upper'. This is evidenced from Line 4 and Line 8 that S12 and S1 use L1 to ask for which part 'upper' is but not asking about 'arm'. In other words, they have understood the meaning of arm, but have problems in getting the meaning of 'upper'. However, in the Chinese language, arm (*shou bei*) is usually addressed as a whole and it is seldom referred as upper arm (*shang bei*) and lower arm (*xia bei*). Therefore even though the teacher uses gesture to show the meaning, the students are unable to comprehend the adjectives 'upper' and 'lower'.

From the data, the direct translation into L1 is evidenced to be a more effective tool to help students understand the L2 word 'upper' than the use of gesture. The use of L1 here is more than just direct translation, it is an effective tool to communicate the idea and meaning. This is evidenced in Lines 5 and 6: after the teacher uses L1 to respond to S12's question, S12 uses L1 to ensure that she has got the correct meaning. Presumably without the use of L1, S12 might not be able to express her query and to check her understanding of the L2 word.

When the meaning of 'upper arm' seems to have established with the help of L1, in Line 11, the teacher moves on to introduce the 'lower arm' by pointing at the appropriate part of the arm, with the assumption that the students have already

understood 'upper arm' and by the same token they should be able to comprehend 'lower arm' just by use of gesture. The response of S6 in Line 12 indicates that he has got the meaning.

Up till Line 13, only English and Cantonese are used, but not Mandarin. After the teacher translated 'upper' into Cantonese and then Mandarin in Line 14, in Line 15, S8, a Mandarin speaker who does not understand Cantonese, has called out excitedly, '*Shang! Shang!*' (upper! Upper!) twice in Mandarin. The response of S8 suggests that S8 has not got the meaning of 'upper' even though the teacher has used gesture to show the upper part of the arm. It is not until the teacher gives the direct translation into Mandarin that S8 comes to a sudden understanding of the word 'upper'. When S8 realises the meaning of the word was '*shang*', she calls out excitedly. This indicates that S8 has come to a sudden understanding of the meaning of 'upper'.

In this episode, a student attempts to use L1 to further construct the meaning of L2 words. In Line 10 and Line 17, S4, a Cantonese speaker, uses colloquial Cantonese, '*sau bei*' and '*sau gwa*' attempting to construct the meaning of 'upper arm' and 'lower arm'. The purpose of using the colloquial language is to unfold the prior knowledge the student has and to construct the knowledge of the L2 words 'upper arm' and 'lower arm'. The L1 word '*gwa*' means a melon. '*Sau gwa*' is used to mean the part of the arm looking like a melon. In other words the colloquial Cantonese '*sau gwa*' is figurative language that illustrates the L2 words and helps to construct the L2 words.

The data suggest that the learners use L1 to ask, to discuss, to construct and to elaborate the L2 words which are essential processes in learning L2. L1 is like an immediate tool used by the students to interact and to explain the L2 words. With the mediation of L1 the learners are able to have shared understanding and to actively construct the knowledge of the L2 words.

Text 5.1.2

Episode 1.1.13.

Students	Teacher	Comment on the use of L1
1.S6:*Zhan zai zhe li?* (Standing here?)		S6 uses L1 to ask whether he can stand there to conduct the task.
2.	What? *Kei hae ne dou a* (Stand here)? I don't mind.	The teacher uses L1 to respond to S6.
3.S6:*Ha yin bu zhun.* (Can't pronounce properly.) *Tao shi* (Head is) head, head. *Qin a shi* (Forehead is) forehead. *Tou fa shi* (Hair is) hair.		S6 uses L1 to state his problem in speaking. Then he uses L1 to say the word before saying it in English.
4.	Hair, yes.	
5.S6:Eyes. This, nose. *Kou chuang shi* (mouth is) 'mo'.		S6 again says the L1 before saying it in L2, which is not pronounced correctly.
6.	*Kou chuang*?	The teacher clarifies what '*kou chuang*' is.
7.S6: [Pointing at the mouth] *Kou chuang a.* (It's mouth.) *Zui chun,* lips.		S6 indicates what '*kou chuang*' is before saying the lips.
8.	This one is mouth.	
9.S6:Mouse.		
10.	Mouth not mouse.	The teacher tells S6 the

	Mouse *shi lao shu a* (is a mouse).	meaning of 'mouse'.
11.S6:Oh, *lao shu a* (mouse). Mouth. *Ah, na go dian nao de jiao* (Oh, that one goes with the computer is called) mouse, mouse.		S6 responds with L1 and then expresses his understanding of the 'mouse' used for computer.
12.	Mouth.	
13.S6:Mouth. *Ya chi jiao* (Teeth is called) teeth.		S6 uses L1 to say the word before saying it in English.
14.	Yes, teeth	

Episode 1.1.13, S6 uses L1 to help him to construct the L2 words when he is asked to produce L2 words by saying and pointing at the appropriate parts of the body. From Line 3 to Line 7, S6 uses L1 (Mandarin) to help him to bring out the L2 words although his mother tongue is Cantonese. He uses Mandarin to say the part of the body before he says the word in L2. For example in Line 3, *'Tou' shi* head, *'Qin a' shi* forehead, *'Tou fa' shi* hair." It is interesting to understand why S6 uses L1 to bring out the L2 words. When S6 says the words in the first language, he seems to be engaged in thought which suggests that it is an attempt to relate thought with L2 words. S6 thinks of *'tou'* and then gives the word 'head'. The use of L1 seems to play a part in thinking of the meaning and in producing the appropriate L2 words. The present study argues that via the use of L1, S6 has gone through a process in an attempt to construct the L2 words.

From Line 8 to Line 13, after the teacher has helped S6 to pronounce the word 'mouth', S6 becomes conscious of the words 'mouth' and 'mouse'. He then uses L1 to say that 'mouse' is the device used with the computer. The use of L1 enables S6 to trigger his thinking and to relate his prior knowledge to identify the word 'mouse' as

a computer device which is different from the word 'mouth'. The ability to differentiate is an important part of the process of learning. In Line 11, after using L1 to express his prior knowledge of 'mouse', there is an interesting link back to L2 (English). The use of L1 possibly helps to construct the word 'mouth' and to distinguish it from the word 'mouse'. These utterances initiate cognitive dialogue (Lantolf, 1990) in which L2 words with similar sound are distinguished. The unsuccessful performance in Line 5 is transformed into positive knowledge (Line 11 and Line 13), which indicates a point of development for the participant.

The explanation of 'mouse' as a computer device is an interesting point. It reflects the thought of the learner, and his prior knowledge of the L2 word 'mouse'. It also helps S6 to build up the L2 word 'mouth' which he could pronounce correctly in Line 13. If without the use of L1, S6 might not be able to express his thinking which appears to help him to construct the word 'mouth' and to distinguish it from 'mouse'.

From the data of Group Two Level Two, the following episodes have been selected for discussion of the use of L1 for construction of L2 knowledge.

Text 5.1.3

The following episodes are from the Group Two data which indicate that with the mediation of L1 the learners construct the knowledge of L2. It is for the convenience of discussion that the utterances are transcribed and grouped into four episodes.

In these four episodes, the discussion between the teacher and students to work out the meaning of 'China tour departs September' demonstrates how L1 is used among the learners to construct the knowledge of L2. The text is 'Tai Chi. Affiliated with Beijing Institute of Physical Education. Tai Chi and Yoga Centre. Relax with tai chi. Beginner classes starting the week Monday 18 - 22 July at Paddington, Clovelly, Glebe, Stanmore, Bankstown. Special family discount. Free

introductory lesson. China tour departs September. Places still available. All inquiries phone Ursula 9293 6955 or 018 9788 2243.' (Brynes, Davidson, Mason, Moar, Moar, and Whyte, 1996:69).

Episode 2.1.9

Students	Teacher	Comment on the use of L1
1.	OK. Now. Look at the information from the ad written in the box. So, what course is it?	
2.S5:Taiji.		
3.	And starting date?	
4.S5:July, Monday, eighteen to twenty-two July.		
5.	The level?	
6.S5:Beginners.		
7.	The beginners level. Just starting, isn't it? Beginners level, the starting level. So do you need to pay fee?	
8.S5:The first lesson is free.		
9.	Yes. And then how much is it? Any way, family goes together they get the discount. All right. They didn't mention how much.	

	[Pause.] All right, anyway, you are expected to pay. Maybe after the first lesson they will tell you how much you need to pay. So, venue? What does venue means?	
10.S5:Location.		
11.	The place.	
12.S5:The place.		
13:	Where does it happen? So venue, location, the place. So at... [pause] Paddinton, Clovely, Glebe...	
14.S5:Stanmore.		
15.	Stanmore, Bankstown. How many places altogether.	
16.Ss:Five.		
17.	Five, Five different places. So, yes, who to contact? Contact person?	
18.S5:Ursula, Ursula.		
19.	Ursula.	
20.S1:Ursula.		

In Episode 2.1.9, when the teacher asks questions regarding the Taiji Course, the students respond to all the questions with correct answers in L2. Throughout the

episode only L2 has been used. The correct responses to the questions seem to suggest that the learners probably understand the text of the advertisement.

However, in Episode 2.1.16, when the teacher asks if there are other questions from the advertisement, S7 uses L1 to clarify the meaning of 'China Tour departs September'.

Episode 2.1.16

Student	Teacher	Comment on the use of L1
1.	OK. Any other questions from here?	
2.S7:China Tour departs September. *Shi bu shi dao Zhong Guo lu xing a?* (Is it going to China for a tour?)		S7 uses L1 to ask if 'China Tour departs September' means to be going to China for a tour. S7 uses L1 to clarify the L2 meaning.
3.	I think there is a tour that have got the Chinese people who are in this Beijing Institute of Physical Education coming here...	
4.S7:Departs...		
5.	Oh, they are going...Oh, departs September. They are going there to learn it.	
6.S8:Yes.		

7.	All right.	
8.S7:Departs.		
9.S1:Someone going to China.		
10.S7:The members.		
11.S8:Tour to China.		
12.S7:This is 'tour to China'. So the members can go there.		
13.S1:China tour.		
14:S5:China tour in September.		
15.	But they didn't mention that if they have to learn it in China because they say Paddington.	
16.S8:Just a tour.		
17.S7:It's part of the course.		
18.S8:Not course. They got the tour as well.		
19.	So it's another thing. So after the course, maybe.	
20.S8:Not part of the course.		
21.	So eighteen to twenty-second in July, that is the course, and that finishes. Only four ...five days. Five days	

	course.	
22.S8:Yes.		
23.	And then after that they arrange a tour.	
24.S8:Yes, September, two months later.		
25.	Maybe to visit the Taiji in the Institute of Physical Education in Beijing.	

In Episode 2.1.16 Line 2, S7 switches to L1 to clarify the L2 statement. The statement 'China tour departs September' has been a bit confusing since it does not mention who the tour is for and how it is related to the course in Paddington.

This episode indicates that after the initiation of S7 with the mediation of L1, various learners (S1, S5, S7 and S8) have attempted to use the L2 to work out the intended motive of the advertisement. This process of using language to discuss the meaning of the text is an important process in the learning and understanding of L2.

The point to note is that from Line 3 to Line 25, the utterances are in L2. Theories seem to suggest that those with exclusive use of second language are competent second language speakers. However, the data in this episode indicate that S7, who is competent in using L2 to resolve the problem (Lines 8, 10, 12, 17) does use L1 to initiate the problem (Line 1). It suggests that S7 is competent in using both languages and would be able to use both L1 and L2 as active thinking tools for the construction of L2 knowledge.

From the data, it is interesting to note the implicit ritual in utterances. When someone has asked in L1, the response would probably be in L1. However, although S7 has asked in L1 (Episode 2.1.16, Line 2), the teacher does not respond in L1, expecting the students would be competent to use L2 for simple explanation. Starting from Line 3, after the teacher's switch to L2, it follows the implicit ritual that the rest of the dialogue is conducted in L2. This suggests that the teacher plays a significant role in guiding and directing the students in L2 learning. When the teacher is competent in both L1 and L2, the L2 knowledge can be actively constructed through the use of language (including L1 or L2), which serves as a mediation for learning.

Episode 2.1.17

Students	Teacher	Comment on the use of L1
1.S1:China tour departs. *Zhong Guo guo lai hai shi qu Zhong Guo?* (Come from China or go to China?)		S1 uses L1 to ask if 'China Tour departs September' is to come from China or to go to China.
2.	*Qu Zhong Guo*. (Go to China.) China tour.	The teacher responds to S1 that it is 'go to China'.
3.S1:*Qu Zhong Guo.* (Go to China.)		S1 says the meaning in L1.
4.	*Qu Zhong Guo*. (Go to China.) Departs September. Yes?	The teacher reassures the meaning.
5.S1:*Jiu yue fen qu Zhong Guo.* (Go to China in September.)		S1 uses L1 to explain 'China Tour departs September'.
6.S8:*Dui a.* (That's		S8 agrees with S1.

right.)		
7.S2:*Wei shen me shuo* departs *a?* (Why does it say departs?)		S2 uses L1 to ask why it says 'departs'.
8.S5:[To S2.] *Hao xiang lei kai yi yang.* (It's like going away.)		S5 uses L1 to explain to S2.
9.S1:*Shang mian.* (Above.) Places still a...*Hai you kong wei. Hai you kong wei.* (Places still available. Places still available.)		S1 uses L1 to talk about her understanding of 'places still available'.
10	Places still available. Yes. *Hai you kong wei.* (Places still available.)	The teacher responds to S1.
11.S5:*Hai you kong wei.* (Places still available.)		S5 says the meaning in L1.
12.	Yes. Places still available.	
13.S2:*You kong que.* (Have vacancies.)		S2 uses another way to interpret in L1.

Following the L2 utterances in the last episode, the utterances have switched to L1 in Episode 2.1.17. S1 switches to L1 to consider the meaning of the statement 'China tour departs'. She asks if that means to be coming from China or going to China. Then various learners use L1 to discuss further in an attempt to resolve the problems arising from the advertisement.

The use of L1 in Episode 2.1.17 enables S1 to confirm that it is 'Go to China in September' for which S8 uses L1 to show his agreement (Line 6), and S2 asks why it uses the word 'departs', which is responded to by S5 who explains the meaning of 'departs' in L1 (Line 8). It also enables S1 to express her understanding of 'places still available' (Line 9), and S2 to give an alternate meaning in L1 (Line 13).

In learning a language, it is important for the learners to comprehend the meaning of the words, not only the meaning by itself, but the meaning used in a particular social context. In this episode, with the use of L1, the learners have considered the individual meaning of 'departs' and 'places still available' and their contextual meaning used in the advertisement.

Comparing this episode with the last one, the use of L1 seems to suggest that when the learners are engaged in more complicated concepts or ideas, they use L1 for discussion. In this episode, even though the teacher attempts to switch from L1 to L2 (e.g. Line 2, Line 4) the students keep using L1 for interaction to resolve more complicated problems.

Episode 2.1.18

Students	Teacher	Comment on the use of L1
1.S7:*Dan shi ni kan la.* (But you look.) *Shi* China tour. (It's China tour.) *Yin wei ta men liang ge dou shi xie ping, shi ma?* (Because both lines are written parallel in the same format, aren't they?)		S7 uses L1 to express her understanding of the ad.

2.	*Dou shi shen me*? (What are they?)	The teacher responds to S7.
3.S7:*Xie ping la.* (the same format.) China tour. Places still available. *Liang hong dou shi.* (Both lines are.)		S7 uses L1 to talk about her awareness of the style of writing for the two lines.
4.S2:*Liang hong dou shi xie de.* (Both lines are in hand-written form.)		S2 talks about the same idea.
5.S7:*Zhe ge places ying gai shi tour*. (The places should refer to the tour.)		S7 uses L1 to further explain her understanding.

In Episode 2.1.18, S7 notices that the format of the writing might give some hints to the understanding of the information in the advertisement, and she uses L1 to talk about her awareness that both lines are in italics, and that they are different from the rest of the writing in the advertisement. Then S2 uses L1 to say the same idea (Line 4). With the use of L1, the learners are able to think of and to give opinions about their metalinguistic awareness in an attempt to understand the L2 information in the advertisement.

In this episode, S2 and S7 have used L1 to express their metalinguistic awareness of the words in the advertisement that these two lines are written parallel in the form of italics which indicate the close relationship of the context of the two statements. With the metalinguistic awareness, S7 reasons that the places have a close relationship with the tour departs in September and that the places refer to the vacancies for the tour.

The use of L1 to talk about the metalinguistic awareness, which will be discussed further in Section 6.2, is shown to be helpful for second language learners

to resolve problems in their learning, and during the discussion L1 is like a tool used for mediating the thinking and reasoning of the learners. The use of L1 is like an active thinking tool to reflect on learners' understanding of the text.

Episode 2.1.19

Students	Teacher	Comment on the use of L1
1.S8:This one is special for the ad for the Taiji class and they say to put this one, say China tour places still available is still have places for that.		
2.S7:*Yin wei zhe ge* places *ben lai shi* tour *de.* (Because these places are originally for the tour.)		S7 goes on with her reasoning.

In Episode 2.1.19, the point to note is that after the use of L1 for understanding the contextual meaning and for the metalinguistic awareness, S8 switches back to L2 to conclude his understanding of the two different events, Taiji Class and China Tour, in the advertisement (Line 1). The discussion in the previous episodes, much of it in L1, has led to various perspectives in understanding the advertisement and has ended up with this L2 conclusion of S8. On the other hand, S7 seems to have problems in understanding the advertisement in the beginning (Refer to Episode 2.1.16 Line 1), but through the use of L1 in discussion and with her metalinguistic awareness, she seems to have resolved the problem, and uses L1 to conclude that 'places still available' is referring to the China Tour.

These four episodes suggest that L1 has been used as a tool of thought to help the adult learners in thinking and understanding the contextual meaning of the words used in the advertisement. Through the interactions and with the use of L1, learners are able to build up their understanding and knowledge of L2. The present study argues that this process of discussion and interactions with the use of L1 and L2 is essential for learning, and for L2 development.

Text 5.1.4

The following episode refers to a text: 'Children's swimming classes. Book now for the new term commencing 25th July. We teach all levels from babies through to the competitive swimmer. A maximum number of five students to one instructor guarantees considerable attention and excellent results. Ask about our adult classes. Enquiries on 4014 4638' (Brynes, Davidson, Mason, Moar, Moar and Whyte, 1996:71).

Episode 2.1.20

Students	Teacher	Comment on the use of L1
1.	All right. No more question? Let's turn to the back of it. And then you have some work to do. Children swimming classes, all levels from baby through to the competitive swimmers. A maximum number of five students to one instructor guarantees	

	considerable attention and excellent results. OK? So ask about our adult classes. Enquiry on four zero one four four six three eight. Right, OK. So let's try to find out some of the information. So, the course?	
2.Ss:Children swimming class.		
3.	Right. So, starting date. Can you find out the starting date?	
4.Ss:Twenty-fifth July.		
5.	Twenty-fifth of July. Would you like to put that down? We're talking about here. Starting date. Can you write that down? Put down twenty-fifth of July.	
6.S2:All leeve.. All leeve...		
7.	All levels. Do you know what 'all levels' mean?	
8.S2:Starting date, after level.		
9.S5:All levels, from		

baby through to the competitive swimmers.		
10.	All right, So all levels, from baby to…	
11. S1:What is competitive?		
12.S7:*You jing zheng xing de.* (Competitive.) Competitive.		S7 uses L1 to explain 'competitive'.
13.	Yes, more or less like that.	
14.S8:*Ta shi cheng du gao yi dian de.* (It is of a higher level.)		S8 uses L1 to express his understanding of 'competitive' used in the text.
15.	Yes, competitive swimmers.	
16.S8:*Shui ping bi jiao gao yi dian de.* (Of a higher level.)		S8 further elaborates the meaning.

Episode 2.1.20 is another example of Group Two students constructing the knowledge with the mediation of L1. The teacher starts with reading aloud an advertisement for children's swimming class and then asks some questions for students to find out the information in the advertisement. The learning goes smoothly in L2 and the students do not have problem in finding out the name of the course and the starting date. When the teacher talks about 'all levels', S1 has problems with the word 'competitive'.

In Lines 12 to 16, after S7 has used L1 to explain the word meaning, S8 uses L1 to further construct the knowledge of the word and comments that it was of a higher level. The response given by S7 is like a direct translation of the word 'competitive', but S8 goes further in giving more analytical comments. In this way, students construct the knowledge with the mediation of L1.

This episode uncovers how L2 development has been brought about through discussion, and how interactions with the use of L1 among learners have the potential to result in L2 development. Following Vygotsky's developmental theory, it is hypothesised that learners can provide the same kind of support and guidance for each other that adults provide children (Forman & Kraker, 1985). The utterances of S8 in Line 14 and Line 16 provide support and guidance for other learners and have the potential to result in L2 development.

Text 5.1.5

Episode 2.2.9

Students	Teacher	Comment on the use of L1
1.	I bought one in an ordinary shop and it cost me I think seven dollars.	
2.S5:Yes, yes, where are they? In Campsie?		
3.	No. In Bankstown.	
4.S5:Yes, even in Flamington Market when I go back in the		S5 uses L1 to ask how to say souvenir.

other side close to all the restaurants in Flamington that one is. They have the sign may be go up-stair, some what they call some *gei nim ben hae dim gong a* (how to say souvenir)?		
5	Souvenir.	
6.S5:Souvenir.		S5 says 'souvenir' to herself.
7.S8:Souvenir.		S8 says Souvenir to himself.
8.S5:Souvenir shop. So I went up-stair to have a look. Also ten dollars per piece.		S5 uses the expression 'souvenir shop'.

In Episode 2.2.9, S5 uses L2 to talk about her experience of buying souvenirs, but when she could not think of the L2 word for 'souvenir' she uses L1 to ask for the L2 word. After the teacher has told S5 the word 'souvenir', in Line 6 and Line 7, S5 and S8 say the word to themselves. This is like private speech attempting to self-regulate the L2 word. In Line 8, S5 is able to construct the L2 word 'souvenir' into 'souvenir shop' which is evidenced as the active construction of knowledge. The use of L1 to ask for the word 'souvenir' results in the construction of 'souvenir shop', which is shown to be an application of what has been learned.

Text 5.1.6

Episode 2.4.6

Students	Teacher	Comment on the use of L1
1.S1:When it to have *da lei* (thunder). *Da lei zen yang jiao* (How to say 'thundering'?) *Xia lei zen yang jiao* (How to say thundering)?		S1 uses L1 to ask how to say 'thundering'.
2.	Thunder.	
3.S1:Thunderstorm.		
4.	Thunderstorm. So what do you want to say?	The teacher prompts S1 to construct her sentence.
5.S1:Lightning.		
6.S2:Lightning.		
7.S1:Thunderstorm.		
8.	So what do you want to say?	The teacher again prompts S1 to construct her sentence.
9.S1:*Wo jiu shi shuo 'lei da le hao ji ge zhong ran hou xia yu la'.* (I want to say 'Thunder has been going on for several hours and then it rains.)		S1 uses L1 to state what she wants to say.
10.	All right.	

11.	So you mean the thunder comes first, isn't it?	
12.S1: Yes.		
13.	Use 'after'.	The teacher guides S1 to construct the sentence.
14.S5:Yes. After thundering it rains.		S5 has constructed the sentence with 'after'.
15.	So there is a sequence that thunder comes first and then the rain. After... what?	
16.S5:The thunder.		
17.	...and which one comes first, the lightning or the thunder?	
18.S1:Lightning.		
19.	Lightning comes first, isn't it? Light comes first. Usually the light then boom boom boom. [The sound of the thunder]	
20.S5:*Shan dian ran hou da lei a.* (It's lightning and then thunder.)		S5 uses L1 to state the sequence of lightning and thunder.
21.	After the lightning and thunder... [pause]	
22.S5:After the		

lightning and thunder the rain comes.		
23.	...the rain comes. This is also as a usual case. After the lightning and thunder the rain comes. So I use 'comes' because it's a usual case.	

In Episode 2.4.6, the students participate in the construction of the sentence with the use of L1. This episode starts with S1 trying to use L2 to construct her sentence, but when she could not think of the L2 word for 'thunder', she uses L1 to get support from the teacher (Line 1). After the teacher has said 'thunder', it is interesting that S1 could construct the L2 word 'thunderstorm' (Line 3). It might be that the use of L1 to ask for the L2 word 'thunder' helps S1 to recall the compound word 'thunderstorm'.

In Line 4 and Line 8, the teacher prompts S1 to make her sentence with the L2 words that she has just asked for, but instead of making the L2 sentence directly, S1 uses L1 to express what she wants to say (Line 9). The use of L1 here indicates that S1 may not be ready to construct her sentence in L2. The teacher then uses scaffolding strategies to work out with S1 the sequence of thunder and lightning and guides her to use 'after' to tell the sequence of things that may happen in a thunderstorm. It is S5 who uses L1 (Line 20) and then L2 (Line 22) in an attempt to construct the sentence that S1 might mean to say.

The point to note is that the use of L1 in this episode helps to construct the L2. With the use of L1 and with the guidance of the bilingual teacher, S1 and S5 have been able to be involved in active participation in the construction of the L2 sentence. This type of dynamic use of L1 helps to build into the L2 learning.

The present study argues that students learn the second language through the mediation of language or languages of which L1 is inevitably the most viable. However, in the second language learning the role of L1 has been underestimated. In the present study, the data suggest that when the second language learners are given the opportunity to use L1 as mediation, they are able to engage in active construction of the L2 knowledge. From the data, it also indicates the need to explain the rich fabric of inter-individual help that arises in social interactions. With the use of L1, second language learners appear quite capable and skillful at providing the type of help and interactions in the L2 development.

5.2 Metalinguistic Awareness

Metalingusitic awareness refers to the ability to consider language not just as a means of communicating with others but also as an object of inquiry. It includes not only awareness and knowledge about grammatical rules, but also awareness of the non-communicative uses and functions of language. Masny (1987:59) defines metalinguistic awareness as 'an individual's ability to match, intuitively, spoken or written utterances with his or her knowledge of language'. Vygotsky (1962:110) suggested that bilingualism facilitates certain types of language awareness and that bilingual children could transfer their own language system to the new language.

Second language research has suggested that metalinguistic awareness reflects developing second language competence (Tucker and Sarofim, 1979; Arthur 1980; Masny, 1987). In a research study, Masny (1987:70) demonstrates that the ability to recognise grammatical sentences is dependent on cognitive-related behaviour and suggests that first language competence can play a facilitative role in performing second language tasks.

In the present study, metalinguistic awareness is defined as the ability to consider or to match the utterances with one's knowledge of language which includes

grammatical rules and functions of language. The data in the present study indicate that the adult second language learners attempt to transfer their first language system to the new language. During the transfer or the matching, learners make assumptions and hypotheses with their knowledge of language, such as making the assumption that this is an adjective or that is a noun. Apart from the example discussed above in Text 5.1.3, the following episode has been selected from Group One for further discussion of metalinguistic awareness:

Text 5.2.1

Episode 1.2.22

Students	Teacher	Comment on the use of L1
1.S6: *Ngo soeng men* (I want to ask). *Jau di ng sik* (Something I don't know). *Ne go hae* 'does'. *Ne go hae* 'Do you like ...?' *Ne dou ng sae ga* 's'. (This is 'does'. This is 'Do you like'. This does not need to add 's'.) [S6 points at the appropriate words]		S6 compares the questions 'Does he like...?' and 'Do you like...?' with the use of L1
2.	Yes, *Ne dou ng sae* (This does not need it).	The teacher uses L1 to explain why 'Does he

	Jen wae ne dou ji jing yau go 's' (Because this has already had an 's'). *Nei gei dek? Gei de tau sin hoi tsi jau go* 'verb' *a.* (You remember? Remember at the beginning there is a verb.)	like ...?' does not need 's' for the verb 'like'.
3.S6 *Ne go* 'does'(This word 'does'). *Zik hae tsin bin jau, so ji hau min ng sae ga* 's'. (It is because there is [an 's'] in front so there is no need to add 's' at the back.)		After the explanation of the teacher, S6 uses L1 to talk about his understanding of why 's' is not needed.
4.	*Hae. Tsin bin ji jing jau* (Yes. There is an 's' in front). *Dong nei wa* (If you say) 'He' 'He likes'	The teacher uses L1 to confirm what S6 has said and to further illustrate the use of third person singular.

In Episode 1.2.22, S6 uses L1 to construct L2 knowledge and he tries to work out the structure of a question which involves the English grammar rule of third person singular. The interesting point is that S6 attempts to match his metalinguistic awareness with his learning in class. S6 certainly has learned the grammatical rule that third person singular needs to add 's' and so from 'he likes' he makes the assumption that the question form should be 'Does he likes...?' What the teacher has

written on the white board, 'Do you like...?' and 'Does he like...?', does not match S6's metalinguistic knowledge. S6 then uses L1 to ask and to clarify his query.

The data suggest that S6 has the metalinguistic awareness that in English language 's' is added to the verb used with third person singular and is different from his L1. With this grammar rule, he raises the question why it is not 'Does he likes...?' With the use of L1, S6 is able to inquire about the application of this grammar rule. In Line 1, S6 uses L1 to say 'I want to ask.', and 'Something I don't know.' which indicate the intention of S6. This suggests that to be able to use L1 to ask and to clarify is an essential learning process which could help adult learners build up the knowledge of L2.

From the data of Group Two, the following episodes are selected for the discussion of metalinguistic awareness.

Text 5.2.2

Episode 2.1.8

Students	Teacher	Comment on the use of L1
1.S5:Fibre, *jau hae* adjective *lae ga* (is also adjective)? *Wan shi* noun *a* (Or noun)?		S5 uses L1 to ask if fibre is an adjective or a noun.
2.	Fibre *jiu shi* (is) noun.	The teacher responds.
3.S5:Fabric *jau hae* adjective *a?* (Is fabric an adjective?)		S5 asks if fabric is an adjective.

4.	*Ke yi shuo* ([You] can say) 'High fibre bread'.	The teacher gives an application of 'fibre'.
5.S5:Fabric *ne*? Fabric *hae* adjective? (What about fabric? Is fabric an adjective?)		S5 asks again if fabric is an adjective.
6.	Fabric? No. It's a noun.	
7.S5:Fabric *dou hae* noun *a*? -i-c bo, -i-c *ho tsi hae* adjective a! (Fabric is also a noun? With i-c. With i-c it looks like an adjective.)		S5 tries to reason that fabric should be an adjective.
8.	What kind of fabric is that? 'Fabric' is a noun.	
9.S5:Noun *lae ga*? (Is it noun?)		S5 queries if fabric is really a noun.

Episode 2.1.8 reveals that S5 is using her linguistic knowledge to help to identify the part of speech of the two L2 words, 'fibre' and 'fabric', which she has mixed up. In this episode, S5 is keen to find out if these two words are adjectives or nouns. She assumes that 'fabric' should be an adjective because she knew many adjectives ended with '-ic'.

The assumption that an adjective ends with 'ic' is of interest here. This suggests that S5 uses her prior knowledge to make links with the new learning. Although this assumption does not apply to the L2 word 'fabric', the process of verbalising the prior knowledge and attempting to apply the grammar rules to the new learning is an important process of learning and might result in L2 development. The

use of L1 facilitates S5 to express her metalinguistic awareness and to clarify her query in learning L2.

Text 5.2.3

Episode 2.1.23

Students	Teacher	Comment on the use of L1
1.S5:*Key ne go* (This one) instructor guarantee. Guarantee *hae* verb *lae ga, hae mae a*? (Guarantee is a verb, isn't it?)		S5 uses L1 to ask if guarantee is a verb.
2.	Guarantee? Yes, it's a verb.	The teacher uses L2 to confirm what S5 says is correct.
3.S7:Guarantee. *Bao zheng*. (Guarantee.)		S7 uses L1 to say the meaning of 'guarantee'.
4.S8:Guarantee. It's a verb.		
5.	So it says 'a maximum number of five students to one instructor guarantees considerable attention'. So what is the subject?	
6.S5:It's together. 'A		

maximum number of five students' is subject.		
7.	That is the subject and then 'guarantees considerable attention ...'	
8.S8:*Zhu yu, fu yu.* (Subject, object.)		S8 uses L1 to say subject and object.
9. S2:*Hou mian zhe ge hao xiang shi xing yong ci, hai shi fu ci.* (The latter one looks like an adjective or an adverb.)		S2 uses L1 to express her opinion.

Episode 2.1.23 is another example the students use L1 to discuss the grammar of the text. In this episode, the teacher uses only L2 but various students have used L1 to express their metalinguistic awareness.

It starts with S5 uses L1 to ask if 'guarantee' is a verb. The teacher uses L2 to respond that it is a verb. It is interesting that S7 then gives the meaning of 'guarantee' in L1. This seems to suggest that giving the meaning of guarantee might help to think of the functional use of the verb 'guarantee'. S8 then switches to L2 to show his agreement that it is a verb (Line 4). After the teacher has used L2 to ask which one is the subject, S5 uses L2 to give her response.

This episode suggests that after the use of L1, students are able to switch back to L2 for further discussion. Even though in Line 1 S5 has used L1 to initiate the use of grammar, in Line 6 she is able to use L2 to respond. This is to say that the use of L1 is like a tool to trigger the thinking and that the use of L1 does not stop the learners from using L2 for further responses.

It is worth noting that the utterances switch back to L1 in Line 8 when S8 says 'subject' and 'object' in L1. Then S2 goes on to use L1 to say that the latter one looks like an adjective or an adverb. This suggests that from time to time the adult learners switch to L1 to discuss the grammar point in an attempt to work out the structure of L2 in spite of the fact that the teacher uses only L2.

Text 5.2.4

Episode 2.4.8

Students	Teacher	Comment on the use of L1
1.	Yes. That's something you prefer. This 'would' is not a past tense.	
2.S1:*Shi fu ci*? (Is it adverb?)		S1 uses L1 to express her idea.
3.S5:*Ha*? (What?) *Shi fu ci*? (It's adverb?)		S5 uses L1 to show her queries.
4.	I would rather stay home. That means it's your choice.	
5.S5:*Na shi shen me ci a*? (What form of word is it?) Rather *shi shen me ci* (is what form of word)?		S5 uses L1 to ask what form of word 'would' is.
6.S1:Rather *jiu shi wo ning yuan la. Ning ke la.*		S1 uses L1 to explain the meaning of 'rather'.

(Rather is 'I would rather'. 'Would rather.')		
7.S5:*Na shi bu shi liang ge dou shi dong ci a*? (Is it both of them are verbs?) 'Rather' *shi fu ci a*? (Is 'rather' really an adverb?)		S5 uses L1 to consider which are verbs and which are adverb.
8.	'Would stay', that's the verb.	
9.S5:Rather *shi* (is) adverb.		
10.	Yes, adverb. I would rather stay... Just like you say 'I would never stay home. Never, is adverb. 'I would rather stay home' is the pattern. That means, I prefer to stay home. This is the verb [Pointing at 'prefer']. But if you use rather. I would rather stay home than... I would rather stay home than go out. OK?	

Episode 2.4.8 is another example of students using their prior metalinguistic knowledge to work out the structure of L2 with the help of L1. In this episode, like in

Episode 2.1.23 (Text 5.2.3), the students use L1 to talk about the grammar and the teacher uses only L2 to respond. When the teacher uses L2 to tell the students that 'would' is not past tense, S1 uses L1 to say that it is an adverb.

It is interesting to note the learning process S5 has gone through in this episode. In Line 3, S5 uses L1 to disagree with S1 that 'would' is an adverb. In Line 5 S5 uses L1 to ask for the parts of speech, especially for the word 'rather'. Instead of saying the parts of speech for 'would rather', in Line 6, S1 uses L1 to give the meaning of 'would rather'. In Line 7, S5 uses L1 to first ask if both 'would rather' are verbs and then ask if 'rather' is an adverb. This suggests that S5 is trying to reason and to work out the grammar with the use of L1. First she has said both are verbs and then she says 'rather' could be an adverb (Line 7). It is worth noting that in Line 8, after the teacher uses L2 to identify 'would stay' as verbs, in Line 9, S5 is able to make her comment that 'rather' is an adverb.

Through the use of L1, S5 is developing her knowledge in L2 grammar, from the disagreement in Line 3 and the urging for answers in Line 5, to the assumption made in Line 7 and the final comment in Line 9.

In this episode, the role of the bilingual teacher should not be overlooked. At first the teacher wanted to talk about the verb 'would stay' but not the adverb 'rather', but when the students raised the question in L1, the teacher attended to the series of questions in L1 and helped to build up the learners' knowledge of L2. If the teacher did not understand the students' L1, it would be difficult for the teacher to co-construct the L2 knowledge with the students.

One more point to note is that even though the teacher uses L2 throughout the episode, the learners keep on using L1 to respond and to interact. This particular style of bilingual speech is of interest.

In this episode, S1 and S5 are deeply engaged in discussion to work out their problem with the use of L1. The L1 discussion of the learners is not just for getting help from the teacher, but is an important learning process for the learning of L2, for it allows opportunities for students to think, to make assumption and to make judgement. Through these learning processes and with the guidance of the teacher, the learners eventually work out which is the adverb. Without the use of L1, the students might not be able to reflect on what they think and might not be able to go through similar learning process.

5.3 Using L1 as private speech - a cognitive tool

From the data, besides as a tool of thought, the first language has been used as private speech. Private speech is defined as 'oral language uttered not for communicative interaction with another, but for dialogue with the self. Through the developmental process, speech that originally serves an interpersonal function, comes to be internalised as an intrapersonal cognitive tool (Ohta, 2001:13)'. Ohta (2001:14) points out that there are various definitions of private speech in the research literature, and most commonly used definitions focus on the form of private speech as oral language not addressed to another. Private speech has been defined as 'speech spoken out loud that is addressed either to the self or to no one in particular (Bivens and Berk, 1990:443)' or as speech which is 'not adapted to a listener or not clearly and definitely addressed to another (Berk and Garvin, 1984:276)'.

Besides being defined by its self-addressed form, private speech has also been defined by its function. Studies such as Appel and Lantolf (1994:437) define private speech as 'speaking to understand', and state that private speech represent 'the externalisation of what otherwise would remain as covert mental processes'(Appel and Lantolf, 1994:439). Ohta (2001) comments that in 'studies like these, private

speech is identified not by any self-addressed nature, but by its cognitive function, by the use of language as "speaking to understand" or "writing to understand".

In the present study, private speech is defined by its form, and is referred to as speech spoken to the self but not for communication with another person. The present study also considers the function of private speech which might give some suggestions for L1 use. Learners from the present study were recorded to have used L1 for dialogue with the self, or for private speech, which worked like a cognitive tool that helped to promote a transformation of the course of cognitive development.

For Piaget (1962), young children used private speech, which he termed egocentric speech, but private speech disappeared when children were fully socialised. In Vygotsky (1987)'s view, egocentric speech which 'plays a central function in the development and conduct of mental activity' (Lantolf & Appel, 1994:14) does not disappear, but is transformed into inner speech or verbal thought. The emergence of self-regulated activity does not signal the end of the developmental process. On the contrary, development is conceived of as dynamic. Once egocentric speech is transformed into inner speech and goes 'underground', it does not remain underground forever, but it can resurface as private speech whenever an individual engages in a task of enhanced difficulty. At Wertsch (1985)'s recommendation, private speech has become more widely used today in lieu of egocentric speech. Lantolf and Appel (1994:15) states that private speech 'has a strategic function, just a social speech has a strategic function in other regulation'. It represents an externalization of the inner order as the individual attempts to regain control of his or her cognitive functioning to carry out the task.

According to the Vygotskian view, in difficult knowing situations, the adult reverts to child-like knowing strategies to control the situation and gain self-regulation. Private speech functions as a tool for self-regulation (Wertsch, 1985), a process through which the language of social interaction becomes a tool for the learner's own thought. Self-regulated individuals have full control of their own

activity, having internalised the cognitive tools needed to direct their own behaviour, and having the ability to focus without being distracted by others.

For adult learners, private speech plays a role in L2 development. L1 and L2 private speech has been documented in adult foreign language learning and second language learning (For example, Ohta, 2001; Centeno-Cortes and Jimenez, 2004). Ohta (2001) found evidence of private speech among learners of Japanese to work out problems in L2 internalisation and production. In the study of Centeno-Cortes and Jimenez (2004), private verbal thinking (PVT) has been identified as a particular type of private speech, characterised as being the externalisation of the process of reasoning during a problem-solving activity, and L1 PVT was found to be manifested itself as a key factor in the process of reasoning. Centeno-Cortes and Jimenez (2004:31) concludes that 'L1 private verbal thinking plays a crucial role in the case of L2 speakers engaged in problem-solving'.

In the present study, data suggest that adult second language learners use 'private speech' to think and to regulate their own learning of L2. The way to determine whether the utterances belong to private speech or to social speech is that when students attempt to repeat the words to themselves or to utter something to themselves, but not to talk to anyone in particular, they are regarded as 'private speech'. Data suggest that learners use both L1 and L2 for private speech, and learners use private speech in a variety of ways.

The following episode from Group One Level One has been selected for discussion.

Text 5.3.1
Episode 1.2.29

Students	Teacher	Comment on the use of L1

1.S2: *Jiu gei suk ne go zek.* (Have to remember this one.)		S2 uses L1 to tell herself that she has to remember the word 'during'.
2.S8: During. During *zen yang jie shi* (what does it mean)?		S8 uses L1 to ask what 'during' means.
3.	During, *zai jia qi li mian* (During the holiday).	The teacher responds to S8.
4.S2: *Ga kei ney min! Ngo.* (During the holiday! Now I understand.)		S2 shows that she understands.
5.S8: During *zen yang xie*? (How to write 'during'?)		S8 uses L1 to ask how to write 'during'.
6.	During, d-u-r-i-n-g.	
7.S2: During *a*! (It's during!)		S2 says the word to herself.
8.	Yes, during the holiday.	

In Episode 1.2.29, the private speech used by S2 is of interest. In Line 1, S2 used L1 to inform herself that she has to remember the L2 word 'during'. This suggests that this L2 word is not easy for her to remember and that this word is of significance and worth memorising. In Line 4, S2 uses L1 to inform herself of the contextual meaning of the L2 word 'during'. In Line 7, S2 uses private speech to inform herself the L2 word by saying 'During *a*! (It's during!)'.

In this episode, Lines 2 and 3, and Lines 5 and 6 show that S8 and the teacher are having a dialogue (in Mandarin and English) to talk about the L2 word 'during'. In between these lines (Lines 1, 4, 7), S2 has been recorded with her private speech (in Cantonese) to inform herself to remember the word, the meaning of the word and the pronunciation of the word. The private speech of S2 demonstrates her self-regulation in L2 learning and her effort to comprehend the L2 word 'during'.

From the Group Two data, Episodes 2.1.4 and 2.1.25 are selected to demonstrate how learners use private speech to help learning the L2 words.

Text 5.3.2

Episode 2.1.4

Students	Teacher	Comment on the use of L1
1.	*Zhe ge shi* mayonnaise.	The teacher makes clear which is mayonnaise.
2.S5:Mayonnaise, *zung men dim fan jik a* (how to translate in Chinese)?		S5 uses L1 to ask how mayonnaise is translated in Chinese.
3.	Mayonnaise, *sa loet zoeng* (salad dressing).	The teacher responds to S5.
4.S5:*O, giu sa loet zoeng a.* (Oh, it's called '*sa loet zoeng*'.)		S5 says the L1 meaning to herself.
5.S1:*Zhe ge zong shi ji bu jin qu.* (This one can never be remembered.)		S1 uses L1 to say that she can't remember the word.
6.S5:*Zhe ge chang chang jiang de, chang*		S5 says that the word is often used in talking.

chang dou jiang de. (This one is often used in talking, often used in talking.)		
7.S2:*Jiao shen me?* (What is it called?)		S2 asks how to say the word.
8.	Mayonnaise.	

In Episode 2.1.4, in Line 4, S5 uses L1 to say the word 'mayonnaise' to herself. The saying of the word in L1 is certainly not for communication purpose and it does not appear to be simply repetition of what the teacher has said. The way S5 says it suggests that she is telling herself what it means in L1. The saying of the L1 meaning to herself seems to function in certain ways, to guide her learning, to reinforce the word and to help in memorising.

It is interesting to note that in Line 5, S1 uses L1 to say, 'This one can never be remembered' and in Line 6, S5 uses L1 to say that it is often used in talking which indicates that she has to remember it because of its usefulness. S1 and S5 were talking to themselves or using private speech for they did not expect any responses from others. S1 uses L1 to inform herself the problem of learning the word while S5 uses L1 to inform herself the value of learning the word. The function of both lines is to self-regulate the learning by evaluating the learning and personal use of the L2 words.

Line 7 indicates that S2 is not able to pronounce the word even though the word has been mentioned a couple of times. L1 has been used as a tool in helping S2 to ask for the word 'Mayonnaise' in an effort to learn to say it.

Comparing Episode 2.1.4 from Group Two data with Episode 1.2.29 from Group One data, the use of private speech is much similar. First, the private speech

from both episodes involves the use of L1. Second, the function of the private speech in both episodes appears to be for self-regulation.

Episode 2.1.5

Students	Teacher	Comment on the use of L1
1. S5:[Speaking to S2] *Bu shi, ni gao cuo la.* (No, you have mistaken it.)		S5 uses L1 to inform S2 that she has made a mistake.
2.S2:M-a-r-i...		
3.S5:...n-a-d-e...		
4.S2:...n-a-d-e..., m-a-r-I		
5.S5:...-n-a-d-e		
6.S2:*Zhe ge shi shen me la? O, yan la.* (What is this one? Oh, marinade.)		S2 uses L1 to ask what the meaning of marinade is. Then she cites the meaning.
7.	M-a-r-i...	
8.S5:...n-a-d-e.		
9.	Yes. ...n-a-d-e.	
10.S2:M-a-r-i-n-a-d-e.		

In Episode 2.1.5, it demonstrates the process S2 takes to learn to spell the word 'marinade' with the help of S5. Despite the word 'marinade' having been mentioned first by S1 and then discussed by S5 and the teacher, S2 still has not got the word. From Lines 1 to 5, S5 is helping S2 to spell the word correctly. S2 then uses private speech to self-regulate (Line 6) and to repeat what she has learned (Line 10).

In Line 6, after S2 has got the spelling of the word, she uses L1 to ask for the meaning and then answers the question herself. S2 is telling herself the L1 meaning of marinade and she tries to bring to her consciousness what 'marinade' means in L1. S2 is engaged in private speech because she addresses the question to herself and then mentally answers the question herself. Through the use of private speech in L1, S2 raises the question and formulates her own response. The response is for self-regulation, not for an audience. In Line 10, after the teacher and S5 have spelt the word 'marinade', S2 again uses private speech to imitate and to spell the word to herself.

This episode suggests that in learning L2, S2 learns through collaborative learning with the help of another more capable learner, and then she goes through the word meaning herself by asking the question and then saying the word meaning to herself. The utterance of a question followed by an answer by herself is of interest. The production of the correct answer at the moment the question is asked suggests that the learner uses private speech that makes sense to herself. This suggests that the use of private speech in L1 during the learning process helps to gauge the appropriateness of the response based on the ongoing utterances.

Text 5.3.3

Episode 2.1.25

Students	Teacher	Comment on the use of L1
1.S1:*Zen me du a*? (How to read it?)		S1 uses L1 to ask how to read 'considerable'.
2.S5:Considerable.		
3.S1:Considerable.		S1 says the L2 word to

		herself
4.	Yes.	
5.S1:*Xiang... dang... duo ... de.* [Writing the Chinese meaning in her notebook.]		S1 says the L1 to herself and after checking from the dictionary she writes the L1 meaning in her notebook .

In Episode 2.1.25, S1 uses L1 and L2 in the form of private speech to inform herself of the learning (Line 3 and Line 5). In Line 1, S1 uses L1 to ask how to read 'considerable'. S5 then reads it aloud to S1. In Line 3, S1 says the L2 word to herself. In Line 5, S1 says the L1 meaning and writes it down in her note book. This suggests that S1 uses private speech in L2 as well as L1 to inform herself of the learning.

Language learners do not repeat everything they hear. What they repeat may be indicative of what they are working to acquire, as noted by Saville-Troike (1988) and Ohta (2001). S1 intends to learn how to say the word 'considerable' and she uses private speech to imitate in an attempt to acquire the pronunciation as well as the meaning of the word. Ohta (2001:20) points out that once 'the learner is able to imitate orally, the stage is set for the use of speech as a tool for learning'. Imitation is not a trivial or rote process, but interactive processes of inner imitation, which can be part of comprehension processes themselves.

The interesting point is that after the teacher indicates the pronunciation is correct, in Line 5, S1 says the L1 meaning to herself and writes it on to her note book. The saying of the L1 meaning and the writing into the note book indicate the initiative of the learner to learn the second language and the individual cognitive process taken to acquire the learning.

To sum up, the data discussed above suggest that the second language learners use both L1 and L2 for private speech, and they use private speech in a variety of ways. The above data indicate that private speech has been used for guiding and evaluating the L2 learning, for comprehending and reinforcing the L2 words, and for asking a question and responding with an answer. The development of private speech is a complex process that begins with imitation, and can function to transform into the individual cognitive process which contributes towards the L2 learning.

5.4 A summary of Chapter Five

To conclude, in this chapter the data suggest that with the use of L1 the second language learners are able to engage in social and cognitive dynamics of class interactions which result in active construction of knowledge of L2. L1 can be used as a tool to mediate the L2 learning and to build up the knowledge of L2. Through the use of L1, the second language learners are able to discuss the meaning of the L2 words for active construction of L2 knowledge, and to talk about their metalinguistic awareness which helps to build up their knowledge of L2. From the data, the second language learners also use L1 in the form of private speech in an effort to self-regulate in the L2 development. L1 is like a mediation for building and establishing L2.

The findings in this chapter suggest that L1 plays a significant role and it functions in a variety of ways in L2 development. The data in this chapter are in line with the views of various interviewed learners who expressed that they preferred using L1 for learning L2. The data help to demonstrate how L1 functions in L2 development, and the findings in this chapter indicate that L2 development is brought about in ways that go beyond mere input to the individual learners, and that L2 development involves learners' effort in construction, hypothesis and self-regulation.

Focusing on the use of L1 in conversational adjustments of language learners, the data reveal the significance of collaborative interacting events. In the process of interactions using L1 as mediation, learners are able to expand their own L2 knowledge and to extend the linguistic development of their peers.

The implication of the findings is that we should not underestimate the value of the use of L1 in L2 learning, and L1 does play a role in L2 development. The data suggest how the first language builds into the learners' growing abilities to use the L2, and the findings illuminate the potential use of L1 in L2 development. Without the use of L1, the learners might not be able to achieve the same level of L2 development. Based on these findings, it is necessary for the second language teachers to recognise and acknowledge the role of L1 as language mediation in constructing the knowledge of L2.

Chapter 6 The use of the first language as a tool for thinking and learning

This chapter focuses particularly on the aspect of the use of the first language as a tool for thinking and learning. Much has been written about language and thought (e.g.Vygotsky,1962; Mercer, 2000). Mercer (2000:1) suggests that language is used 'for thinking together, for collectively making sense of experience and solving problems' and that thinking is 'at the heart of human achievement'. People use language every day to think and act. With the use of language, we are capable of thinking constructively and analytically. When we talk with someone, we become involved as 'a collaborative endeavour in which meanings are negotiated and some common knowledge is mobilized' (Mercer, 2000:6). When talking about language and thought, Mercer does not identify the first language or the second language, but from the examples quoted in the text, the language used includes their mother tongue, that is their first language, and the second language.

Piaget's Theory and Chomsky's theory seem to differ radically in their views on the relations between language and thought, and the way in which the development of one influences that of the other (Wood, 1999: 117). Piaget's theory predicts that the use and understanding of language is constrained by stages of intellectual development. Chomsky's theory argues that children are not taught at all but they acquire their mother tongue, and that language has a special structure that involves systems of specifically linguistic rules that cannot be reduced to cognition. As discussed in Chapter Two, these views are different from Vygotsky's view of language and thought that the present study has considered to be relevant for explaining the use of the first language in L2 learning. For adult second language learners, language is used for sharing and developing knowledge. The data in the present study suggest that in L2 learning, the adult learners do not simply copy the L2 language and they use language to think and to make sense of their experience.

The present study is based on the theory of Vygotsky, who in his *Thought and Language* (1962) described language as having two main functions which are integrated. One is as a communicative or cultural tool that we use it for sharing and jointly developing knowledge. The other is as a psychological tool for orgainising our individual thoughts, for reasoning, planning and reviewing our actions. Vygotsky was not able to see the effect of his ideas on psychology and education for he died of tuberculosis in 1933 at the age of 37. In the 1970s and 1980s much of his work became available outside Russia, and since then those ideas have inspired recent research. Language, for Vygotsky, is like a psychological tool, which we use to share and make sense of experience, and it is a means for transforming experience into cultural knowledge and understanding. It is through the medium of language that we share and define experience. Language is therefore not just a means which individuals use to communicate, but to formulate ideas, to think and to learn.

Data in the present study suggest that for the adult second language learners learning English language, their first language is a means for transforming experience into cultural knowledge and understanding, and for thinking and learning together. The first language therefore works as 'a psychological tool' through which the second language learners think, learn, share, dispute and define experience.

Vygotsky (1962:125) states, 'The relation of thought to word is not a thing but a process, a continual movement back and forth from thought to word and from word to thought. In that process the relation of thought to word undergoes changes which themselves may be regarded as development in the functional sense'. Vygotsky explains that thought is not merely expressed in words; it comes into existence through them. Every thought tends to connect something with something else, to establish a relationship between things. Every thought moves, grows and develops. It also fulfills a function or solves a problem.

This notion of thought and words helps to explain the use of the first language in learning the second language in the present study. For the second language

learners, thought comes into existence through the use of language. The first language is a means for thought to come into existence. The relationship of thought to the use of their first language is just a process through which the second language learners develop their thinking, fulfill a function or solve a problem.

Ohta (2001), conducted a study on second language acquisition processes in the classroom, and found that students did use the L1 in peer learning tasks. Ohta (2001) cited two studies and suggested that L1 use may be related to task complexity. One study is from Brooks, Donato and McGlone (1997) who studied the use of learners' L1 (English) and L2 (Spanish) in the talk of third-semester university learners of Spanish who repeated similar tasks in a laboratory setting. When a task was repeated, the learners' use of English declined and use of Spanish increased. At first, English facilitated the use of Spanish by serving as a tool for task management; the use of English diminished as task management issues were resolved. Another study is from Nakaone (1999) who conducted a smaller study in her own university level, second-year Japanese classroom. Nakaone repeated picture sequencing tasks on two consecutive days of instruction with two pairs of learners, and found a reduction in the use of English for task management in the second sequencing task, but use of English of one pair of learners increased dramatically as they worked to resolve a grammatical problem that emerged in the second task. The students' use of English helped them to solve the grammatical problem and to continue using the L2 to tell the story. Nakaone found, as did Brooks et al., that learners used English as a thinking tool to mediate their activity when their L2 knowledge was insufficient for that purpose. Nakaone's findings showed L1 to have a productive role in the learners' predominantly L2 interactions. Ohta (2001: 236) comments that for foreign language students, the L1 is an important element needed for thinking processes.

Ohta's comment that L1 is an important element needed for thinking processes, though referring to foreign language students, is worth noting. In the present study, the first language, apart from being a means to share experience in the learning of L2, and to transform experience into knowledge and understanding of L2,

has been used in the thinking processes. The data suggest that the first language is an essential tool for the L2 learners to think and learn the L2 together. Using language to think and to make sense of the learning seems to be essential learning process for the adult learners.

The following episodes are selected from the data to illustrate how the first language has been used as a means to think and to make sense of the learning. One point needs to be addressed is that these episodes are selected from the classroom discourse data for the discussion of certain L1 use, and these episodes are not exclusive of some other L1 uses. Besides, the present study attempts to use a different episode for illustrating a different L1 use. In other words, the episodes selected to be used in this chapter are to focus on the use of L1 for thinking, but these episodes may also include data of private speech or construction of L2 knowledge which have already been discussed in Chapter Five.

In this chapter, for the convenience of discussion, the data are discussed under the topics of (1) Using the first language to think of the word meaning; (2) Using the first language to make sense of experience and (3) Using the first language to get things done or to solve problems.

6.1 Using the first language to think of the word meaning

In second language learning, the effort to work out the word meaning is observed to be an integral part of the learning. When students are engaged in language learning they are inevitably involved in thought and language in which meaning is embodied in the words they are learning and using. Saying a word without knowing the word meaning is just like an empty sound which is meaningless to the learners. It is therefore important for the learners to think of the word meaning during

the language learning, and with this word meaning which unites thought and speech together the learners are able to make sense of their experience and their learning.

In *Language and Thought* Vygotsky (1962:5) states that 'word meaning is both thought and speech' and it is 'in word meaning that thought and speech unite into verbal thought'. He emphasises the importance of word meaning and states, 'A word without meaning is an empty sound, no longer a part of human speech.' He explains that thought is a generalized reflection of reality, which is also the essence of word meaning; and consequently that meaning is an act of thought in the full sense of the term. At the same time, meaning is an inalienable part of word, and thus it belongs in the realm of language as much as in the realm of thought.

From the interview data, nearly all interviewed learners talked about the use of L1 for understanding of L2. S9 from Group One said he had to use a bilingual dictionary to find the L1 meaning for all the L2 words he had not found out before and to write them down in his note book. S11 from Group One also said that using L1 was for understanding the meaning. She also pointed out that her daughter, who had studied in an 'English only' class, could read the L2 but she did not understand.

From the classroom data, it appears that in the learning of L2 it is inevitable that adult learners use L1 for interactions in an attempt to comprehend the meaning of L2 words and sentences. 'Meanings conveyed in talk may be far more extensive and complex than might appear from the words that are used' (Edward & Westgate, 1994:22). From the data, for example, the connotations of 'talented' and 'genius' are different. Through the interactions in L1, learners are able to discuss the meaning of similar words in the process of learning. That is to say, for adult second language learners, the interaction in L1 is helpful for the understanding of the meaning which is an inalienable part of the L2 words.

The following episodes demonstrating the use of L1 to discuss the word meaning are selected for discussion.

Text 6.1.1

Episode 1.3.18

Students	Teacher	Comment in L1
1.	Plum and peach. Actually may put these two and combine into one.	
2.S12: *Tou bok lei.* (Peach combined with plum or nectarine.)		S12 gives the name of nectarine in L1 which means peach combined with plum.
3.	The peach adding in the plum and then we call what? [Pause] Nectarine.	
4.S12: *Loeng go gap mai zau hae a.* (That is two fruits go together.)		S12 uses L1 to explain that two fruits go together to become nectarine.
5.	*Ng hae loeng go gap mai. Ji hae go ben zung gap mai.* (It's not two fruits go together. It's two species combined together.) Yes, they're put together and then they make the nectarine. So in Chinese they say *tao bo li.* (Peach	The teacher uses L1 to explain nectarine is *'tao bo li'* which means peach (*tao*) combined (*bo*) with plum (*li*).

	combined with plum) *Bo shi liang ge fang zai yi qi.* ('Combine' is two combined together.) So that's 'nectarine'. I think it is harder and tasting better, isn't it? But all these belong to the same... they all belong to the same type, peach, plum, prune. They all look very much like nectarine.	
6.S2: Plum *hae dim?* (How does plum look like?)		S2 asks how plum looks like.

In this episode, when talking about plum and peach, the teacher introduces 'nectarine', a type of fruit which is formed as a result of combining peach with plum. The L1 called it '*Tou bok lei* (Peach combined with plum)'. The point to note is that the L1 name itself indicates clearly how the fruit is formed, and it seems to mean more than just a name. S12 is interested in the L1 name of nectarine, and she uses L1 to explain its word meaning.

In Line 1, after the teacher uses L2 to talk about plum and peach combined together, S12 immediately responds with '*Tou bok lei* (Peach combined with plum or nectarine)'. In Line 3, the teacher attempts to ask for the L2 word from the students, but it seems that the students are not familiar with it, and the teacher has to inform them the L2 word. Then S12 again uses L1 to talk about her knowledge of nectarine. In Line 5, the teacher further explains nectarine, how it tastes and how it looks like. Then S2 asks what plum, a similar kind of fruit, looks like.

The L1 of nectarine suggests the word meaning which may help the learners understand the relationship of plum, peach and nectarine. The use of the first language to say the name of the fruit indicates that S12 understands what the teacher has said in L2 in Line 1, and that she has the knowledge that plum combined with peach is called '*tou bok lei*', although she might not have known the L2 word 'nectarine'. The opportunity to use L1 enables the learner to think of the L1 word meaning, and enables the learner to elaborate the word meaning which at least has initiated interest to learn the L2 word.

In Line 5, when the teacher mentions that peach, plum and prunes all look alike, S2 uses L1 to ask how plum looks like. This suggests that S2 shows interest in the learning and she makes sense of her experience to work out what plum looks like so as to distinguish it from others.

Text 6.1.2

The following are two consecutive episodes demonstrating the use of L1 to explore the word meaning of 'considerable' from the text 'Children's swimming classes, Book now for the new term commencing 25th July. We teach all levels from baby through to the competitive swimmers. A maximum number of five students to one instructor guarantees considerable attention and excellent results. Ask about our adult classes. Enquiries on 4014 4638' (Brynes, Davidson, Mason, Moar, Moar and Whyte, 1996:71)

Episode 2.1.22

Students	Teacher	Comment on the use of L1
1.S1:Considerable *zhen zheng de yi si shi shen*		S1 uses L1 to ask for the 'exact' meaning of

me la? (what is the exact meaning of considerable?)		'considerable'.
2.S5:Considerable. *Kao lei de* (With consideration.)		S5 uses L1 to respond to S1.
3.S1:*Kao lei de*. (with consideration.)		S1 repeats what S5 has said.
4.S5:Considerable *dou ho ji deng jy* reasonable *a, hae mae a*? (Considerable is equal to reasonable, isn't it?)		S5 uses L1 to further explain her understanding of 'considerable',
5.S7:*Cha bu duo*. (More or less.)		S7 responds to S5.

Episode 2.1.22 demonstrates the interactions among the learners S1, S5 and S7 who use L1 as well as L2 attempting to explore the word meaning of 'considerable' used in the context. The episode starts with S1 using L1 to ask for its exact meaning, then S5 responds with the L1 meaning as 'with consideration', which in fact is not the exact meaning of the L2 word 'considerable'. In Line 4, S5 gives another meaning in L2 'reasonable' in an attempt to be more exact in explaining the L2 word. This is responded by S7 that 'reasonable' is getting close to the meaning.

It is interesting to note the process S5 has taken with the use of L1 to define the meaning of the word 'considerable'. The word 'considerable' has posed some problems for second language learners to comprehend its meaning, since the word 'considerable' is formed with the word 'consider' which has misled the learners to think of the meaning 'with consideration'. Although the initial suggestion given by S5 might not be very accurate, through the process of discussion the learners are able to work out alternatives to explore the meaning of the word used in the context. This

process of on-going thinking and making assumptions of the word meaning is an essential process of learning for the learners.

Another point to note is that S5 does not just stick to using L1, but she uses L2 'reasonable' for explaining the meaning of the L2 word as well. In the discussion, S5 uses both Mandarin (Line 2) and Cantonese (Line 4). The utterances of the learners in this episode suggest their effort and attempt to explore the word meaning, and their interactions and responses also indicate their involvement and interest in L2 learning.

Episode 2.1.24

Students	Teacher	Comment on the use of L1
1.	[checking from the dictionary.] Yes, considerable. *Zhe li shuo shi `Xiang dang duo de'*. (Here it says 'considerable') *Zhe ge ke neng shi zui hao de jie shi, xiang dang duo de.* (This is possibly the best explanation, considerable.)	The teacher reads the meaning in L1 from the dictionary.
2.S1:*Xiang dang duo de* (Considerable).		S1 says to herself.
3.S7:Not 'enough'?		S7 tries to ask if 'enough' means to be 'considerable'.
4.	No, not 'enough'. Not saying 'enough' because	The teacher uses L2 to explain why 'enough' is

	they cannot guarantee 'enough'. They will say considerable. That means...	not appropriate for the text.
5.S8:*Hen duo de*. (A lot of.)		S8 used another expression in L1 to explain 'considerable'.

In Episode 2.1.24, after the teacher has said the L1 meaning of 'considerable' from a bilingual dictionary, S1 says the L1 meaning to herself, followed by S7 bringing up the word 'enough' to ask the teacher if that could mean 'considerable'. In Line 4, the teacher uses L2 to explain why 'enough' is not appropriate for the text. S8 then uses another L1 expression for his understanding of 'considerable'.

The point to note is that after the teacher has read out the L1 meaning '*xiang dang duo de*' from the dictionary, S1 repeats the L1 meaning given by the teacher. In Episode 2.1.22, S1 seems to have got the meaning '*Kao lei de* (with consideration)' suggested by S5. In this episode, after S1 has heard the more appropriate meaning for the word from the dictionary, she repeats the L1 meaning '*xiang dang duo de*' to herself. This is like a private speech which serves to self-regulate the meaning of 'considerable'.

Another point to note is that S8 uses L1, '*Hen duo de*' (Line 5), to elaborate the meaning of 'considerable', after the teacher has mentioned the L1 meaning from the dictionary and has explained why the L2 word 'enough' is not an appropriate meaning for 'considerable' in the context. The use of L1 for elaboration is an interesting point. This suggests that in learning L2, learners might think of using L1 in an attempt to comprehend the L2 word, and the use of L1 provides alternatives for second language learners to explore the meaning and to think of the L2 words.

This episode suggests that using language to comprehend the L2 words is not limited to the use of the first language. In Line 3, S7 attempts to use the L2 word 'enough' to explain the meaning of 'considerable'. Although the word 'enough' turns out to be inappropriate, the process of using other L2 words to think of the new L2 word is worth noting.

The use of L1 in this episode enables adult second language learners to explore and to elaborate the word meaning in the process of L2 learning. With this exploration of word meaning the learners are involved in the process which unites thought and speech together, and through this learning process learners could make sense of their learning.

Text 6.1.3

Episode 2.1.29

Students	Teacher	Comment on the use of L1
1.S1:Meditation. What's meaning? Meditation.		
2.	All right, meditation. You know what's that? [Pause for other students to respond.]	
3.S7:*Da zuo*. (Sit in meditation.)		S7 uses L1 to explain meditation.
4.	*Da zuo shi yi zhong.* (Sit in meditation is one kind.)	The teacher responds to the meaning given by S7.

5.S5:*Chen si, ming xiang.* (Be lost in thought, be deep in thought.)		S5 uses L1 to express her understanding of meditation.
6.	Yes. *Chen si, Ming xiang.* (Be lost in thought, be deep in thought.)	The teacher responds to S5.
7.S7:*Ming xiang, hao xiang da zuo yi yang.* (Be deep in thought, is like sit in meditation.)		S7 gives her opinion that '*ming xiang*' is like '*da zuo*'.
8.S5:*Ming xiang*. (Be deep in thought.)		S5 says '*ming xiang*' to herself.
9.S8:Yoga *ye shi da zuo*. (Yoga is also sit in meditation.)		S8 expresses his understanding of '*da zuo*'.
10.	Meditation. So yoga is one of it. I think there are different types of meditation.	
11.S1:*'Fa Lun Gong' ye shi da zuo ma*? (Does '*Fa Lun Gong*' also sit in meditation?)		S1 extends her thought further by relating meditation with '*Fa Lun Gong*'.
12.S5:*Da zuo*. (Sit in meditation.) [Laughing.]		S5 says '*Da zuo*' to herself.
13.S2:*Fa Lun Gong jiu shi jing zuo.* ('*Fa Lun Gong*' is only sit in silence.) [Ss laughing.]		S2 gives her opinion of '*Fa Lun Gong*'.

Episode 2.1.29 is another example showing how students use L1 to explore the word meaning after a learner S1 uses L2 to ask for the meaning of 'meditation'. With the use of L1, the students are engaged in dynamic interactions to explore the meaning of 'meditation' which has been explained as '*chen si* (be lost in thought)' and '*ming xiang* (be deep in thought)'. After discussing the meaning of meditation, the students extend its meaning to be compared to similar activities, '*da zuo*', yoga and '*Fa Lun Gong*'.

The episode starts with S1 using L2 to ask for the meaning of meditation and after the teacher uses L2 to ask the students to respond to the question, the students switch to L1 to explore the meaning of the L2 word. The way the learners use L1 to explain and to think of the meaning of the L2 word 'meditation' is of interest. In Line 3, S7 thinks of '*da zuo*' which the teacher responds as 'one kind' of meditation. In Line 5, S5 then gives two different but similar meanings '*chen si*' and '*ming xiang*' which the teacher responds with a definite answer 'yes'. However the conversation does not stop at Line 6. In Line 7, S7 suggests that '*ming xiang*' is similar to the meaning '*da zuo*' that she has given in Line 3. This is followed by S5's response by saying the meaning '*ming xiang*' only, without mentioning '*chen si*' which she has used in Line 5. As a matter of fact, '*ming xiang*' is a more appropriate meaning for 'meditation' as compared to '*chen si*'. This seems to suggest that through the interactions, S5 has worked out '*ming xiang*' as a more appropriate meaning for the L2 word (Line 8), and she says the L1 meaning for self-regulation.

Up till Line 8, the learners seem to have worked out the word meaning for 'meditation', and starting from Line 9, the discussion goes beyond the word meaning of 'meditation', and various students attempt to associate different activities related to 'meditation'. In Line 9, S8 suggests 'Yoga' is like '*da zuo*'. In Line 11, S1 initiates the question to ask if '*Fa Lun Gong*' is also '*da zuo*'. In Line 12, S5 responds with '*da zuo*', but her laughing suggests that she might not take her answer seriously. S2 immediately responds with her comment that *Fa Lun Gong* is only sit in silence but not related to '*da zuo*' or 'meditation'.

The use of L1 enables the learners to engage in dynamic thinking to explore the meaning of the L2 word and to think of related activities for meditation. L1 appears to be a helpful tool for understanding and comparing the L2 word meaning. The data suggest that during the process of interactions the learners might be able to work out the meaning. S5 has sorted out the meaning in Line 8. S1 also appears to have got the meaning of meditation, for in Line 1 she raises the question to ask for the meaning of 'meditation', but in Line 11, she is able to use L1 to ask about two similar activities that are related to meditation.

This episode suggests that with the use of L1, the students are able to make sense of their prior knowledge and experience and to comprehend the word meaning of the L2 word. The use of L1 enables the students to discuss the meaning of 'meditation' and to talk about the related Buddhist concept of '*da zuo*' and yoga, or the contemporary activity called '*Fa Lun Gong*'. With this dynamic discussion of word meaning the learners are able to make sense of their experience and their learning.

This is another example which demonstrates the use of L1 for thinking and understanding, and the concept cannot be elaborated to the same extent if only L2 is allowed in the L2 learning. Furthermore, the on-going discussion and the laughing of the students suggest that the learning has been carried out in a joyful and harmonious atmosphere which is conducive to L2 learning.

Text 6.1.4
Episode 2.1.32

Students	Teacher	Comment on the use of L1
1.S1:Bellying dancing. Belly dancing.		

2.	Oh, belly dancing.	
3.S5:*Ba ley mou a*! (It's ballet!)		S5 has mistaken belly dancing as ballet.
4.	Belly. No!	The teacher attempts to inform S5
5.S5:*Ba ley mou tong* (Ballet and) Disco.		S5 mentions two types of dancing she knows.
6.	Ballet.	The teacher informs S5 the L2 for '*Ba ley mou*'
7.S8:Belly.		
8.S7:*Ba lei, da lei de lei a.* (Ballet, *lei* sound the same as thunder) [One of the Chinese character of 'ballet', 'lei', has the same sound as the Chinese character of 'thunder', 'lei'.]		S7 talks about the similarity of the Chinese character of ballet and thunder.
9.S5:Belly *ne*? (What about belly?) Belly.		S5 asks what belly means.
10.	Belly is not.	
11.S7:Belly and ballet.		
12.S5:Belly. Ballet.		
13.	You know the Hawaiian using the belly. [Pointing at the belly and demonstrating the belly dance.]	
14.S5:*Cong xiao xue de. Hen li hai.* (They learn		S5 expresses her understanding of belly

it when they were young. It's great.)		dancing which needs to be learnt when young.

Episode 2.1.32 is also an example of second language learners using L1 to think of the word meaning and to make sense of their experience in the second language learning. When 'belly dancing' is mentioned, S5 uses L1 to express her thinking of the word meaning of 'belly dancing', which has been mistaken as 'ballet dancing'. With the use of L1, S5 is able to express her understanding of the word meaning of 'belly', which is shown to be incorrect, and then the teacher is able to give guidance and support to clarify the L2 words 'belly dance' and 'ballet'. It is not uncommon for second language learners to have mistaken L2 words bearing similar sound or similar spelling. In this episode, it is with the use of L1 that the learners are able to verbalise their thinking and with the help of the teacher and other learners the dialogue becomes a valuable learning process for the learners to build up their L2 learning.

Teaching learners the L2 words is not just one-way speaking, but it requires responses and feedback. It is interesting to note the responses from the learners in this episode. The conversation starts with 'belly dancing', but S5 keeps on using L1 to talk about '*Ba ley mou* (ballet dancing)' which indicates that she has mistaken 'belly dancing' as 'ballet dancing' (Lines 3 and 5). In Line 4, the teacher attempts to tell S5 that it is 'belly' not 'ballet'. The response in Line 5 indicates that S5 was not aware of the mistake. In Line 6, the teacher informs S5 the L2 word for '*Ba ley mou*' is 'ballet', yet S5 has not noticed the difference. After the teacher has said the L2 word for 'ballet', S8 responds with the original word 'belly'. Up till here, S5 still does not realise the difference between ballet and belly.

The interesting point is that S7 makes sense of her knowledge and experience, and thinks of the L1 word for 'ballet' which is to distinguish from the L1 word for 'belly'. The response of S7 (Line 8) in identifying the L1 word for 'ballet' seems to

be effective. It seems to have illuminated S5 and have indicated the meaning of 'ballet' for S5.

This response from S7 has made a turning point because after the comment of S7, S5 appears to have got the word meaning of 'ballet' and to have realised the mistake she has made, so she changes to ask, 'What about 'belly'?' After the teacher has used L2 to explain that the Hawaiian uses the belly to dance and has used gesture to show the meaning of 'belly dancing', S5 tries to make sense of her knowledge and comments that belly dancers have to start learning to dance when they were young, and that the belly dance is great (Line 14).

This response in L1 reveals that S5 extends her thinking of 'belly dancing' to people learning belly dancing and her appreciation for belly dancers, and it also reveals that S5 understands the word meaning of 'belly dancing' after the teacher's explanation. If without the use of L1, the second language learners might have mistaken the meaning of words with similar sound such as 'belly' and 'ballet' and they might not be aware of the differences between these words with similar sound. Furthermore, without L1 as mediation the learners might not be able to verbalise their thinking and to extend their thinking to make sense of their experience in L2 learning.

Another point to note is that the teacher uses L2 throughout the episode, while the learners switch to L1 to think of the meaning and to express their understanding of the L2 words. With the use of L1, the learners are able to be involved in dynamic interactions in the process of learning.

Text 6.1.5

Episode 2.3.15

Students	Teacher	Comment on the use of L1

1.S2:M-u-e-s-l-i. *Zhe ge shi shen me* (What is this)?		S2 asks what muesli is.
2.S5:Muesli		
3.S2:Muesli		
4.S5:Muesli. *Bu xiao de shi shen me.* (I don't know what it is.)		S5 also expresses that she does not know what it is.
5.	Oat, all sort of grains, putting together with some dried fruits and that is muesli.	
6.S5:Oh! Ah yes! Something like that.		
7.	Yes, dried grapes, dried cherry, dried pineapple. All sorts of dried fruit.	
8.S5:Ah yes. Dried fruits mixed together.		
9.	Mixed with the grain or flakes. Sometimes corn flakes, grains or oats, whatever, and they are called muesli.	
10.S5:*Tsong ga* (Newly created?). *Ne go hae tsong ga? Wan ng do ge.* (Is this word newly created? I can't find it in the dictionary.)		S5 did not find the word 'muesli' in the dictionary. She therefore asks in L1 if the word is newly created.
11.	It's a new name, I think.	

	Maybe it's a make-up name. I don't know how come it's like this.	
12.S5:Mues-li *a*? (Is it muesli?)		S5 asks to make sure she gets the right word.
13	Yes, muesli.	
14.S5:*Mai zao can jiu kan dao you* muesli *a* (At where it sells breakfast food you can find muesli).		S5 tells others that muesli is put among the breakfast food.
15.S2:*You* nuts *a* (With nuts). *Gen niu nai chi a* (Eat with milk).		S2 shows her understanding of muesli.
16.	*You* nuts, dried fruits. Yes, nuts and grains.	The teacher responds to S2.
17.S1:*Shi* porridge *shen me* (Is it like porridge*)? Shi shen me* (What is it)?		S1 asks if muesli is like porridge.
18.S2:*Yi he yi he mai de*. (Selling in boxes) *You hua sheng a.* (There are peanuts in it)		S2 gives more information about muesli.
19.S5:Conflakes *a.* (It's like conflakes.)		
20.S1:*Yong niu nai chong lai chi de.* (Eat it with milk.)		S1 tells how muesli is eaten.

Episode 2.3.15 indicates that a valuable learning experience is taking place in the exchange through the use of L1. In this episode the use of L1 provides opportunities for the learners to involve themselves in exploratory talk, and during which the learners are capable of providing guided support to their peers during collaborative interactions which result in interesting conclusions and valuable insights into the topic under consideration in L2 learning.

In Line 1, S2 asks what 'm-u-e-s-l-i' is and S5 responds by guiding S2 how to pronounce the word. In Line 4, S5 says that she does not know what muesli is. This implies that she intends to get help from the teacher. After the teacher uses L2 to describe what muesli is, S5 responds with understanding (Line 5). In Line 10, S5 uses L1 to express her opinion that 'muesli' could be a newly created word.

From the data, although the teacher uses L2 to explain what muesli is, the students still keep on using L1 to ask and to tell more information about 'muesli'. In Lines 14, 15, 17, 18, 19 and 20, S5, S2 and S1 use L1 to tell something about their understanding of muesli. The use of L1 in the collaborative interactions enables students to eventually work out what 'muesli' is and to explain it to another student.

The point to note is that some learners did not know what 'muesli' is (Line 1 and Line 4), and the L2 word could not be found in the dictionary (Line 10). This poses a problem for the learners to work out what muesli is. From Line 14 to Line 20, the learners use L1 to work out where to buy muesli, how it looks like, and how to eat it. All these help the learners to understand not only the L2 word but the cultural context related to 'muesli'.

This episode has demonstrated that learners are not simply inert vessels to be filled with the teacher's accumulated wisdom but active beings whose own use of language, including the use of the first language, can make a significant contribution to their learning and understanding of L2. Therefore the emphasis here is on the way

the learners learn from each other with L1 as a viable mediation, rather than on the function of the teacher as a dispenser of wisdom.

Text 6.1.6

Episode 2.1.4

Students	Teacher	Comment on the use of L1
1.	No.12. [To S2] Can you read that?	
2.S2:Do you get enough satisfying sleep?		
3.	What does satisfying sleep mean?	
4.S5:*Shui bao la.* (Enough sleep.)		S5 uses L1 to explain 'enough sleep'.
5.	*Hen mang yi de shui mian.* (Satisfying sleep.)	The teacher gives the word meaning of satisfying sleep in L1.
6.S5:*Mei you fa e meng a.* (Not having bad dreams.) *Mei you shen me la.* (Not having anything else.) Satisfying sleep.		S5 uses L1 to elaborate the meaning of satisfying sleep.
7.S2:Enough.		
8.S5:Satisfying sleep.		

Episode 2.3.24 is another example of using L1 to elaborate the word meaning of L2 expression. In this episode, L1 is used when responding to the question 'What does satisfying sleep mean?' S5 first uses L1 to explain the meaning of 'enough sleep'. After the teacher has given the L1 meaning of satisfying sleep, S5 uses L1 to elaborate the meaning of satisfying sleep and says '*Mei you fa e meng*' (Not having bad dreams).

This elaboration of 'satisfying sleep' is an interesting point for it demonstrates that S5 has extended her thinking to make sense of her experience that when she has satisfying sleep she does not have bad dreams. This extended thinking is essential for the process of learning for it builds up deep knowledge and understanding of the word meaning.

Learning a second language involves deep knowledge and understanding. The ability to relate the learning to one's own knowledge and experience is essential for the learner. In this episode, S5 uses '*shui bao*', '*mei you fa e meng*' and '*mei you shen me*', which reflect her knowledge and understanding, to illustrate the L2 expression 'satisfying sleep'.

In Line 6, the data indicate that after using L1 to elaborate the L2 expression, S5 is able to switch back to L2 and says 'satisfying sleep' (Line 6 and Line 8). This suggests that the use of L1 is not an end in itself. The learners use L1 just as a means to mediate the word meaning and to extend the understanding, and the learning is still focused on the L2 development.

The utterances of S2 and S5 in Lines 7 and 8 do not seem to be used for communication. The repetition of the word 'enough' for S2 and 'satisfying sleep' for S5 appears to be 'private speech' that is used for self-regulation of the L2 learning.

Text 6.1.7

The following are a series of episodes that demonstrate how the students use L1 to ask for the words they intend to learn and to clarify words that sound similar to them.

Episode 2.4.12

Students	Teacher	Comment on the use of L1
1.	OK. So you believe that you should study very hard before you could speak good English? Some people just speak it.	
2.S5:*Tin tsoi a* (Talent).		S5 uses L1 to express her opinion.
3.	Yes.	
4.S5:*Tin tsoi dim gong a*? (How to say 'talent'?)		S5 uses L1 to ask how to say 'talent'.
5.	Eh...	
6.S5:Gi-lon.		S5 pronounces 'Gi-lon' which is not comprehensible to the teacher.
7.	Talent	
8.S5:Talent		

9.	Talented.	
10.S5:Not gi-lent *a*?		S5 pronounces 'Gi-lent' which is again not comprehensible.
11.	Talented.	

In this episode, when the teacher says that some people could just speak the language, S5 responds in L1 '*tin tsoi a*' (talent). She uses L1 to ask how to say that in L2. Then she thinks of the word which sounds like 'gilon'. When the teacher mentions the L2 word 'talent', S5 keeps asking 'Not gilent *a*?'

The use of L1 here is to ask for the L2 word S5 has had in mind, to express 'the talented people' who do not require much study but could speak well in English. However, since S5 has a particular L2 word in mind, she seems not to be satisfied with the L2 word 'talented' suggested by the teacher.

Episode 2.4.14

Students	Teacher	Comment on the use of L1
1.S1:Hey. How's the spelling, *tian cai de* (talented)?		S1 uses L1 to ask how to spell the word talented.
2.	T-a-l-e-n-t-e-d.	
3.S1:T-a-l-e-n-t-e-d. *Wo shi tian cai ma*? (Am I talented?)		S1 uses L1 to show her humour.

In this episode, S1 asks for the spelling of '*tian cai*'. After the teacher has spelt the word 'talented' to her, she uses L1 to share a joke by asking 'Am I talented?'.

In Line 1, S1 attempts to use L2 to ask 'How's the spelling ...?', but when she comes to the word she intends to ask for, she has to switch to L1 to say '*tian cai de*'. The use of L1 here indicates that she might not be able to say the L2 word 'talented', but she wants to learn the spelling of the word. After the teacher has spelt the word, S1 repeats the spelling to herself, and then she switches to L1 to ask the question 'Am I talented?' The use of L1 here again indicates that she is not yet confident to speak the L2 word, but she understands the word meaning in L1.

This suggests that second language learners might take some time to learn a word, and they might use L1 to think of the word meaning in the process of L2 learning.

Episode 2.4.15

Students	Teacher	Comment on the use of L1
1.S5:*Jau go giu* 'jen-ny' *a* (There is a word sound like 'jen-ny'), 'jen-nu-lin, jen-nu-lin' *hae*(is)...		S5 uses L1 to try to recall the word 'genuine'.
2.S2:*Zhen zheng de*. (Genuine.)		S2 uses L1 to tell the word S5 means to say.
3.S5:Oh, *Zhen zheng de.* (Genuine.)		S5 assures the word in L1.
4.S2:Oh, *Hai you* (There is also) 'gen-nion, gen-nion'.		S2 uses L1 to tell a similar word 'genius' but mistaken it as 'gen-nion'.
5.S1:*Tian cai jiu shi* (Genius is) 'gen-nion'?		S1 asks if 'talented' means 'gen-nion

		[genius]'.
6.	Genius.	The teacher comes to realise the L2 word the students want to learn.
7.S5:*Zen me* (How is it) 'genius'?		
8.	Genius [writing on board].	
9.S5:'G' *zhe ge* (This one) 'gen-nu-lin' *a*?		S5 asks if the word is pronounced as gen-nu-lin.
10	Genuine [writing on board].	
11.S5:*Zhen zheng*. (Genuine.)		S5 uses L1 to state the meaning of genuine.
12.	The leather...	
13.S2:Yes, the leather, *zhen zheng de pi* (genuine leather).		S2 uses L1 to make link 'genuine leather'.
14.S5:Genuine leather, genuine, genuine, genuine. *Jiu yao gao cuo de*. ([I] will mix them up.)		S5 expresses that it is easy to mix them up.
15.S2:*Wo cong lai bu hui ting de*. (I can never listen well.)		S2 uses L1 to express her anxiety that she could never listen well.
16.S5:Yes, *hen nan ting de*. (It's difficult to listen well.)		S5 agrees with S2.

17.S2:*Zhen de pi* (genuine leather), genuine leather.		S2 states first in L1 then in L2.
18.S5:Genuine, genuine leather, genuine *ne go ho nan duk a* (this one is hard to read).		S5 uses L1 to express that 'genuine' is hard to read.

In this episode, S5 mentions the L2 word that sound like 'jen-ny' (Line 1). S2 responds with the L1 words meaning 'genuine'. S2 also mentions the L2 word 'gen-nion' (Line 4), which leads to S5 saying that 'gen-nion' means '*tian cai* (genius)'. Then the teacher realises that S5 is thinking of the word 'genius'. After the teacher has told them the words, S5 and S2 use L1 to talk about their problem in listening and in identifying the two different words.

From Line 1 to Line 5, the learners use L1 to express the word they intend to say. When S1 says, '*Tian cai jiu shi* 'gen-nion', in Line 6, the teacher comes to understand the learners' intention, and the teacher introduces the word 'genius' which was the word S5 meant to ask for in Episode 2.4.12. With the L1 meaning 'Zhen zheng de', the teacher introduces the word 'genuine'. After the words have been written on board, in Line 14, S5 is able to say the L2 'genuine leather', and in Line 17, S2 first says the L1, then say the L2 'genuine leather'.

However, in Line 14, S5 goes on saying that she will mix up the two words. S2 then responds to say that she can never listen well, and S5 agrees that it is difficult to listen well. In Line 18, S5 again says that 'genuine' is difficult to read.

The point to note is that learning a second language can be stressful. Learners may have difficulties in speaking the language, and they may need to go through a long process of learning, during which they have to go over the same words or expressions again and again. The data indicate that the L2 words 'genius' and 'genuine' may not be new for these learners, but they have difficulties in pronouncing

the L2 words and to distinguish them. The use of L1 in this episode helps them to make clear the words they intend to ask for. Besides, the learners also use L1 to express their problems and anxieties in L2 learning.

Episode 2.4.16

Students	Teacher	Comment on the use of L1
1.S2:Talented *shi tian cai ma? Bu shi a?* (Is talented genius? Is it not?)		S2 asks the L1 meaning of 'talented'.
2.S5:Talent *gen tian cai hai shi you fen bie.* (There are differences between talented and genius.) Genius *shi* (is) top.		S5 attempts to distinguish talented from genius.
3.	Genius has done something great. That is genius.	
4.S5:So *hen shao ren jia jiang* genius *ma*? (So people seldom say genius?)		S5 works out that 'genius' is seldom used. She uses L1 in the form of a question to make sure she has got the right idea.

After the teacher has told the learners the L2 words 'genuine' and 'genius', in Episode 2.4.16, S2 and S5 use L1 to clarify the meaning of and the difference between 'talented' and 'genius'.

This again suggests that learning a second language is not just learning the words and being able to read them, but needing to have deep knowledge and understanding. The use of L1 enables the learners to find out the differences between the two words, and to make the point that 'people seldom say genius'. The above episode indicates that the learners demand further understanding of the L2 words .

Episode 2.4.17

Students	Teacher	Comment on the use of L1
1.S5:*Nei ge zhen zhen de* (This one genuine) genuine.		S5 uses L1 to explain 'genuine'.
2.	Genuine.	
3.S5:Genuine.		
4	This is different. This is genius.	
5.S5:*So ji gao tsok.* (Therefore [I] mix them up.)		S5 uses L1 to explain why she mixes up 'genius' with 'genuine'.
6.S2:*Tai duo la.* (Too many words.)		S2 uses L1 to explain why she could not remember.
7.S5:Genius.		

In Episode 2.4.17, S5 attempts to distinguish 'genuine' from 'genius'. In Line 5 and Line 6, S5 and S2 again express their problems in distinguishing the two L2 words.

The above episodes demonstrate that the learners use L1 to think of the L2 words, to distinguish the L2 words that bear some similarities, and to understand them. L1 is just a mediation to learn the L2 words. The use of L1 is a means towards the end which, in these episodes, is to get to know the L2 word 'genius', and to differentiate it from 'genuine' in pronunciation and in spelling, and to differentiate 'genius' from 'talented' in their contextual meaning. The continuous effort in learning the word 'genius' shows that they are active learners who would not be satisfied by surface knowledge, and who would attempt to obtain deep understanding of the L2 words, and with the use of L1, the learners are able to voice their thought, express their ideas, and reveal their understanding.

To sum up, Texts 6.1.1 to Text 6.1.5 are the discussion of some selected episodes which demonstrate the use of L1 for exploring the meaning in an attempt to achieve deeper understanding of the L2 words. From the interview data discussed in Chapter 4, using L1 for meaning and understanding is one of the most well-cited reasons of the learners for the use of L1 in L2 learning. The above classroom discourse data give us some ideas of how the learners use L1 for understanding and for thinking of the L2 word meaning. With the findings in this section, the present study therefore makes the point that the classroom discourse data support the interview data that L1 can be used for meaning and understanding

One point of interest here is that from the interview data S5 from Group Two is of the opinion that learning L2 should use L2. However, from the above texts S5 has been using L1 to define, to elaborate, to compare and to contrast. This indicates there is a discrepancy between what S5 says and what S5 does. This will be further discussed in Chapter 8.

6.2 Using the first language to make sense of experience

In the present study, the adult learners use their first language to think and to make sense of experience. Mercer (2000:46) states that we 'use language to make the future from the past, to build a relationship between what has been and what is to come; and we use the resources of past experience to make new, joint knowledge and understanding. Using language, we can transform the raw material of our shared life experiences into stories which have continuity and coherence.' The diversity in learners' prior knowledge and experience appears to provide a large base of resources for the group's knowledge construction, giving opportunities for self-reflection and joint meaning making (Teasley, 1995). Adult learners use language to talk about their life experiences. Their knowledge of shared history is a resource for building shared context in L2 learning. They use L1 to transform individual experience into shared knowledge and to make shared knowledge available to individuals.

Marton and Tsui (2004:23), from a different perspective, suggest 'the space of learning' which is used to refer to 'the pattern of variation inherent in a situation as observed by the researcher. This space is a necessary condition for the learner's experience of that pattern of variation unless the learner can experience that pattern due to what she has encountered in the past.' A space of learning comprises any number of dimensions of variation and denotes the aspects of a situation. Variation that is not present in the situation can still be discerned, however, if variation is brought in by means of the learner's memory of previous experience.

Marton and Tsui (2004:17) emphasise that a person must experience variation in a particular feature that he or she is about to learn and they give an example that in order to experience a teenage girl as strikingly tall, we must have encountered teenage girls as typically being shorter or considerably shorter than this particular girl. The experience of tallness derives from juxtaposing what we see and what we remember; what we experience now and what we have experienced before, and we have to be aware of both at the same time. In order to understand what it is possible to learn,

four patterns of variation are identified. They are constrast, generalisation, separation and fusion. For Marton and Tsui (2004:25), learning is the process of coming to experience the world in a certain way with potential for seeing and understanding. In L2 learning, the opportunity for learners to refer to their past experience opens up dimensions of variation in learning, and provides space for learning L2.

In the present study, opportunity to use language for talk and interactions to make sense of the learners' experience of a particular aspect of learning is essential in L2 development. It provides space for seeing, thinking, understanding and making sense of the learning in the second language classroom. The first language can play a central role in the learning, especially when it is used to constitute experience and to make sense of the L2 learning.

The data of the present study suggest that learners use language to think and to make sense of experience in the process of learning in the second language classroom. For the second language learners, besides using the second language, it is inevitable that they use their first language which is the language they can manage to think and to make sense of experience.

The question to address here is 'How do learners use L1 to think and to make joint sense of their experience in the L2 learning?' The following episodes are extracted from the data as representation of data for discussion.

Text 6.2.1

Episode 1.2.24

In this episode, the students are working on a task which is to write sentences to talk about what kinds of fruit they like to eat. S12 shows the teacher her sentence, in which some words have been misspelled and put in the wrong order. She then uses L1 to talk about what she intends to say in the sentence.

Students	Teacher	Comment on the use of L1
1.S12: *Ngo ne go ji si hae 'Ngo mui jet sik jet go ping go tong mai tsang. Hae mae gum se a?* (This is what I mean, 'I eat an apple and an orange everyday'. Is it written like this?')		S12 shows the sentence she has written. The teacher is trying to work out the meaning of the sentence. S12 then uses L1 to tell the teacher what she intends to say.
2.	Ah, yes. And then you can simply say 'I eat...' [Writing on paper].	
3.S12: I eat...		
4.	...an apple [Writing on paper].	
5.S12: ...an apple.		
6.	...and an orange everyday [Writing on paper].	
7.S12: ...and an orange...		

The sentence in this episode looks like just a simple sentence. However, it is worth-noting because of the way the talk is related to the learner's thinking and experience. S12 is a bit nervous about the sentence she has written. She uses L1 to express her thinking and her intention. S12 has a habit of eating an apple and an

orange everyday and this L2 sentence she has written is meant to express her habit of taking fruit. S12 uses L1 to express what she has thought of and to put them in words in L2, but it just happens that she has misspelled some words and has put some words in the wrong order which makes it hard for the teacher to understand what she wants to say.

The use of L1 enables S12 to say what her original thinking has been and she seems to be very focused on what she means. This is evidenced in Line 1 when she says in L1 'This is what I mean...' This suggests that the learner has her own thinking that she wishes to focus on in the writing. She wants to talk about her personal habit of eating. The use of L1 enables S12 to talk about this personal eating habit of hers, and with the co-construction of the teacher, S12 learns how to repair her L2 sentence to express what she intends to say. In other words, the use of L1 has helped S12 to make sense of her experience in L2 learning.

Of course, from the language teaching point of view, the L2 sentence S12 intends to say looks like just an ordinary sentence, but for S12 it is meaningful because it makes sense of her experience. What is the motive of using L1 to express her thinking? S12 wants to use L2 to talk about her own thinking which reflects her own habit of eating fruit.

This episode also shows that the student uses L1 to seek support from the teacher. Although the sentence seems to be with simple basic structure, S12 has difficulty in constructing it in the correct way by herself. S12 has already made a sentence but she seems to sense that her sentence is not expressing what she intends to say. She then seeks support from the teacher.

S12 uses L1 to state what she intends to say. Through the mediation of L1, the teacher is able to understand what S12 is thinking and then to guide S12 in constructing the sentence. After S12 uses L1 to verbalise her thinking and to explicitly request for assistance from the teacher, she seems to be able to comprehend

the L2 sentence that has been constructed and she utters the words after the teacher without asking further questions.

This episode suggests that with the use of L1, the adult learner is able to verbalise her thinking and make sense of her experience. Using the first language has helped the learner to structure the L2 sentence to express what is intended to say. In this way the learning becomes meaningful to the learner, and has the potential for L2 development.

Text 6.2.2

Episode 2.1.3

Students	Teacher	Comment on the use of L1
1.S2:*Gao xian, zen me ping a*? (High fibre, how to spell?)		S2 uses L1 to ask S5 how to spell 'fibre'.
2.S5:*Ha*? (What?)		S5 asks with L1.
3.S2:*Mai mian bao, jiu shi gao xian.* (Buying bread, it is high fibre.)		S2 explains to S5 in L1
4.S5:O. High *shen me*? (High what?)		S5 uses L1 to ask what has been asked.
5.S2:Fibrai.		
6.S5:O, fabric, f-a-b-r-i-c.		S5 says the word and spells it to S2.
7.S2:F-a-b-r-i-c.		S2 repeats the spelling
8.S5:*Zhe ge shi ming ci. Ke neng shi xing rong ci gen ming ci a.* (This is a noun. Maybe it is an adjective and a noun.)		S5 uses L1 to reason if it is a noun or an adjective.

Episode 2.1.3 is a private conversation recorded between S2 and S5 without the involvement of the teacher. In Line 1, S2 uses L1 to ask for the L2 for 'high fibre'. S2 tries to seek help from S5, who at first does not quite understand what S2 means. In Line 3, S2 elaborates in L1 what she has been thinking, 'Buying bread, it is high fibre.' S5 gets the meaning but could not think of the right word for 'fibre', so she responds with 'High *shen me* (what).' Then S2 thinks of the word pronounced like 'fabrai' that has led to S5 saying and spelling 'f-a-b-r-i-c' for 'fibre'. In Line 8, S5 tries to think of what part of speech 'fabric' is in L1.

This episode demonstrates how S2 and S5 use their first language as a thinking tool in the process of learning L2. The point to note is that we do not learn language incidentally, separate from the practicalities of life. S2 uses L1 to think of 'high fibre' and think of 'buying bread which is high fibre'. The notion of 'high fibre' indicates the cohesion of language learning and the practicalities of life. It also indicates how the language is used to make sense of the learners' experience.

The use of L1 in an attempt to solve their problem and to work out the L2 word for 'fibre' is of interest here. S2 uses L1 to seek help from S5, assuming that S5 could help her to solve the problem. When S5 could not think of the appropriate word, S2 gives the hint that it sounds like 'fabrai' which triggers S5 to think of the word 'fabric'. Although the word generated from the interactions is not correct, the process of learning is important here. The process of learning indicates that learners might make their effort to learn by bringing together all their prior knowledge and experience to build up the 'new' learning. Effort as such is important for the language learning and with such effort the learning becomes more focused and more meaningful to the learners.

The further consideration of whether the word 'fabric' is a noun or an adjective is an interesting point. Besides focusing on the L2 word and its spelling, the learner suddenly uses L1 to talk about her metalinguistic awareness of the word. (Metalinguistic awareness has been discussed in Chapter 5.)

The statements made by S5 suggest that S5 is not sure what part of speech it is and she is using the L1 language to explore the function of the word. First she thought of 'fabric' as a noun. Then she changed to say maybe it is an adjective and a noun. This can be another example of how learners make use of their prior metalinguistic knowledge to evaluate and to think of their 'new' learning. The point needs to note is that this is only a learning process that the learners go through, and during this learning process, the learners hypothesise and make assumption, and they might make mistakes as well.

However, S2 might have doubts about what S5 has told her. In Episode 2.1.7, S2 brings this word up again and uses L1 to ask the teacher for support.

Episode 2.1.7

Students	Teacher	Comment on the use of L1
1.S2:*Xian wei jiao shen me? Ying wen o! xian wei a!* (What is fibre called? English! Fibre!)		S2 uses L1 to ask how to say fibre in English.
2.S1:*Xian wei you yong a, you yong a, dan shi wo...* (Fibre is good for the body, good for the body, but I...)		S1 responds that fibre is good for the body.
3.S5:*Sor tsoi you tsim wae a!* (Vegetables have fibre.) Fibre.		S5 responds that vegetables are with fibre.
4.S2:*Zen me ping fa a?* (How to spell it?)		S2 asks how to spell fibre.

5.	Oh. Fibre. F-i-b-r-e. [Writing 'fibre' on the board.]	
6.S2:F-i-b-r-e *a*? (Is it f-i-b-r-e?)		
7.S5:F-i... *ma*? (Is it f-i...?)		S5 asks if it starts with 'fi...'
8.S2:[To S5] *Ni gong cai shuo zhe ge a?* (What about the one you've just talked about?) Fabric.		S2 asks S5 what was the one mentioned before.
9.	Oh. Fabric is another word. [Writing 'fabric' on board.] Fabric *jiu shi jia si de bu.* (Fabric is the material for furniture.)	The teacher distinguishes fabric from fibre.
10.S2:Fibre...		
11.	Fibre, *jiu shi zhe ge xian wei* (is this fibre).	The teacher says again what fibre is.
12.S2:*Xian wei. Mian bao ma. Wo jiu shi mai mian bao gao xian wei de.* (Fibre. For bread. I buy high fibre bread.)		S2 uses L1 to express that she buys bread with high fibre.

This is an interesting episode because of the way the talk goes on in an attempt to find out the correct L2 word 'fibre', and the way the talk makes sense of experience. Following the private conversation of S2 and S5 in Episode 2.1.3, in

which S2 asks for the L2 word of 'fibre' but S5 has given an incorrect word 'fabric', in Episode 2.1.7, S2 seeks help from the teacher to ask for the word 'fibre' for which she has asked S5 before.

In Line 1, the use of L1 to ask 'What is fibre called? English! Fibre!' has been a deliberate effort to turn to others for help when S2 has some doubts about the word 'fabric' that S5 has told her. The tone of the language implies that S2 has been eager to obtain the L2 word. It is interesting to note that before the teacher could respond to S2, S1 and S5 have responded by giving their opinions about 'fibre', and with the use of L1, S1 and S5 try to make sense of their personal experience. In Line 2, S1 talks about 'fibre' is good for the body and in Line 3, S5 says that vegetables has got fibre. Right after S5 uses L1 to talk about vegetables has got fibre, she switches to L2 and says the word 'fibre' which leads to S2 asking for the spelling of the word. These utterances demonstrate how the learners switch to L1 to think and to link up the topic with life experiences, and how they could switch back to L2.

The conversation could have stopped when the teacher responds with the spelling of the word 'fibre' and then S2 repeats the spelling of the word, but it goes on further with S2 using L1 to ask about the word meaning of 'fabric' mentioned by S5 previously. The point to note is that it is the learner who generates the desire to compare and contrast the two L2 words which bear some similarities in the spelling and pronunciation.

S2 buys bread with high fibre, and she intends to use L2 to express this practical life experience of hers. The effort of S2 to find out the L2 word 'fibre' in Episode 2.1.3 and Episode 2.1.7 suggests that S2 is eager to learn the L2 word 'fibre' and she uses L1 to talk about her life experience in the above two episodes in an attempt to get to know how to talk about it in L2. In other words, S2 uses L1 to help developing the L2.

What is of interest here is that the learning of L2 is not separated from the word meaning and the learners' life experience, and L1 is the language used as a thinking tool for making sense of experiences in the L2 learning. Through the process of learning, learners use language to manipulate their learning and to relate what they knew to build up what they are learning. The talk in this episode indicates that the learners learn the second language by using L1 to make sense of their experience and this is where L1 plays a part in the L2 learning.

The data also show that the individual language development of the learners is shaped by the dialogues with people around them. The generation of 'fabric' in Episode 2.1.3 (Line 6) and 'fibre' in Episode 2.1.7 (Line 3) suggests the importance of talk and dialogues with people in L2 development. Although the talk is mainly conducted in the first language, the use of language provides learners opportunities to think, to relate with prior knowledge and experiences, to explore the use of L2 words and to build up profound interest in L2 learning.

From the data, L1 appears to be a tool for the learners to mediate with the teacher to get support or to mediate with other learners by working in collaboration. Collaborative learning is used here to emphasise cooperative learning and joint discovery in which the teacher brings existing knowledge to students by co-constructing it with them, and more able students are able to co-construct the knowledge with other students. In this episode, with the use of L1, S2 asks the teacher twice to find out the exact word for 'fibre'. She also uses L1 to ask the teacher in an attempt to distinguish 'fibre' from 'fabric'. This suggests that with the use of L1, it provides S2 opportunities to develop the L2 words and to develop her understanding of the words. Such development, with support from the teacher and other learners, is important for the L2 learning.

Text 6.2.3

Episode 2.1.34

Students	Teacher	Comment on the use of L1
1.	With fees from as little as two dollars a section.	
2.S1:What is a section? What is a section?		
3.	What does a section mean?	
4.S5:*Mei ke a. Mei ke a.* (Every lesson. Every lesson.)		S5 gives the meaning in L1.
5.	Yes, it's like a period, a lesson. So they try to make it very cheap.	
6.S1:Section, *dou mei you jiang guo* section. *Ren jia dou shuo* lesson. (No one talks about section. People all say lesson.)		S1 gives her opinion in L1.

In Episode 2.1.34, S1 uses L2 to ask what a section is. After the teacher tries to get response from other learners, S5 responds in L1. After the teacher confirmed the meaning in L2, S1 used L1 to comment that people say lesson instead of section.

The point to note is that the L1 meaning of 'section' given by S5 has certainly helped S1 to comprehend its meaning. The comment given by S1 in Line 6 suggests

that she has got the meaning of section and she is trying to make sense of her knowledge and experience in making the comment that people say 'lesson' instead of 'section'.

In this episode, another point to note is that the teacher uses only L2, while the learners respond in L1. L1 has been used for explaining (Line 4) and for expressing opinion (Line 6). The use of L1 for explaining the word meaning of 'section' seems to be effective, for the comment made in Line 6 indicates that S1 has got the meaning, and she is able to relate to her knowledge and experience that people usually say 'two dollars a lesson' instead of 'two dollars a section'. The opportunity to use L1 to make sense of the experience helps to build up a higher level of understanding of the L2 word 'section'.

Text 6.2.4

The followings are two consecutive episodes responding to the questions 'Are you trying to eat less salt?' and 'Are you trying to eat less sugar?'.

Episode 2.3.17

Students	Teacher	Comment on the use of L1
1.	OK. The next one. Are you trying to eat less salt?	
2.S5:No. Normal. Normal		
3.	So you are not reducing the salt and you just eat normal.	
4.	No. 6. Are you trying to	

	eat less sugar?	
5.S2:No.		
6.	No? I do. I don't put sugar when I drink tea or coffee.	
7.S5:For coffee, I put three teaspoons.		
8	OK.	
9.S5:Sometimes if not busy I drink at least two cups of coffee every day early in the morning, lunch time.		
10.S2:At work, *wo ye chi le fan yi hou he* (I also drink coffee after lunch). *Dan shi wan shang wo bu neng* (But I can't drink at night). *He le yi hou bu neng shui* (After drinking coffee I can't sleep).		S2 expresses in L1 that she likes coffee but it affects her sleep.
11.S1:*Wo jue de tai duo de ka fei he le hen nan guo.* (I feel too much coffee made me feel bad). *Wo ai he* (I love it). *Dan shi wo jue de ta gen zhe ge ke le yi yang.* (But I feel it is like Coca cola.) *He le dui* baby *bu*		S1 expresses in L1 that she likes coffee and coca cola but she can't drink them because she is bearing a baby.

tai hao. (Drinking coffee is not good for baby.)		
12.S5:O, *you* baby *jiu shi zhe yang. Bu neng he ka fei.* (Oh, having baby is like that. You can't drink coffee.)		S5 responses to S1.
13.	Yes. When you are having a baby, it's better not.	

In response to the two questions in this episode, the students are engaged in the talk to make sense of their learning. From Line 1 to Line 9, the utterances are in L2. It is when coffee is mentioned, S2 switches to L1 to talk about her habit, followed by S1 and S5 who respond in L1.

The learners use L1 to share their opinions and to talk about their problems in drinking coffee. S2 says that she likes coffee but could not drink it at night. S1 also says that she likes coffee but it is not good for her pregnancy. S5 agrees with S1 that coffee is not good for the baby. The different views expressed by the learners are to make sense of the learners' experience and to provide variations in the learning .

In Episode 2.3.18, the topic is switched to 'good food for pregnancy' after S1 has mentioned that she is pregnant.

Episode 2.3.18

Students	Teacher	Comment on the use of L1
1.S5:Eat oranges. Orange is good		

especially the sweet oranges.		
2.	Yes. Egg is good for the baby.	
3.S5:Bone. Drink bone soup. *Gu tou a* (It's bone).		S5 cites the word 'bone' first in L2 then in L1.
4.	Bone.	
5.S5:*Bou do di* (Cook more) bone soup. *Bou tsung koi zet.* (To supplement the calcium.) *Koi zet jing men dim gong a*? (How to say calcium in English?)		S5 expresses that S1 should have more bone soup for calcium. S5 then asks how to say calcium in English.
6.	Calcium.	
7.S5:*Dim ping a?* (How to spell it?)		S5 asks how to spell 'calcium'.
8.	C-a-l...	
9.S5:C-a-l		
10.	c-i...	
11.S5:c-i		
12.	u-m.	
13.S5:u-m		

In Episode 2.3.18, the students use L1 to make sense of experience which as a result has provided opportunities for L2 learning. When the topic has been switched to good food for pregnancy, S5 mentions 'have bone soup' which is a traditional Chinese way of providing calcium for the body during pregnancy. She uses L1 to explain that bone is rich in calcium which triggers her to think of the L2 word for

'calcium'. She uses L1 to ask for the L2 word for calcium. After the teacher has told her the L2 word 'calcium', she goes on asking for the spelling which shows her initiative to learn the L2 word.

The point to note is that S5 uses L1 (Mandarin and Cantonese) to talk about her experience (Line 3 and Line 5), which triggers her to ask for the L2 word 'calcium' and its spelling. This suggests that the use of L1 to talk about one's experience is part of the process of learning which provides opportunities for thinking and learning, and which might trigger the motivation to learn the L2 word.

6.3 Using the first language to get things done or to solve problems

With language we do not only talk, we use language to get things done. With the use of the first language, students may make request, persuade or solve problems. Mercer (2000) talks about how we use language to think together and he argues for using language to get things done. 'With language we do not only 'inform' and 'promise': we 'accuse', 'defend', 'lie', 'deny', 'order' and 'persuade'. Language is a weapon in battles between competing explanations, theories and ideologies. (Mercer, 2000:12)' In second language learning, learners need to comprehend the new language, and with the use of the first language, it helps to fulfil functions, and to solve problems. This is one way learners use their L1 in the second language learning.

As mentioned in the beginning of this chapter, for Vygotsky, the relation of thought to word is a process that undergoes changes and development. 'Every thought moves, grows and develops, fulfills a function, solves a problem' (Vygotsky, 1962:125). From the data, with the use of L1, the learners are able to put thought into existence through words, and they use the first language to ask questions, to express their personal opinion, to compare similar words or sentence structures and to solve problems.

The following episodes which indicate using the first language to get things done are selected for discussion.

Text 6.3.1

Episode 2.2.6

Students	Teacher	Comment on the use of L1
1.S8:It's quite big the island. It got the light tower there and *eh* a lot of trees, and lots of rocks. I found like what they say *hai luo*. (Sea shells.) *Zen yang shuo a?* (How to say?)		S8 uses L1 to express 'sea shells'. He also uses L1 to ask how to say the word.
2.	You found it there.	
3.S8:*Ah.* (Yes.)		
4.S5:*Dim gong ne, lo?* (How to say, sea shell?) *Lo dim gong?* (How to say sea shell?)		S5 uses L1 to ask how to say sea shell.
5.	So how do you carry *hai luo* (sea shell)?	
6.S8:It was so heavy.		
7.S5:*Di lo hae me a?* (What is shell?) Shell a? *Hae mae a?* (Shell? Is it?)		S5 uses L1 to ask again.
8.S8:Shell. I don't know		

what kind. Shell *Hai luo*. (Sea shell.)		
9.	Yes, shell.	

After the students have been asked to respond to the question 'How was the trip?' S8 manages to use L2 to give a recount of his holiday. In Episode 2.2.6, when S8 could not think of the L2 words for 'sea shell', he simply uses L1 as an alternative expression instead by saying, 'I found like what they say *hai luo*.' The use of L1 here provides an alternative which enabled S8 to move on smoothly with his recount. If without the use of L1, he might just stop there or might simply avoid telling that part of his recount. It is not until he comes to the word '*hai luo*' that he has to switch to L1 to seek help or support. This suggests that students use L1 to ask for support when they could not think of the word in L2. At first S5 could not think of the L2 word and she also starts asking how to say '*hai luo*'. However the teacher uses question to prompt S8 to go on with his recount trying not to be disturbed by the word. S8 moves on to talk about his holiday but S5 asks again how to say '*lo*' and finally she resolves it by asking 'Shell? Is it?' (Line 7)

The point to note is the way S5 uses L1 to ask for the L2 word for '*hai luo* (sea shell)'. As mentioned above, S8 uses L2 to talk about his trip, and he uses L1 to ask for the L2 word 'sea shell'. However, the teacher wants S8 to move on with his recount in L2, and therefore responds with 'You found it there' to prompt him to go on. In Line 4, S5 uses L1 to push for the L2 words 'sea shell'. S5 has been eager to think of the word in L2 and she uses Cantonese to ask for the L2 for '*lo*'. Despite the teacher intending to move on with the recount, and S8 going on to talk about his trip (Lines 5 and 6), S5 asks for the L2 word for shell again (Line 7). This episode indicates that S5 uses L1 to push for the L2 word or to solve the problem.

The point of interest is after S5 has asked for the L2 word, she thinks of the appropriate words herself. S5 is a native Cantonese speaker but is competent in Mandarin as well. Since S8 had been using Mandarin, she could have asked for the

word in Mandarin. The use of Cantonese rather than Mandarin indicates that it is an immediate response to demand for the L2 word.

Text 6.3.2

Episode 2.2.10

The following two episodes are a response of the question 'What did you do during the weekend?' asked in the previous episode. After S5 responds that she bought souvenirs in Flemington Market, in this episode she then thinks of another time she had been to the market buying tomatoes.

Students	Teacher	Comment on the use of L1
1.S5:Let me think of last time I went to Flemington Market and bought the whole box of tomatoes.		
2.	Tomatoes.	
3.S5:Two dollars for the whole box. So we didn't thought it. Two dollars. It's not all very fresh. Some is very ...		
4.S8:Dried.		
5.S5:No dried. Tomatoes...		
6.	Ripe.	
7.S5:Ripe		
8.	Too ripe.	

9.S5:R-a-p-e.		S5 thinks that the spelling for ripe was 'r-a-p-e'
10.	[Writing r-i-p-e on board] Ripe.	The teacher wrote the word on board to show S5.
11.S5:R-i-p-e. yes. And my husband went home. He cooked. He probably used the ... [pause] what... *Gwo zep gei dim gong?* (How to say juice-blender?). Juice eh...		S5 uses L1 to ask how to say 'juice-blender'.
12.	Juice blender.[Writing 'juice-blender' on board.]	The teacher told S5.
13.S5:*Ngo*. (Oh, with the implication that now I understand.) Juice-blender. Use the juice-blender to do all the juices and put in the lunch boxes and put in the fridge. [laughing.]		S5 uses L1 to express she understands. Then S5 started using 'juice blender' in her dialogue.
14.	All right. Tomato juice is nice.	
15.S5:No. He... gets ready for cook the soup.		
16.S8:Oh!		
17:S5:Cook the soup.		

18.	Oh! The soup.	
19. S5:Yes, the soup and then for the pasta.		
20.	Oh! That's the best way to...	
21.S5:Yes. He put in many boxes. [Laughing.]		

Episode 2.2.10 is an example of a learner using L1 to get things done or to solve the problem in L2 learning. The episode begins with S5 revealing her thinking and making sense of her experience of buying things in the market. The data exhibit collaborative interactions in the learning of L2 in Line 3 that when S5 could not think of the word to describe the tomatoes that she bought, S8 suggests the word 'dried'. After S5 says 'dried' is not appropriate, the teacher gives support by suggesting the word 'ripe'. S5 at first has mistaken it as 'rape' but with the guided support from the teacher, in Line 11 S5 gets the word 'ripe'.

Up till Line 10 the interactions is in L2, but in Line 11, when S5 wants to ask for the L2 word 'juice-blender', she uses L1 to explicitly request for assistance from the teacher. This switch to L1 to get help from the teacher is an example of using the first language to get things done.

S5 could have asked the question in L2, such as, 'How do we call the appliance for making juice?' However, instead of using L2 to ask for help, S5 has switched to L1 to acquire the L2 word for 'juice-blender'. The switch to L1 seems to have gone through the process that thought comes into existence through words, and using L1 to ask for the L2 word seems to be a direct and straight forward way to get things done.

During the interview S5 admits that her reason for using L1 in L2 learning is L1 is 'faster'. The use of L1 in this episode demonstrates what S5 means by 'faster'. It means faster to get things done, faster to get the L2 word for 'juice-blender'.

Furthermore, after using L1 to ask for support, in Line 13, S5 is able to apply the word 'juice-blender' in her utterances which indicate that S5 has got the word and is able to use the word to go on telling her experience in buying tomatoes. This application of the word 'juice-blender' suggests that allowing the use of L1 does not mean that L1 will take over the classroom, and that L1 can be a useful tool for L2 development.

In this episode, with the use of L1 to ask for support from the teacher, L2 development is evidenced. This episode also demonstrates that the Level Two learners, who are more competent in using L2 than Level One learners, might switch to L1 to ask for support. Without the mediation of L1, S5 might not be able to ask for the L2 word or to solve her problem straight away.

Episode 2.2.11

Students	Teacher	Comment on the use of L1
1.	If you don't put in the juice- blender you can just squash it and then put in ...	
2.S5:Depends on what kind of the soup.		
3.S8:You put in just the fridge for two days. It does not last for more than two days.		

4.S5:No. What do you ..going to ...		
5.S8:Put in the fridge for two days, last for two days. It does not last for that		
6.S5.But you put up the top one, not the refrigerator. It's the freeze.		S5 has difficulty in producing the word 'freezer'. She uses 'the top one' and 'the freeze' to indicate the freezer.
7.S8:Freezie, freezie.		S8 tries to help to produce the word but has not got it right.
8.S5:Freeze...		S5 goes on trying.
9.	Freezer.	The teacher says the word.
10.S5 &S8:Freezer.		S5 and S8 say the word to themselves.
11.	Yes. And frozen.	The teacher gives another word 'frozen'.
12.S5:Oh, frozen it.		
13.	You get it frozen. Freeze it. You call it 'freezer'.	The teacher tries to make sentences with 'frozen', 'freeze' and 'freezer'.
14.S5:*Ngo.*(Oh, I understand now.) freezer.		L1 is used as a response to show her understanding.
15.	Freezer and the fridge.	

In Episode 2.2.11, the interactions are in L2 except when saying '*Ngo*, freezer'. S5 has not been able to produce the word 'freezer' properly. Then S5 and S8 have attempted to make the guess with L2. After the teacher has told them the word 'freezer' and 'frozen', S5 uses the word 'frozen' as the verb to say 'frozen it'. After the teacher demonstrates how to use 'frozen', 'freeze' and 'freezer', S5 seems to have grasped the meaning of 'freezer' by saying '*Ngo.* (Oh, I understand.) freezer'.

The point to note in this episode is the process the learners take to learn the L2 word 'freezer'. In Line 6, S5 says 'the freeze'. In Line 7, S8 builds the word up as 'freezie'. In Line 8, S5 attempts again by saying 'Freeze'. In Line 9, the teacher says the word 'freezer', and S5 and S8 repeat the L2 word to themselves.

This episode suggests that students might get confused with similar English words like 'freeze, frozen, freezer'. The teacher makes the judgement that the learners might not be able to use the words in the right context. The teacher therefore demonstrates the way to say them: 'You get it frozen. Freeze it. Your call it freezer.' These help to clarify the similar L2 words, and S5 therefore indicates that she understands.

The use of L2 in this episode suggests that the learners use L1 just when they require it to mediate the L2 learning. The learning process also suggests that the learners are focused and have interest in their L2 learning.

Text 6.3.3

The following are two consecutive episodes which again suggest the use of L1 for getting things done.

Episode 2.3.2

Students	Teacher	Comment on the use of

		L1
1.	All right. Let's look here. [Pointing at the picture in the worksheet.] Are there any fruits that you like?	
2.S2:Oranges, sometimes water-melon.		
3.S5:Oranges, water-melon, peach, bananas.		
4.S2:Bananas. Oranges, my daughter likes to eat.		
5.	Fresh fruit everyday. Yes. I think I like apple.	
6.S5:Because of the juice. Yes. In fact, I like apple that is sweet. And sour that one is no good.		
7.	Oh yes. Have you tried Fuji apple?	
8.S5:Fuji?		
9.	Yes.	
10.S5:Fuji.		
11.S1:Sweet and very hard. I don't like the hard one. I like the soft one.		
12.S5: Very hard to find.		
13.	Fuji is a combination of	

	Australian and Chinese apple. It is a combination. I visited an orchard. They say it is a combination of Australian and Chinese. Fuji is good because they are hard or because the taste is nice.	
14.S5:Both.		
15.	Oh. Apples, when they are fresh they are very hard.	

In Episode 2.3.2, when the teacher asks about the fruits the learners like, the learners respond with L2. It is of interest that in this episode, only L2 is used, but in the next episode the utterances are mainly in L1. This episode seems to have set the stage for the next episode in which L1 is used. In this episode, in responding to the question, 'Are there any fruits that you like?' the students use L2 to name the fruits they like. In Line 4, S2 relates her experience that her daughter likes oranges. S5 extends her thinking and responds with 'because of the juice' and she relates her experience that she likes apples that are sweet but not sour.

When the teacher mentions a kind of apple called 'Fuji', in Line 11, S5 again talks about her choice of apples, soft but not hard. In L2 learning, it is inevitable that the learners use the language for their thinking and to make sense of their personal experience.

The use of L2 for interaction in this episode demonstrates that when the students are capable of using L2 for responses L1 is not used, while in the next episode the learners use L1 to initiate the problem and eventually to solve the problem in L2 development.

Episode 2.3.3

Students	Teacher	Comment on the use of L1
1.S5:Because the taste is different. So you like the taste.		
2.	Yes. The taste is ... very sweet.	
3.S2:*Hen cui*. (Very crunchy.)		S2 uses L1 to describe an apple.
4.S5:*Cui. Cui zen me jiang*? (Crunchy. How to say crunchy.)		S5 uses Mandarin to ask how to say crunchy in English.
5.S2:*Hen* (Very) hard. *Jiu shi hen cui* (It means very crunchy).		S2 thinks of the L2 word 'hard' for crunchy, then says in L1 'It means very crunchy'.
6.S5:*Tsey. Tsey ge jing men dim joeng gong?* (Crunchy. How to say crunchy in English?) *Zik hae tsey a. Gong lok sok sok sing.* (That means crunchy. It sounds like 'sok sok') [Laughing]		S5 uses Cantonese to ask how to say crunchy in English. She even uses onomatopoeia '*sok sok sing*' to illustrate crunchy.

7.S2:<u>*Cui a. Hen cui.*</u> (Crunchy. Very crunchy.)		S2 repeats crunchy in L1
8.S5:*Dim jeong jing jung ping go ngao dek tsey ne?* (How to describe an apple is crunchy to bite?)		S5 uses Cantonese again to ask how to say crunchy in English.
9.	Crunchy.	
10.S5:*A.* Crunchy *a*? (Oh. Is it crunchy?)		S5 responds with a question.
11.S2:*A!* (Oh!) [I know it now.]		S2 responds that she knows it now.

Episode 2.3.3 is another example of using the first language to get things done. When S2 brings up the word '<u>*hen cui*</u> (crunchy)', the utterances are switched to L1. S5 uses L1 (Mandarin) to ask how to say it in L2. This is followed by S2 trying to use the word 'hard' to express the meaning of 'crunchy', but S5 is not satisfied with the word 'hard' and uses L1 (Cantonese) to ask again.

S5 even imitates the sound of 'crunchy'. She uses onomatopoeia '*sok sok sing*' to illustrate the word. Then S2 repeats 'crunchy' in L1 and S5 again uses L1 (Cantonese) to ask how to describe an apple that is crunchy to bite, expecting the teacher to give the answer straight away. The asking of questions with the use of L1 suggests that the learner demands a direct and straight forward response.

The data indicate that the use of L1 provides S5 opportunities to verbalise the thinking of the word '*tsey*', to illustrate the crunchy sound, and to relate to experience that apple is crunchy. After the teacher says the word 'crunchy', S5 confirms the word, and S2 shows that she understands by then. These suggest that L2 learning is developing through the use of L1.

The point worth noting is that S5 switches from Mandarin to Cantonese to get things done. Although S5's first language is Cantonese, she is competent in Mandarin as well, for she attended high school and university in a Mandarin-speaking country. In Line 4, S5 uses Mandarin to ask how to say 'crunchy' which has been responded by S2, a Mandarin speaker. However S5 was not satisfied with S2's response. In Line 6 and Line 8, S5 again asks how to say 'crunchy' but with Cantonese. Since S2 does not speak Cantonese, the questions are certainly meant to be for the teacher to answer. In Line 9, after the teacher has said the word 'crunchy', S5 and S2 both give their personal responses. The point to note is that the switch from Mandarin to Cantonese suggests that S5 uses L1 to get things done: she is expecting the teacher to answer her questions, and she uses Cantonese instead of Mandarin in an attempt to get support from the teacher.

6.4 A summary of Chapter Six

To conclude, this chapter discusses how the first language and the second language have been used to think of the word meaning, to make sense of experience, and to get things done or to solve problems. With the use of L1, the learners are engaged in talk and interactions which elicit their thinking and shape their perceptions that lead to L2 learning and development. From the data, the adult learners use L1 to talk about similar L2 words such as belly dance and ballet dance, and genius and genuine, and for more in-depth discussion of certain concepts such as 'considerable', 'meditation' and 'muesli'. The use of the first language provides learners opportunities to discuss, to compare, to make assumption, and to make judgement of the word meaning. These are valuable learning processes which could contribute towards deep knowledge and profound understanding in L2 development.

The second language learners use their first language to make sense of their experience. The data in this chapter indicate how learners use language, including the

first language, to relate the L2 learning to their knowledge and personal experience, and how the knowledge and experience help to build up their interest in L2 learning. Furthermore, in the process of L2 learning, second language learners use their first language to ask for the L2 words and to ask for the L1 meaning. In other words, second language learners use their first language as a tool to get things done or to solve their problems. The first language is like a tool for second language learning. Seen in this light, the first language plays a positive role in L2 learning and understanding.

From the interviews, many of the learners have expressed that L1 is used for understanding of L2. The classroom discourse data discussed in this chapter support this view of the learners. The ultimate aim of using the first language to think of the word meaning, to make sense of learners' experience, and to ask for the L2 words, is for understanding and comprehending the new language.

In the present study, data indicate that both Level One and Level Two students use L1 for L2 learning. Students of Level One seem to be not so fluent in L2, and some of them have expressed that they would like to learn L2 with L1. For the Level Two students, even though they appear to be more fluent in L2 and sometimes they could manage to use L2 for interaction, they still use L1 for discussion, for requesting guidance and support in the L2 learning. L1 seems to be a useful tool for learning L2 for both groups of students. The data appear that Group Two Level Two students use comparatively more languages, including L1 and L2, to share, to dispute and to define experience. The present study therefore draws the conclusion that differences in the use of L1 for the two different levels of students are not in the quantity or the frequency of use but rather in the way the language is used.

The findings of this chapter suggest that through the use of language, which includes the first language, the learners are able to convey ideas, to put forward propositions, to explore the meaning, and to make sense of their experience, and this is how the first language can play a significant role in the L2 development.

Chapter 7 The use of the first language for support and encouragement

Chapter 5 focuses on the use of the first language for active construction of knowledge and Chapter 6 discuses the use of the first language as a tool for thinking and learning. In this chapter, I am particularly interested in the social aspect rather than the cognitive aspect. This chapter focuses on the use of the first language for support and encouragement, although the data might not be exclusive of other L1 uses. In Vygotsky's (1978) view, language or speech can be functioning in the social-mediational situation. Post-Vygotskian notions of teaching and learning as an assisted performance (Tharp & Gallimore, 1988) or as a process of guided participation (Rogoff, 1990) suggest that learning arises both as the result of deliberate guidance of the learner by a more capable person or through participation in activities within a community of practice. In the light of these views, learning is not only a construction process that takes place in the mind of an individual but also a social learning process that takes place in the sociocultural context of activity.

The sociocultural perspectives which view learning from the cultural point of view emphasise the role of social interaction (Vygotsky, 1962, 1978; Wertsch, 1985; Van der Veer & Valsiner, 1994). Social interaction is defined as 'an ability to engage with others as persons and specifically to be equipped to engage in mutual influence over others as a fundamental capacity' (Van der Aalsvoort & Harinck, 2000:5).

In sociocultural perspectives on learning, particular emphasis is put on the mediation of action through tools on the development of the mind (Wertsch, 1991; Harre & Gillett, 1994). Tools are used to refer to the mediational means which include various cultural artifacts such as different symbol systems, language, maps and works of art. Language is seen as one of the main sources of mediational means. In the present study, L1 is used as one of the main mediational means in the learning and interaction of L2.

The dimensions of interactions are related to the participants' socio-cognitive and emotional processes. Research has provided convincing evidence of the positive effect of collaborative small group work activity on students' cognitive and social development (Rosenshine & Meister, 1994). The dialogic exchanges with the use of L1 in collaborative tasks are important as an activity favourable to second language acquisition (Anton and DiCamilla, 1998). In the present study, with the use of L1, the learners are able to be involved in collaborative interaction which results in cognitive and social development.

Group activities can offer students extended opportunities for active participation. The quality of learning in small groups is strongly associated with the quality of interactions and collaboration learners engaging in academic tasks (Webb, Troper & Fall, 1995; Mercer, 1995). The dynamics of group interaction are complex and do not automatically lead to collaboration and understanding. For effective learning in group interaction it is necessary that participants have a shared understanding of the task and its goals, and are ready to take active participation in the learning.

In the present study, dynamic social interactions are evidenced and that L1 is used as a social mediator in the socially shared learning process. The effect of the social interactions contributes towards an affective aspect which helps to reduce frustration and anxiety in the L2 learning, and to build up a friendly and caring learning environment conducive to L2 learning.

In an attempt to investigate how the first language is used for support and encouragement, some episodes from the data have been selected for scrutiny. In this chapter, the data are discussed under the topics of (1) Scaffolding learning with the use of L1, (2) Getting support from more capable peers with the use of L1, (3) The use of L1 for reducing frustration and anxiety, and (4) The use of L1 to give support and to encourage others.

7.1 Scaffolding Learning with the use of L1

The term scaffolding was first used by Wood, Bruner, and Ross (1976) in their examination of parent-child talk in the early years. Scaffolding in a usual sense is a temporary but essential construction used in the process of constructing a building. Bruner (1978:19) describes scaffolding in the metaphorical sense as 'the steps taken to reduce the degrees of freedom in carrying out some tasks so that the child can concentrate on the difficult skill she is in the process of acquiring.' Mercer (2000:140) says that scaffolding 'helps a learner to accomplish a task which they would not have been able to do on their own. But it is a special, sensitive kind of help which is intended to bring the learner closer to a state of competence which will enable them eventually to complete such a task on their own.' Gibbons (2002:10) points out that scaffolding 'is not simply another word for help. It is a special kind of help that assists learners to move toward new skills, concepts, or levels of understanding'. That is to say, scaffolding is used to assist learners to move toward higher level of understanding.

Scaffolding is to be regarded as the temporary assistance by which a teacher helps a learner know how to do something so that the learner will later be able to complete a similar task alone. To use scaffolding as a teaching/learning technique, an adult or a more capable peer has to make careful judgement about what a learner understands, and has to adapt the kind of intellectual support for the learner to take account of their developing knowledge and understanding. During a joint activity with a learner, the adult or the more capable peer can enable the learner to make progress which he or she would not have been able to do alone. The adult's intellect provides a temporary support for the learner's own until a new level of understanding has been achieved. Therefore scaffolding is future-oriented.

In the present study, the temporary assistance with the use of L1 is helpful for the learning of L2. The data indicate that the second language learners have used L1 as a special kind of help that assists their learning to move toward new skills, concepts, or levels of understanding. Through the use of this temporary assistance of L1, it is hoped that the learners would eventually achieve higher levels of understanding in the L2 learning.

The following episodes are selected for the discussion of scaffolding of learning which involves this special kind of support that assists learners to move toward new levels of understanding.

Text 7.1.1

Episode 2.3.26

Students	Teacher	Comment on the use of L1
1.	Right. No.14. Whose turn to read?	
2.S1:Do you practise a relaxation technical regularly?		By mistake, S1 substitutes 'technique' for 'technical'.
3.	A relaxation technique regularly. Do you practise a relaxation technique regularly?	The teacher helps by modeling it.
4.S1:Relaxation techniques?		S1 asks to make sure she gets the right pronunciation.
5.	Relax. Remember the	The teacher tries to

	word relax?	break down the word to help their understanding.
6.S5:Yes.		
7.S1:*Qing song*. (Relax.)		S1 gives the meaning of 'relax'.
8.	Yes, relaxation.	The teacher then builds up into relaxation.
9.S1:*Qing song de.* (Relaxation)		S1 again gives the meaning in L1.
10.S5:*Qing song de ji qiao*. (Relaxation technique.)		S5 uses L1 to build up the meaning of relaxation techniques.
11.	Yes. So what are the relaxation techniques?	
12.S5:For example, listen to the music.		S5 gives an application in L2
13.	Ah. Yes.	

Episode 2.3.26 is an example of scaffolding of learning, during which the learners are able to build up the word meaning of 'relaxation techniques' with the guidance and support of the teacher. The scaffolding involves the support of the teacher to break down the word into morphemes or smaller parts, and with the step by step guidance the learners are able to work out the word meaning.

The problem is initiated when the learner S1 makes an error in reading the question with 'relaxation technique' (Line 2). The teacher models the reading twice assuming that this is only a pronunciation error (Line 3). The feedback of S1 in Line 4 suggests that the learner might not be able to comprehend the word meaning which leads to the use of scaffolding technique to assist the learners in their understanding.

During the scaffolding of learning, it is interesting to note that the teacher uses L2 to elicit responses from the learners while the learners use L1 to respond. The data in this episode suggest that the first language is not just a language, but it enables a particular way of developing the dialogue. The first language is evidenced to be a very important part of the scaffolding of learning, and it functions as a tool for the learners to achieve their L2 learning. Another point to note is that the bilingual teacher has played a crucial part in co-constructing knowledge with the students through her proficiency in both the L1 and L2.

The scaffolding of learning begins when S1 has questioned about 'relaxation technique'. The teacher breaks down the words into morphemes and guides the learners to think of the word 'relax' for which S1 responds with the L1 meaning of 'relax' as '*Qing song*'. When the teacher goes further with the word 'relaxation', S1 responds with the L1 meaning of 'relaxation' as '*Qing song de*'. By then S5 seems to get the scaffolding skills and continues to scaffold the learning by giving the L1 meaning of relaxation technique as '*Qing song de ji qiao*'. The scaffolding is based on the teacher's judgement that the learners might have an idea of what 'relax' is. After S1 has responded with the meaning in L1, the teacher goes on further to ask for the meaning of 'relaxation' that S1 again responds with the meaning in L1, and then for 'relaxation techniques' S5 responds with the meaning in L1. To provide this 'scaffolding', the learners develop their knowledge and understanding. This scaffolding is a joint activity with the learners involving the use of L1. It is not just any L1 use, but a particular way of constructing meaning. The use of L1 to respond is evidenced to be effective in the scaffolding of learning which helps to actively construct the word meaning and to build up a new level of understanding.

This notion of active construction of knowledge of the word meaning is established when the teacher asks for an application of relaxation technique, and S5 could respond with an appropriate answer in L2 'listen to the music' for application. The L1 responses of S1 and S5 suggest that the learners are using L1 to build up their

understanding of the phrase 'relaxation technique'. This episode also demonstrates the collaborative learning in which S1 and S5 work together to construct the meaning of the L2 words.

In this episode, the use of L1 is just like the scaffolding which is a temporary construction to support the L2 learning. This temporary construction is considered to be an essential step because it is a special kind of assistance which helps the learners to move forward to achieve the L2 learning. Effective scaffolding with the use of L1 encourages learners to advance, and it brings the learners closer to a state of competence which helps them to accomplish a task that they would not have been able to do on their own. When the learners have gone through the learning process and when the scaffolding of learning has been completed, the appropriate response in L2 for application in this episode suggests that the learning through the temporary construction with the use of L1 as scaffolding is effective.

Text 7.1.2

Episode 2.3.20

Students	Teacher	Comment on the use of L1
1.	OK. No. 8. Who can read No.8?	
2.S2:Are you about the right weight for your height?		
3.	So you know what that means? What is weight?	
4.S1:*Zhong liang, Zhong liang.* (Weight. Weight.)		S1 says in L1 the meaning of weight.

5.	What is height?	
6.S5:*Gao du* (Height). *Gou du a* (Height).		S5 says in L1 the meaning of height.
7.	Usually the weight is measured over the height. Just like she is taller she can be bigger. If you are small you have to lose some weight.	
8.S5:I think I am right.		
9.S2:You are right? I think I'm too fat for me.		
10.S5:I'm right. I'm right.		
11.	You put it down if you are right.	

This is another example of the teacher using scaffolding technique to help students understand what the question is asking. During the scaffolding learning, the teacher uses L2, and again the learners use L1 to respond. When the scaffolding learning is completed the learners could switch back to L2 to respond to the question.

In this episode, the teacher makes the judgement that understanding the question read by S2 requires the understanding of the relationship between weight and height. The teacher then uses the scaffolding technique to break down the question into smaller parts in order to help the students to develop their understanding. The teacher first uses L2 to ask what weight is (Line 3), and S1 responds in L1 the meaning of 'weight'. Then the teacher uses L2 to ask what height is (Line 5), and S5 again responds in L1 the meaning of 'height'. The use of L1 to

respond in this episode suggests that L1 is an immediate tool the learners use in scaffolding the learning.

The scaffolding of learning provides a support for the learners, and it enables the learners to advance further. After the teacher has explained the relationship of weight and height with the use of L2 (Line 6), S5 and S2 switch back to L2 for responses. S5 responds to the question and says that she thinks she is right in weight and height. S2 questions S5, 'You are right?' and then she makes a self-comment that she is too fat.

The scaffolding with the use of L1 in this episode again demonstrates that L1 is like the temporary assistance used to help the learners to work out the individual concepts before moving forward to comprehend the contextual meaning of the question. When the scaffolding is completed the learners do not need the use of L1. The ability to switch back to L2 for responses by the learners (Lines 8, 9 and 10) suggests that the use of L1 is just a temporary support, and that through the use of L1 for scaffolding a new level of understanding has been achieved.

7.2 Getting support from more capable peers with the use of L1

There is a growing interest among researchers in understanding how language development occurs through interaction in classrooms. The interactional routines are evident not only in teacher-fronted settings, but also in peer learning contexts. Through collaborative interaction with peers, learners apply the tools to linguistic and interactive problems, and language is acquired as learners interact in the zone of proximal development (ZPD). Recent work has prioritised examining developmental processes in the zone of proximal development (Donato, 1994; Washburn, 1994; Lantolf and Aljaafreh, 1995; Ohta, 2000). Vygotsky (1978) introduced the notion of the zone of proximal development in 'an effort to deal with two practical problems in educational psychology: the assessment of children's intellectual abilities and the

evaluation of instructional practices. With respect to the former, he believed that existing techniques of psychological testing focused too heavily on intrapsychological accomplishments and failed to address the issue of predicting future growth'(Wertsch, 1985). For Vygotsky, it is just as crucial to measure the level of potential development as it is to measure the level of actual development.

Vygotsky defined the zone of proximal development as the distance between a child's 'actual developmental level as determined by independent problem solving' and the higher level of 'potential development as determined through problem solving under adult guidance or in collaboration with more capable peer' (Vygotsky, 1978:86). This concept of zone of proximal development was developed by observing the children who came to adopt the role of adults in culturally organised activities. Although Vygotsky was speaking of children, this concept could be applied to adults in second language learning context. Ohta (2001:9) has developed a definition of ZPD for the L2 learner as 'the distance between the actual developmental level as determined by individual linguistic production, and the level of potential development as determined through language produced collaboratively with a teacher or peer'. Ohta points out that Vygotsky's notion of ZPD required the one providing the assistance to be a teacher or more capable peer, but Ohta explains that 'true peers' are also able to assist each other through interactive processes.

In the present study, the zone of proximal development is used to mean the difference between what a person could achieve when acting alone and what the same person could accomplish when acting with support from someone else. With the mediation of L1, second language learners are able to work towards a higher level of potential development. The learners use L1 to ask for support from the teacher or from some of the learners who are capable of providing support to the peers. Through appropriate assistance in the collaborative process, the second language learners are able to learn from their peers and to accomplish tasks above their independent ability.

From the data, L1 has been used for the support of L2 development from more capable learners. The following episodes are selected for discussion.

Text 7.2.1

Episode 1.3.42

Students	Teacher	Comment in L1
1.S10: *Jy gwo jau ding go di giu zou Lai Ba Ngy tseing gwa a.* (If it has nail-heads it is Lebanese cucumber.)		S10 explains how Lebanese cucumber looks like.
2.S12:*Jau di tsoeng tsoeng ge jau go tou, ng sae zy ge.* (Some are long in shape, with a head and does not need cooking.)		S12 describes another similar type of vegetable.
3.	Oh Zucchini.	
4.S12: *Ng sae zy ga, zau gem sik ge. Hou sik ga, sang sik.* (Does not need cooking, just eat it. Very nice to eat, eat it raw) *Zy zo zau fan wae ng hou sik.* (After cooking it's not good to eat.) *Jet zy zau hou lem ge.* (Once you cook it, it		S12 goes on saying zucchini is crunchy and nice to eat but is not good after cooking.

becomes too tender to eat.)		
5.S10:*Hae mae jau go tou?* (Does it have a head?)		S10 asks if zucchini has a head.
6.S12: *Hou tsoeng ga. Hae a! Hae a!* (Very long. Yes! Yes!) *Hou tsi jau do fa gem ge. Zy zo fan wae ng hou sik.* (Look like a flower. After cooking it's not good to eat.)		S12 describes how zucchini looks like: very long, with a flower, and it is not suitable for cooking.
7.	It's called zucchini. [The teacher writes and draw 'zucchini' on board.] Look like *eh* a cucumber. It always has this part [pointing at the drawing of zucchini.]	
8. S12:*Hae a! Go tou hou tsi jau do fa.* (Yes! The head looks like a flower.)		S12 goes on describing how zucchini looks like.
9.	So, it's called zucchini. It's very nice to eat. You can cook it.	
10.S10: *Siu wu gwa.* (Small cucumber from overseas or Zucchini.)		S10 says zucchini in L1.
11.	*Giu zou me a*? (What's	The teacher asks how it

	it called?)	is called in L1.
12.S10: *Siu wu gwa.* (Small cucumber from overseas or Zucchini.)		S10 repeats the name.
13.	*Siu wu gwa* (Zucchini).*Xiao hu gua* (Zucchini).*Wai guo de, zhe zhong dong xi jiao 'hu'*. (From overseas, '*hu*' means things coming from overseas) *Hu gua jiu shi wai guo lai de.* (Zucchini comes from overseas).	The teacher uses Cantonese and Mandarin to explain why zucchini is called '*Siu wu gwa*'/'*xiao hu gua*'.

In Episode 1.3.42, with the use of L1 the learners provide support to each other during collaborative interactions in the L2 learning. The episode starts with S10 and S12 using L1 to describe a common vegetable in Australia, zucchini, which probably has originated from overseas and is unfamiliar to Chinese people. The use of L1 is not only a translation of L2, but reveals the vivid thinking of both S10 and S12. From what S10 says in Line 1, it reveals that S10 has thought of the vegetable has a head like 'nail head', and is like Lebanese cucumber. However, S12 thinks of another way to describe the vegetable: long, with a head like a flower, and does not need cooking. This episode demonstrates that with the use of L1 the learners are capable of using vivid description to talk about the vegetable, including how zucchini looks like and how it should be eaten.

The description in L1 helps the teacher to figure out which vegetable S12 is talking about and in Line 3 the teacher makes the assumption that the vegetable mentioned is 'zucchini'. After the teacher has responded with the L2 word 'zucchini' the learners try to make sense of their experience and go on talking about its

appearance and the best way to eat it (Lines 4, 5 and 6). By then, the teacher is sure that the vegetable the learners talk about is 'zucchini'. The use of L1 helps to indicate the kind of support required by the learners, and without the use of L1, it might be difficult for S10 and S12 to reveal what they are thinking of, and the teacher might not be able to know 'zucchini' is the vegetable the learners intend to say. With the mediation of L1 the learners are able to acquire the appropriate assistance.

In Line 10, S10 brings up the Chinese name '*siu wu gwa* (small cucumber from overseas)', which indicates the origin of zucchini. With the use of L1 the teacher is able to elaborate the meaning of '*wu* (overseas)' that implies its origin.

The discussion of this episode focuses on the interaction process which enables the learners to give help and support with the use of L1 in the learning of L2, and through this interaction process, the learners have achieved some understanding that they might not be able to achieve if working independently.

Text 7.2.2

The students have been asked to respond to the questions 'Do you eat vegetables everyday?' and 'What sort of vegetables do you eat?' Some students have named some of the vegetables they eat in Episode 2.3.4. In the following episodes, the students continue to talk about the vegetables they eat, and through the interaction process the students get support from more capable peers with the use of L1. One point to note is the progress that S1 has made from Episode 2.3.5 to Episode 2.3.8.

Episode 2.3.5

Students	Teacher	Comment on the use of L1
1.S1:And *na ge qin cai.* (And that celery.) *Qin*		S1 uses L1 to say celery and then asks how to

cai jiao shen me? (What is celery called?)		say celery in English.
2.S5:Celery.		
3.	Celery. Yes.	
4.S2:Cucumber.		
5.	Tomato and cucumber.	

In Episode 2.3.5, S1 used L1 to ask how to say 'celery' and S5 responded with the L2 word. Then S2 uses L2 to say 'cucumber' which is the vegetable she eats. This episode indicates that S1 thinks of 'celery', but she cannot produce the L2 word. With the use of L1, S1 gets support from another student, S5.

Episode 2.3.6

Students	Teacher	Comment on the use of L1
1.S2:And Chinese cabbage.		
2.	Yes. Chinese cabbage.	
3.S2:*Zhe shi wo men jia de jia cheng cai.* (This is our family's favourite vegetable.) [Laughing.]		S2 uses L1 to express that Chinese cabbage is her family's favourite.
4.S5:[Laughing.]		
5.	Yes.	
6.S2:*Hai you* (And also) potato.		S2 goes on naming the vegetable that she eats.
7.	Yes, potato.	
8. S5:Chinese cabbage *hae mae zik hae siu tsoi a?* (Is Chinese cabbage		S5 asks if Chinese cabbage is '*siu tsoi*' in Cantonese.

called '*siu tsoi*'?)		
9.	*Hae a.* (Yes.)	The teacher responds.
10. S5:*Ye jiao da bai cai*. (Also called '*da bai cai*'.)		S5 gives another name of Chinese cabbage in Mandarin.

In Episode 2.3.6, S2 goes on naming the vegetables she eats. When she talks about 'Chinese cabbage', she gives her personal comment in L1 that Chinese cabbage is her family's favourite vegetable. In Line 8, S5 uses L1 to ask if the L1 for Chinese cabbage is called '*siu tsoi*' and says it is also called '*da bai cai*'.

This episode suggests that students use L1 to interact with other students and through the interactions they get support from the more capable peers. It is interesting to note that S2 uses L1 to give a personal comment. It seems to indicate that when talking about the vegetables S2 eats, she thinks of her family's favourite vegetable, and this suggests that she tries to make sense of her own experience in L2 learning.

It is also worth noting that S5 is not satisfied with just saying 'Chinese cabbage' in L2, she wants to know if it means to be '*siu tsoi*' in Cantonese or '*da bai cai*' in Mandarin. It seems to suggest that just learning the name of a vegetable in L2 is not enough. It is interesting that the learner in this episode attempts to find out what they are called in Cantonese as well as in Mandarin. Maybe this enables the learner to improve her L1 as well.

Episode 2.3.7

Students	Teacher	Comment on the use of L1
1.S2:*Jiu cai jiao shen me*? (What do we call '*jiu cai*'?) *Jiu cai a* (Chives)!		S2 uses L1 to ask how to say '*jiu cai*' in L2.

2.S1:Chives. Chives		
3.S5:Ah. Chives. *Zen me ping a?* (How to spell?)		S2 uses L1 to ask for the spelling.
4.S1:C-h-i-v-e something.		
5.	It's a sort of chives. *Jiu cai*.(Chives.)	The teacher explains what is '*jiu cai*'.
6.S1:*Jiu cai* (Chives.).		S1 says chives in L1.
7.S2: *A! Ni hui jiang zhe ge jiu cai!* (Oh! You know how to say chives!)		S2 uses L1 to show her appreciation to S1 who knows how to say chives.
8.S1:*Wo hui jiang. Hen duo dou hui jiang.* (I know how to say. I know how to say many of them.)		S1 expresses that she could say many of them.
9.S5:*Jiu cai jiu shi* (Chives are called) chives.		S5 says '*jiu cai*' is chives.
10.	Chives, *jiu cai shi* (chives is) like herbs. And all these, like parsley, one of the herbs. Yes?	The teacher says chives in both L2 and L1.
11.S5:How to spell chives?		
12.	c-h-i-v-e-s	
13.S2:c-h-i-v-e		

14.	C-h-i-v-e-s	
15.S1:*Zen me jiang cai? Shenme cai?* (How to say vegetable? Whatever vegetables?)		S1 asks how to say vegetables in L1.
16.S5:C-h-i …		
17.	-v-e	
18.S5:Chinese c-h-i-v-e chive. *Wo hui xie a!* (I know how to write!)		S5 uses L1 to express she has learnt how to write chives.
19.S1:*Jiu cai.* (Chives.)		S1 says 'chives' in L1 to herself.
20.S5:*Jiu cai.* (Chives.)		S5 also says the word in L1.

In Episode 2.3.7, S2 used L1 to ask how to say '*jiu cai*' and S1 responded with 'chives'. In Line 3, S2 goes on to get support from S1 and asks S1 how to spell the word 'chives' which was then responded by S1. In Line 7, S2 even shows her appreciation for S1. From Line 9 to Line 20, S2 and S5 try to learn the word by spelling the word and saying the word to themselves (Line 13 and Line 18).

This episode demonstrates the interactions among S1, S2 and S5. With the use of L1, students were able to get support from other learners, and to learn through collaboration.

Episode 2.3.8

Students	Teacher	Comment on the use of L1
1.S2:*Qin cai shi shenme*? (What is celery?) *Qin cai a*		S2 asks how to say celery.

(Celery).		
2.S1:*Qin cai* (celery) *shi* celery *a*.		S1 tells S2 how to say celery in L2.
3.S5:*Shi* celery. *Shi* celery a! (It's celery. It's celery!)		S5 says celery twice.
4.S5:*Ha ji tsung.* (Shallot.) *Me giu 'ha ji tsung'?* (How to call '*ha ji tsung*'?) *Xia yi cong a.* (Shallot.) *Mei teing gwo ha ji tsung a?* ([You] Haven't heard of '*ha ji tsung*'?)		S5 says an unfamiliar name of shallot in L1, first in Cantonese, then in Mandarin.
5.S1:*Cong shi* (Shallot is) spring onion.		S1 tells S5 it is called spring onion.
6.	Yes. Some people call spring onion.	
7.S2:Shallot		
8.	Or shallot.	
9.S5:Shallot.		
10.	Shallot.	
11.S5:Yes, shallot.		

This episode again demonstrates how learners use L1 to give support to others and how they learn through interactions and collaboration in the zone of proximal development. The point to note is the change and development of S1. Referring back to Episode 2.3.5 (Line 1), S1 has to ask how to say the L2 word for 'celery' and has used L1 to get help from S5, but in Episode 2.3.8 (Line 1), when another student, S2, asks for the L2 word 'celery', S1 is able to help S2 with the L2 word (Line 2).

That is to say, the second language is acquired as the learners interact in the zone of proximal development. With the use of L1, the learner, S1, after getting support from a learner, S5, is capable of progressing further to give support to another learner, S2. This progress of S1 indicates that with the intellectual guidance and support from a more capable peer, the learner is able to make progress beyond the original independent capability.

Another example is the learning of the L2 word 'shallot'. In Line 4, S5 asks how to say shallot and in Line 5, S1 responds with 'spring onion'. In Line 7, S2 responds with another L2 word 'shallot'. S5 then repeats the word 'shallot' (Line 9 and Line 11).

To sum up, the guidance and support in the ZPD in these episodes involve the use of L1. This suggests that L1 has a role to play in the zone of proximal development in L2 learning.

7.3 The use of L1 to reduce frustration and anxiety

For adult learners, learning a new language is not easy, and they may come across times of difficulties which resulted in frustration and anxiety. As mentioned in Chapter Two of this study, Collingham (1988:82) discusses making use of students' linguistic resources and she advocates the use of L1 or 'bilingual approach' in the teaching of English as a second language. One of the eight reasons stated for the use of L1 is to reduce learner anxiety and therefore increasing confidence and motivation.

The classroom discourse data in the present study indicate that learners use L1 to talk about their difficulties in L2 learning. With the use of L1, learners are able to express their frustration in pronouncing the L2 words, in memorising the vocabulary and in using the correct sentence structure. The use of L1 to interact with other learners helps to reduce the frustration and anxiety of the learners. The classroom

discourse data support the data from the learners' views in which S11 from Group One talks about how she uses L1 to help memorising the L2 words (Refer to Chapter 4 Text 4.9), and S1 and S7 from Group One talk about their frustration and anxiety in L2 learning and their preference in using L1 for L2 learning (Refer to Chapter 4 Text 4.1 and Text 4.2).

From the classroom discourse data, the following episodes suggest that the learners use L1 as mediation which helps to reduce frustration and anxiety in the L2 learning and thereby helps to build up confidence and motivation in L2 learning.

Text 7.3.1
Episode 1.1.8

Students	Teacher	Comment on the use of L1
1.S12:*A, lou si, lek gwet dim gong a?* (Oh, teacher, how to say 'rib'?)		S12 asks the teacher how to say ribs.
2.	*Eh?* (What?)	
3.S12:*Lek gwet a.* (Ribs.)		S12 repeats her request.
4.	*Lek gwet a* (Ribs), ribs.	The teacher responds to the request.
5.S12:Ribs.		
6.	R-i-b-s, ribs	
7.S12:*Ngao ng zing* (Can't pronounce properly). *Dim jeong fen* (How to make the difference)? .		S12 expresses her problem in pronouncing the word 'rib'.

8.	Ribs, ib, ribs. R, r-ib, ribs	
9.S12:Ribs.		
10.	'R', *tiu lei hae zyn* (the tongue is turning to make the sound).	The teacher tells how to pronounce the 'r' in 'ribs'.
11.S4:'R'		
12.S12:*Ngo sing jet dou duk ng dou.* (I can never pronounce this.) *Go zae gao ngo gao dou fa men.* (My son taught me [how to pronounce it] until he lost his temper.)		S12 expresses her frustration because she cannot pronounce the 'r' sound.
13.	Rib, r, r-ib, rib. You say r, r-ib, rib; run, r, r-un, run.	
14.S12:[Explaining to S10] *Ngo dei tiu lei jiu zyn.* (We have to turn the tongue.)		S12 is telling S10 how to pronounce the 'r' in 'ribs'.

Episode 1.1.8 is an example of the learner, S12, expressing her frustration and anxiety in failing to pronounce words with 'r' sound. S12 uses L1 to turn to the teacher for support when she asks how to pronounce the L2 word 'ribs'. Then the teacher guides the students in pronouncing the word. S12 uses L1 to express her anxiety that she could not pronounce the word properly and that she recalls the time when she was not able to pronounce the 'r' sound her son even lost his temper in teaching her.

After the teacher demonstrates how to say the L2 word 'ribs' (Line 13), S12 is able to inform S10 the pronunciation skill that one needs to turn the tongue in pronouncing the 'r' sound. This indicates that with the support and help from the teacher, S12 is gaining confidence and she is capable of informing another learner the pronunciation skill. The progress S12 has made in pronunciation might be just very little, yet this progress at least has helped her to overcome a bit of her anxiety.

The point to note in this episode is that with the use of L1 the learner is able to express her anxiety, and that with the help of the teacher the learner becomes more confident in L2 learning.

Text 7.3.2

The following are three consecutive episodes which demonstrate how the teacher gives assistance to the learner who has made linguistic errors in her L2 sentence and how the learner uses L1 to express her problems and anxiety in L2 learning.

Episode 1.2.26

Students	Teacher	Comment on the use of L1
1.	'I l-i-e-k…' *Ne go hae me ji si* (What does this word mean)? [Pause] I like …?	The teacher asks what S12 intends to write.
2.S12: I like … *Hae se tsok zo* (It's written wrongly) [Sounds a bit frustrated].		S12 uses L1 to admit her mistake.

3.	I like … e, k, *diu zyn lae se.* (e, k, swap their sequence)	The teacher tells S12 how to correct it.

Episode 1.2.26 again demonstrates the frustration of a second language learner in L2 learning. S12 has written a sentence in L2, which has errors in spelling, word order and in use of vocabulary, to show the teacher. When the teacher tries to work out what the learner intends to say in the sentence, S12 is a bit nervous and uses L1 to admit that she has misspelled the word. The teacher is aware of her frustration and therefore uses L1 to explicitly inform her how to fix up the sentence.

Considering the role of L1 in this episode, in Line 1, the teacher's use of L1 to ask for the meaning of the word the learner has written helps to trigger the learner to think of the word she intends to write, but when the learner has not responded, the teacher gives the suggestion if it means to be 'I like …' In Line 2, the learner confirms that it is 'I like …' but the use of L1 to admit her errors indicates that she is aware of the errors she has made and that she is a bit frustrated about the errors. This frustrated reaction revealed from the L1 utterances of the learner leads to the teacher's decision to give explicit assistance to fix up the spelling rather than prompting further for the corrections.

Episode 1.2.27

Students	Teacher	Comment on the use of L1
1.S12:*A! Tong go zae hey jau sey* (Ah! To go swimming with my son)		S12 uses L1 to tell what she wants to say.
2.	I like …	
3.S12 *Ng sik fen tsin*		S12 uses L1 to explain

hau. Ng sik pai a. (Don't know which is in front or which is at the back. Don't know how to arrange it.)		her problem in structuring the sentence.
4.	...to go swimming. *Ne go dou jau gong* (In the worksheet it also says)'go swimming'. *Ng hae* (But not) 'go to swimming'. I like to go swimming.	The teacher responds to S12

Episode 1.2.27 indicates the problem and frustration of the learner. S12 uses L1 to talk about what she intends to say in the sentence, and then to talk further about her problem in spelling the word with the letters in the right order and in structuring the L2 sentence. The utterances in Line 3 indicate the frustration and anxiety S12 has, and her lack of confidence in her writing. This leads to the teacher giving direct support to the learner by showing her how to construct the L2 sentence.

In this episode, the use of L1 allows S12 opportunities to talk about her problem and anxiety in learning L2 and therefore the teacher is able to provide assistance to help the learner to reduce the anxiety.

Episode 1.2.28

Students	Teacher	Comment on the use of L1
1.	Yes,....my son...'to go swimming with my son Wing On...' Yes.	

2.S12: *Ne go, ne go* 'with' *hae me ji si a*? (This, this 'with', what does it mean?)		S12 asks what 'with' means.
3.	*Tong* (with).	The teacher responds to S12.
4.S12:'with'. *Ngo! Zik hae tong* (Oh! [I understand now.] This means 'with'.}		S12 uses L1 to tell that she understands now.
5.	I go with my son.	
6.S12: I go with. *Ngo ng zik fen di tsi ga* (I don't know how to distinguish the words). *Ngo ng sik pai ga.* (I don't know how to arrange them.) *Ngo ng zik tae di zi.* (I don't know how to read the words).		S12 uses L1 to express that she does not know how to structure the sentence.

Episode 1.2.28 demonstrates the frustration and anxiety of the learner. S12 uses L1 to express her problems in distinguishing the L2 words, structuring the L2 sentence, and reading the L2 words. After the teacher has shown S12 how to structure the sentence, she uses L1 to ask for the meaning of 'with' used in the sentence. In Line 6, S12 uses L1 to talk about her problems. This indicates that the learner has lots of worries and frustration in the L2 learning. The opportunity for her to talk about her worries provides a way for her to get support and assistance from others and it helps to reduce her anxiety in learning.

Text 7.3.3

Episode 1.2.30

Students	Teacher	Comment on the use of L1
1.	Can you think of more words of 'p' and 'b'?	
2.S2: p-u-t and b-u-t.		
3.	Yes, this is a good example. Although they are the same [in spelling] this is 'ut' and that is `oot'.	
4.S1: *Nei gong gong dong wa la. Zen hae ng hae hou ming a!* (You had better speak in Cantonese. Really [I] can't understand!)		S1 uses L1 to express that she would like the teacher to speak in Cantonese and she can't understand L2.

This episode also demonstrates the frustration of adult learners in L2 learning. The utterances of S1 suggest that the learner gets frustrated in not understanding the L2 instruction and that the L2 pronunciation is essential for L2 learning. The use of L1 to request for using Cantonese to explain how to pronounce the L2 words indicates that the learner is eager to learn the skill of pronunciation and her belief that the use of L1 might help her to learn the skill.

The direct request of the learner to use L1 to explain how to pronounce L2 words demonstrates clearly the intention of the learner. As mentioned in Chapter Two of this study, adult learners already have at their disposal a first language and they tend to have an instinctive desire to know the mother tongue equivalent of new words

or phrases in the target language (Piasecka, 1988). L2 learners get frustrated when failing to understand the L2 instruction which they believe is essential for their L2 learning and the learner's request of the use of L1 for explanation is an attempt to understand the instruction and thereby to reduce the anxiety.

Text 7.3.4

The followings are two consecutive episodes which demonstrate the use of L1 to express problems and anxiety in learning L2.

Episode 2.1.1

Students	Teacher	Comment on the use of L1
1.S1:*Ting bu dong ying wen. Ting bu dong.* (I did not understand spoken English. Did not understand.) *Na hou lai wo jiu wen lao shi la.* (Then I asked the teacher.) *Ba na xie rou na chu lai. Wo xiang jiang rou tiao wei. Fang dian yan jin qu.* (Take the meat out. I want to marinate the meat. Put in some salt.) *Ran hou* taste *jiu hen hou.* (Then taste it and it tastes well.) *Na zen yang jiao?*		S1 uses L1 to talk about the problem she had when she first started learning English in AMES. She then tells the difficulty she had in letting the teacher know that she wanted to ask for the word 'marinade'.

(How to say that?) *Ta hou lai zhi dao ta jiu jiao wo zhe ge jiao* marinade. (Then the teacher knew it and taught me that it is called marinade.)		
2.	Oh, marinade.	
3.S1:*Na shi hen qing chu de. Dan shi wo hai wang ji la.* (At that time I remember it clearly. But now I still forget the word.) *Ta hai xie chu lai gei wo zhi dao.* (He also writes it to let me know.) *Wo ba bi ji ben yong zhong wen ji dan ci.* (I use a note book and use Chinese to help me remember the words.)		S1 uses L1 to express the difficulty she has in memorising some English words and how she uses the note book to help her in memorising.
4.	*Ni jiu shi zhe yang ji dan ci?* (Do you remember the words in this way?)	The teacher asks if that is the way S1 remembers English words.
5.S1:*O, you kong jiu na lai kan.* (When I have time I look into the note book.) Marinade.		S1 says she often looks into the note book to learn the words.
6.S5:*Shen me?* (What?)		S5 uses L1 to ask what

		'marinade' is.
7.	[Writing on board.] Marinade. *Tiao wei.* (Marinade.)	The teacher responds to S5.
8. S5:*Zhe ge zen me? Zhe ge yong yuan dou ji bu qi lai.* (What is this one? This one I never remember.) [Laughing.] *Ji bu qi lai. Yong qi lai dou ji bu qi lai.* (Can't remember. When using it [I] can't remember.)		S5 uses L1 to express that she finds it hard to remember the word too.

In Episode 2.1.1, The use of L1 enables S1 to express the problems she had in learning L2. S1 starts with telling how difficult it was for her to learn the new language from scratch and then she talks about how hard it was for her to let her former English language teacher know that she wanted to learn how to say the word 'marinade', since her former English language teacher did not understand Chinese.

It is worth noting that S1 uses L1 to talk about the way to help herself to learn the L2 words is to write down in a note book with the help of L1. Although S1 does not mention in details how she uses L1 to help remember the words, from the data in the present study, two types of strategies are used: one is using L1 to help remembering the word meaning, and another is using L1 to help remembering the pronunciation. The L1 is a link to build up the new knowledge.

By then S5 has great interest to learn the word and she responds by asking for the word 'marinade'. In response to S1's self-reflection, S5 also talks about her problem in memorising and using English words.

This episode suggests at least two aspects of frustration and anxiety adult learners have in learning the second language; one is the difficulty in memorising L2 words and another is the difficulty in asking for words or expressions they want to learn without the use of L1. The use of L1 in this episode provides opportunities for the learners to ask for what they intend to learn, to talk about their problems and to share their problems and anxiety in learning L2. Through the sharing, the learners are aware that they are not alone in the struggle which might help to build up their self-confidence and thereby to reduce their anxiety in learning L2.

Episode 2.1.2

Students	Teacher	Comment on the use of L1
1.S5:Oh, *Wo yi wei zuo zhe ge sha la, zhe ge sha la jiang.* (I thought it was for making the salad, the salad dressing.) *Bai se zhe ge ye shi jiao shen me* 'mar...' *shen me dong xi a.* (This white stuff is also called 'mar...' something.) *Zhe ge ye shi yong yuan ji bu xia lai de.* (This one is also one of those I never remember.) *Sa loet zoeng. Bak sik go di ne.* (Salad dressing. Those white in colour.)		S5 uses L1 to tell how she mixes up 'marinade' with 'mayonnaise' and she thinks they sound similar.
2.	Mayonnaise.	

3.S5:*Ha*? (What?)		S5 uses L1 to ask question.
4.	Mayonnaise. [pause] Mayonnaise and marinade.	
5.S5:*Gem tsyn hae dim a*? (So how is the spelling?)		S5 asks how to spell mayonnaise.
6.	This is mayonnaise. [Writing mayonnaise on board.]	
7.S5:*Zhe ge lao shi ji bu qi lai la. Ji bu qi lai. Jiu shi ji bu qi lai.* (This word [I] can never remember. Can't remember. Just can't remember.)		S5 expresses that she can't remember the word 'mayonnaise'.
8.S1:*Dan zi a. Ting de shi hou jiu shi ting guo a.* (Words. When listen to it, it seems to be familiar.)		S1 says that it sounds familiar.
9.S5:*Dui a.* (Yes.)		S5 agrees with S1.

Episode 2.1.2 demonstrates how the learner uses L1 to talk about the problems in memorising L2 words. In Line 1, S5 thinks of another word that sounds similar to the word 'marinade' meaning the white stuff to put in salad for which the teacher has told her the word 'mayonnaise'. With the use of L1, S5 is able to express how she gets confused with the two words, and to ask for the word 'mayonnaise' and the

spelling of the word. In spite of her effort to ask for the word, she indicates that she might not be able to remember the word. S1 also expresses that the word sounds familiar but it is likely that she is not able to remember the L2 word as well.

This episode indicates the problems and anxiety adult learners have in learning the second language. Adult learners might mix up words with similar spelling or similar sound and they might have difficulties in remembering the words they have just learned. The use of L1 again provides students opportunities to interact with other learners, to share their problems and to get support and assistance from the teacher or from other learners. Such kind of interaction has the potential in stimulating students to be more open in sharing their problems and to be more active in getting support from others, and as a result it helps to reduce frustration and anxiety and to support L2 learning.

7.4 The use of L1 to give support and to encourage others

The present study demonstrates the class dynamics of two second language learning groups in which students get to know each other very quickly and more inclined to be open to give each other advice, support and encouragement.

The following episodes demonstrate the use of L1 to give support and encouragement.

Text 7.4.1
Episode 1.1.14

Students	Teacher	Comment on the use of L1
1.S3:Hair. *Qin ya shi* (Forehead is) hihead.		S3 tells what forehead is called.

2.	Fore	
3.S3:Forehead, eh *gong ng tsoet a* (can't speak it). [Laughing with frustration.]		S3 expresses his problem in speaking.
4.S4:*Ng sae gong la.* (No need to speak it.)		S4 suggests that S3 can be exempted from the speaking task.
5.S12:*Gen zoeng hae gem ga la* (Being tense is like this).		S12 gives her opinion that being tense is like this.
5.S3: *Gong dou ng tsi jeong* (Not speaking them correctly).		S3 again talks about his problem in speaking.
6.	*Man man gong lo* (Speak slowly).	The teacher tells S3 to speak slowly.
7.S4:*Lou si gong gey nei gong gey lo* (The teacher speaks one sentence and then you follow).		S4 suggests that the teacher guides S3 to say them.
8.	No, no, no. He can do it.	
9.S12:*Ng hae ng gei dek ma* (Isn't it that you can't remember them)?		S12 tries to help by asking if it is because of bad memory.
10.	*Jau di nei gei dek ga* (There are some that you remember).	The teacher helps by reminding S3 that there are some that he can remember.
11.S3:*Gen ga ng gei dek* (It makes it harder to		S3 states that it is harder to remember.

remember).		
12.S4:*Zi zy key mei dek lo* (Pointing to it and you can do it).		S4 suggests that S3 can help himself to say it by pointing to the part of the body.
13.S3: *Zi zy key dou ng dek ga* (Even pointing to it I still can't remember them). *Ng dek la.* (Can't do it.)		S3 states that even pointing to it does not help.
14.	Come on, eye.	
15.S3: Eye, nose		
16.	Nose	
17.S3:M...		
18.	Mouth.	
19.S3:Mouth, hand.		
20.	Hand. This one?	
21.S12:Arm.		
22.S3:Arm.		
23.	Arm.	
24.S3:Arm, leg.		
25.	Yes, leg, you know. Foot	
26.S3:Foot		
27.	So, all right. [Students clapping their hands] Yes, at least he's tried his best.	

Episode 1.1.14 demonstrates a socially harmonious second language classroom with support and encouragement from the teacher and the learners. The use

of L1 enables S3 to express his anxiety in producing the L2 words. It also enables other learners to express their concern and to give support, advice and encouragement in the L2 learning.

Before S3 starts to say the L2 words, he appears to be extremely nervous. He starts with saying 'hihead' for 'forehead'. After he says in L1 that he is not able to say them, S4 uses L1 to give support and guidance to S3. First S4 suggests that S3 does not need to perform the task (Line 4), then S4 suggests that S3 says it by following the teacher (Line 7), and lastly S4 gives the advice that when S3 points to the parts and he will be able to say them (Line 12). S12 also uses L1 to give support and encouragement to S3 (Lines 5 and 9). When the teacher has got S3 to start again by saying, 'Come on, eye', he seems to be able to manage to say a few of the parts of the body. When S3 finishes, the students clap their hands to show their support and encouragement.

This episode demonstrates the anxiety the learner has in saying the L2 words and with the use of L1 other learners are able to show their care and concern and to give support and encouragement which are essential for developing a collaborative learning environment for L2 development. This episode also demonstrates that with the support and guidance from the teacher and other learners, the learner S3 is able to proceed to overcome his anxiety and to produce some L2 words. L1 is evidenced to have played a significant role in the process of L2 learning.

Text 7.4.2
Episode 1.1.16

Students	Teacher	Comment on the use of L1
1.S1:*Ngo jau ng sik ga.* (I also don't know them.)		S1 starts by saying that she doesn't know.

2.	*Ng sik sin zi lae.* (You come for the lesson because you don't know.) *Jy gwo sik ge zau ng sae lae.* (If you know them you don't need to come.) [Students laughing] Yes.	The teacher tries to comfort and encourage S1.
3.S1:Eh, forehead. Eye, nose.		
4.	Yes.	
5.S1:Mouth.		
6.	Yes.	
7.S1:Ear.		
8.	Yes.	
9.S1:*Ne go dim duk*? (How to say this one?) Neek.		S1 asks how to say 'neck'.
10.	Neck	
11.S1:*Ne go* (This one) neck. Shoulder.		
12.	Yes.	
13.S1:Back		
14.	Yes, back.	
15.S1:Chess.		
16.	Chest.	
17. S1:*Ne go met*? (What is this one?)		S1 asks how to say 'leg'.
18.	What? Leg.	

19.S1:Leg. *Ne go me zi a*? (What is this word?) Hand, leg, bag toe, little toe.		S1 first asks how to say the word 'hand', but then she says it.
20.	Yes, big toe, little toe. Yes?	
21.S1:Ankle		
22.	Yes.	
23.S1:Eh, *ng zi la* (don't know any more) [Laughing]		S1 finishes by saying she doesn't know any more.
24.	That's good. OK. [Clapping from students]	
25.S4:*Jau je giu ng zi ge me*? (Is there something called '*ng zi*'?)		S4 makes fun of S1.
26.S1:*Ng zi a.* (I don't know.)		S1 states again that she doesn't know.

Episode 1.1.16 is an example of the teacher using L1 to give support and encouragement to the learner who has used L1 to express her anxiety in performing the task in L2. In the beginning, S1 uses L1 to say that she does not know how to say the parts of the body. The teacher shows support and encouragement by saying that people attend English class because they do not know the language. After that, S1 manages to say five of the items before she uses L1 to ask how to say the words. When she finishes she uses L1 to say she does not know any more. S4 appears to be humorous and uses L1 to ask if there is a part of the body called '*ng zi* (don't know)'.

This episode suggests that with the use of L1 in the social interaction, S1 is able to overcome her anxiety and is able to produce some L2 words. The process of

learning with the use of L1 for interactions can result in L2 development. If without the use of L1 for interactions S1 might not have gone through this process of learning and might not have been able to perform the task.

Text 7.4.3

Episode 1.1.23

Students	Teacher	Comment on the use of L1
1.S2:[During the break. To S10] *Nei jet tong zau hok dou gem do.* (You've learnt so much in one lesson.) *Ngo jet tsoet hey zau pa la.* (When I got out there I got scared.)		S2 and S10 use L1 for interaction. S2 praises S10 for her ability to have learnt so much in one lesson, and tells about her own weakness.
2.S10:*Ng gei dek a.* (Can't remember them.) *Duk zo tsa bet do jet go zong, dan hae gei ng dek.* (I have read it for almost an hour yet I can't remember them.)		S10 states that she can't remember the words.
3.S2: *Hae lo.* (Yes.)		S2 agrees with S10.
4.S10:*Jet zen gan fan dou uk kei zau ng gei dek la.* (Later on when I have gone home I will not be able to remember		S10 talks about her problem in memorising the L2.

them.)		
5.S12: *Hae gem ga la.* (That is how it is.) Ha ha ha...(Laughing...)		S12 agrees with the problem in memorising the L2.
6.S10:*Hou mou gei sing a.* (Have very poor memory.)		S10 emphasises her poor memory.
7.S12:*So ji hok dou jet go zau jet go.* (So if I can learn one word I learn one.) *Hok dou jet go...* (Learning one word...)		S12 talks about what she expects to achieve in L2.
8.S10:*Hok dou jet gey...* (If I can learn one sentence...)		S10 responds and agrees with S12.
9.S12:*Hae a, ji jing hou hou ga la.* (Yes, that is very good already.) *Hou hou ga la.* (Very good already.)		S12 states her expectation in L2 learning.
10.S10:*Nei ng hou jiu kau hou do.* (Don't expect too much.)		S10 agrees with S12.
11.S12:*Ngo dou jiu kau ng do a.* (I don't expect too much.)		S12 again talks about her low expectation in L2 learning.
12.S1: *Ngo dou ng zi dim gai gem noi dou ng let dek di hou jem.* (I don't know why for so		S1 expresses it is hard for her to get rid of her native language, *Dung Gun* dialect, in

long that I could not get rid of my native accent.) *Dou ng let dek.* (Can't get rid of it.*) Ng zi jau bin go...* (I don't know who ...)		speaking, possibly referring to her Cantonese speaking.

Episode 1.1.23 is a private conversation recorded during the break. The episode reveals some interesting points about L2 learning. In this episode, only L1 is used and not even one utterance is in L2.

In this episode, one of the learners uses L1 to express her appreciation of another learner who has performed well in the speaking task. They also use L1 to talk about their poor memory, their anxiety and frustration in learning and in producing L2 words. Furthermore they share their view on their expectation and satisfaction in L2 learning. One of the learners even uses L1 to reflect on her problem in speaking proper Cantonese because of the effect of her native language (Dong Guan dialect). The use of L1 provides opportunities for the learners to reflect on their own problems, to give support to each other and to express their aspirations.

This episode demonstrates that social interactions with the use of L1 provide opportunities for learners to express their anxiety and frustration in learning, and more than that, to show appreciation and encouragement which appear to be supportive environment for L2 development.

7.5 A summary of Chapter Seven

To conclude, in this chapter data suggest that the use of L1 for social interactions is useful in the process of L2 learning. With the use of L1, learners are able to interact with other learners who are more capable and who are able to give

help and support in L2 development. The learners use L1 to encourage others and as a result this helps to reduce frustration and anxiety in L2 learning. During these social interactions, the use of L1 appears to result in L2 development.

The findings in this chapter suggest that with the use of L1 adult learners are able to get support from others, to encourage each other, and to show their appreciation for the effort of other learners. The learning of L2 is complex and the learners could get frustrated. The use of L1 as social mediation is helpful in the L2 learning. The learners use L1 to talk about their problems in learning, to reflect their weakness and limitation in learning, and to express their worries and anxieties in learning the second language. The first language functions in social-mediational situation which has the potential to give support and encouragement and help to reduce frustration and anxiety in L2 learning.

The classroom discourse data reveal that with the use of L1 the learners are capable of requesting guidance and support from the teacher as well as providing support to other learners during collaborative interactions. It has also been posited that the support from the teacher and the collaborative interactions among learners have resulted in L2 development in the zone of proximal development.

The views expressed by the learners from the interviews can be seen as consistent with the findings from the classroom discourse data. During the interviews, S1 and S7 from Group One have expressed their frustration and anxiety in L2 learning, and they also talked about their preference for L1 use. The use of L1 have opened up opportunities for the learners to comprehend the L2 and to solve their problems. These might have resulted in reducing the frustration and anxiety in learning the new language. However, processes such as using L1 for scaffolding, giving support and encouragement have not been revealed in the learners' perspectives.

The implication for the findings in the present study is that L1 plays a significant role in L2 learning. For adult learners learning a second language, the interaction with the use of L1 opens up opportunities for the learners to get help and support from others. It helps to reduce frustration and anxiety in L2 learning, and to build up a productive learning environment in which learners can be involved in active participation. The present study therefore argues that it is necessary for the second language teachers to acknowledge and respect the L1 use, and to attempt to incorporate L1 in L2 learning.

Chapter 8: The role of the first language in second language learning – Conclusions, implications and recommendations

The theoretical position of the present study is to support the inclusion of the use of L1 for L2 development in second language classrooms. The present study posits that L1 use is not only for translation, and the data reveal some interesting aspects that suggest more interesting use of L1 in L2 learning.

Reviewing the literature in Chapter Two, studies in the past decades indicated a limited role for L1 or even a negative role of L1 in the second language development. The first language was regarded as 'problematic', and the use of L1 was discouraged in the second language classroom. The first language was limited to the role of translation. With the upholding of bilingual education, L1 seems to play a more positive role. For example, according to Krashen (1989), knowledge gained through the first language was regarded as making L2 input more comprehensible (see Chapter One pp. 28-29). However, according to Krashen, the first language was still limited to a particular role and it was not suggested to be used for ESL teaching.

The theory of Vygotsky provides a point of departure for it sees language and thought as being interrelated. Language plays an important role in the development of thought and concepts, and language gives power and strategy to cognitive development. The Vygotskian theory opens up a new perspective which allows scope for attending to sociocultural contexts and personal knowledge and experiences that guide students' behaviour in the classroom. Therefore, the Vygotskian perspective offers a useful framework for understanding complex student behaviour and gives us illuminating insights in understanding why second language learners use their first language in second language development, and it helps to explain the complex role the first language plays in second language development discussed in the present study.

The traditional view provides a limited vision and it ignores the second language learner's role in active social and cognitive engagement in the L2 learning. In arguing for the role of the use of L1 in L2 learning, many debates often focus on the question 'Should the teacher / the students use L1 in L2 learning?' which eventually ends up with the conclusion that L1 should be limited to certain roles and that learning L2 should be using L2.

With the knowledge that some second language learners do use L1 in the learning of L2, the question to be considered in the present study is: 'How could we understand the use of L1 in a productive way?' In order to better understand the problem, we have to look at the issue from a different perspective. Instead of discussing if we should use L1 or not in a superficial way, we have to look closely at the actual L2 learning in authentic second language classrooms in an attempt to understand how the use of L1 functions in L2 learning, and how the use of L1 contributes to L2 learning.

The present study agrees with Cook (1999) who suggests an 'L2 user model' in which he sees the L2 learners as speakers in their own right and values what the students bring with them into the classroom. He argues that language teaching should go beyond the native speaker's model, and suggests that we apply an 'L2 user model' and use the students' L1 in teaching activities. The notion of L2 learners as speakers in their own right opens up an alternative perspective to consider the role of the first language. As discussed in the literature review, the traditional view is not very helpful in understanding the role of the first language. With the idea of L2 learners as speakers in their own right, we are able to consider the first language use from a different view, and in light of this the second language learners can be considered as competent learners in their own right.

With this alternative way of seeing, the present study argues that the second language learners, who already have their first language as prior knowledge, are to be seen as active learners, actively constructing the knowledge and making sense of their

knowledge and experiences. Viewing learners in this way suggests that we may need to reinterpret the role of the first language which has traditionally been regarded as 'interference' and being 'problematic'.

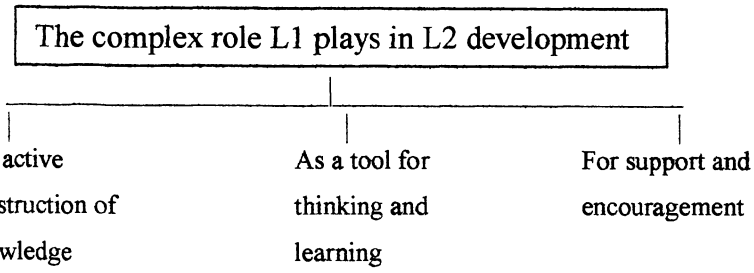
The present study, based upon Vygotsky's theory, has developed a framework for understanding how some adult learners may use their first language in thinking and learning of L2. Using the discourse data from the second language classroom, the present study scrutinised how second language learners were using their first language in L2 learning and what they were doing with the language. The data in the present study suggest that the first language can be used as a resource in L2 learning and it provides a tool for thinking and learning. The findings of the present study are that the use of the first language can be seen as a valuable tool to make sense of the target language and to build into the L2 development. Through interactions with the use of L1, the learners could make sense of their knowledge and experience, progress in the zone of proximal development, and give other learners support and encouragement in L2 learning.

From the analysis of the data in the present study, it is possible to bring together the points made in the preceding chapters in order to draw certain conclusions.

8.1 The first language plays a complex role in L2 development

The data suggest that the first language plays a complex role in the development of thinking and learning of the second language. Chapter 5, Chapter 6 and Chapter 7 explained this complex role, and the data indicated that the first language could be used for various functions in the second language learning. Figure 8.1 shows the complex role L1 plays in L2 learning.

Figure 8.1: The complex role L1 plays in L2 development



8.1.1 The use of L1 for active construction of knowledge

Chapter 5 has drawn upon the episodes which demonstrate the use of L1 for active construction of knowledge. The classroom discourse data suggest that L1 can be used as a tool to mediate the L2 learning and to construct the knowledge of L2. With the use of L1, the L2 learners are able to actively discuss and to constructively build up the knowledge of L2. In learning L2, the opportunity for engaging in talk and discussion, which reflect the learners' own thought and ideas, is an important process of learning. In the present study, the data reveal that some adult learners use both L1 and L2 for talk, discussions and interactions in class with the understanding that L1 is allowed for learning the second language in the Chinese Community Centre.

Adult learners come to the L2 classroom with a varied set of skills and understanding. With the use of L1, the learners are able to talk about their understanding of the new language and to compare this new language to their first language. The important point to note is that the talk, with the use of L1, does not stop there and it proceeds to build into the knowledge of L2. In other words, the use of L1 provides the opportunity for talk which serves as the process of an on-going development of L2.

The L2 learners also use L1 to talk about their metalinguistic awareness in an attempt to work out the structure of L2 and to construct the L2 knowledge. The data suggest that the learners use L1 as a tool of thought to make assumptions and to make judgement about the target language structure. In the present study, through talk and discussion, the learners are able to reflect on their linguistic understanding of the new language, and with the help of more capable peers, the learners are able to work out the knowledge and thereby develop the L2. The present study therefore argues that the process of using language, L1 as well as L2, to hypothesise and to make judgement in metalanguage is important for the L2 development. Through talk about language and about how texts work, L2 learners develop deeper understanding of L2 language use.

The present study values learning appropriated for individual use. Data indicate that the learners use private speech, in which L1 is a viable channel, in an effort to self-regulate and to internalise the L2 learning. The findings and discussion in Chapter 5 establish that through the use of L1, the second language learners have constructed the knowledge of L2 which is to contribute towards the L2 development.

The point to note is that the use of L1 for active construction of knowledge, especially in metalinguistic awareness and in private speech, has not been revealed in the learners' view of L1 use. This suggests that the findings from the interview data may not be able to give a full picture of what the learners do with the L1.

8.1.2 The use of L1 as a tool for thinking and learning

Chapter 6 has drawn upon the episodes which demonstrate that L1 is used as a tool for thinking and learning. The classroom discourse data suggest that the second language learners use their first language to think of the word meaning, for making sense of their experience, for getting things done and for solving problems in L2 learning.

The learners' views obtained from the interview data are in support of this notion of L1 use. Many of the interviewees claimed that their L1 use was for knowing the meaning and for understanding the L2, and some of them admitted that they used L1 to think in the process of L2 learning.

In accordance with the theory of Vygotsky (1962), language, including L1 and L2, is observed to be a means for transforming experience into cultural knowledge and understanding, and it is through the medium of language that we share, dispute and define experience. The data suggest that the first language is more than a means for communication, it is also a means for students to formulate ideas, to think and to learn together. The data from the present study support Vygotsky's notion of language and thought, and the first language has been used as a means for transforming experience into knowledge and understanding, and for thinking and learning in the L2 development.

8.1.3 The use of L1 for support and encouragement

Chapter 7 has drawn upon the episodes which demonstrate the use of L1 for support and encouragement. The present study argues that the learning and support will never be to the same degree if the L2 learning is to be conducted in the second language only. In the present study, the classroom discourse data suggest that L1 has been used for scaffolding learning, for getting support from more capable peers, for reducing frustration and anxiety, and for giving encouragement in L2 learning.

Data obtained from the interviews also suggest that some of the adult second language learners had gone through times of frustration and anxiety in L2 learning, such as S7 from Group One who said '*Bu ming wo jiu zou*. (Once I didn't understand, I walked out of the class)', and the use of L1 helps to give support and encouragement, just as S7 commented that using L1 to learn is '*Hen shuai*. (Very good.)' (Refer to Text 4.2).

Learning is not only a construction process that takes place in the mind of an individual but also a social learning process that takes place in the sociocultural context of activity. Data in the present study support this sociocultural view of learning. Through the use of L1, the second language learners are able to engage in interactions which have resulted in learning in the zone of proximal development, such as the progress S1 from Group Two made through the interaction with the use of L1. First S1 used L1 to ask for the L2 word for 'celery', which was responded by S5. After a while, when S2 used L1 to ask for the L2 word for 'celery', S1 was able to inform S2 of the L2 word. (Refer to Text 7.2.2).

To sum up, from the analysis of the previous three chapters and from the views of the learners we can see the complex role that L1 can play in the L2 learning. L1 can be used as a means for constructing the L2 knowledge, for thinking and learning of L2 and for support and encouragement in L2 learning. The first language can play a positive role and can actively contribute towards L2 learning.

8.2 The role of the first language goes beyond the translation of L2

The role of the first language in L2 learning goes beyond mere translation of L2 words. The data from the present study demonstrate that the use of the first language in the L2 learning is not just for translation of L2. As we can see in the previous chapters, the L2 learning involves the students actively and constructively taking part in the learning. A crucial aspect of being able to take part in the learning is the ability to understand the use of language in class. To comprehend the use of language is not just the ability to understand isolated word meanings, but involves the ability to understand the context of the utterance and to make sense of it. In other words, the use of L1 plays an important role in understanding the use of language in social and cultural context and enables the learners to be involved in active L2 learning.

In the present study, the data suggest that the learners were so engaged in the learning that they used L1, L2 and even L3 in an attempt to understand the English language. The way the learners used not only their first language, either Mandarin or Cantonese, to help them learn English, but also varieties, again, either Mandarin or Cantonese, as well as English language, in which they were not necessarily highly proficient, in order to crack the even more unfamiliar code of English, was fascinating. In other words, the varieties are the multi-lingual resources that the learners could use to construct the English language.

People use language as a cognitive tool (Vygotsky, 1987). The previous chapters have developed the argument that the first language can be used as a cognitive tool to explain, to define, to share, to inquire, to dispute, to compare and to contrast in the L2 learning. The previous chapters have also established that language is for thinking together, for making sense of experience and for solving problems. This is in accordance with Vygotsky (1962)'s idea that the relation of thought to word is a process, a continual movement back and forth from thought to word and from word to thought, which results in changes and development. This notion of thought and words is helpful in understanding how the first language can be used as a cognitive tool for thinking and learning together, why the second language learners use their first language in learning the second language, and how L1 plays a role more than just translation.

In the present study, the first language is used for sharing knowledge and experience, for discussing their understanding and meaning, for scaffolding learning, and for giving support to each other. It is this process of development with the use of the first language that is essential for the L2 development. The data of the present study suggest that the first language is used as a tool to mediate thinking and learning and to achieve a complex role in second language learning. The use of the first language, which opens up opportunities for the learners to interact, to discuss and to think further, helps to develop deeper knowledge and understanding of the second language, and which may in themselves become a significant impetus for L2 development.

The data also suggest that the first language provides a means that the learners could interact with the teacher and more capable peers. The interactions may in themselves constitute an important context for the development of meaning and simultaneously the development of learning. In this way, the opportunity for engaging the learners in such forms of interaction with the teacher or the peers is important for the process of L2 learning. Apart from the interaction, the learners also use the first language for private speech which functions as a mechanism to inform their learning, to establish the pronunciation, to consolidate the meaning and to enhance the L2 learning.

Comparing Krashen's (1989) view on the role of the first language with the findings of the present study, the present study has presented a complex role for the first language, while in Krashen's view the first language only plays a particular role in 'solid subject matter teaching', but not in ESL teaching, for using the first language means 'concurrent translation (Krashen, 1989:75)' which can discourage comprehensible input. The complex role presented in the present study goes beyond the limit of translation and involves the potential of L2 development.

Viewing from a wider perspective of learning, the issue is not just the translation of L2 and the point of interest is not just the use of L1 or L2; it is about the use of thought and language in which L1 can play a complex role in the development of L2 learning. In other words, the issue is about the complexity of L2 learning in which the first language is used as a tool for thinking, for cognition, for awareness, and for social and cultural learning in the L2 development. With the use of L1, the adult learners are able to take an active role in L2 learning and to construe experience which makes the learning of L2 more meaningful to them.

The present study therefore argues that the role of L1 in L2 learning for adult learners goes far beyond mere translation. Language is socially constructed, and being subjected to social and cultural influences and implications. With the use of L1, the adult learners are able to explain, to generalise, to synthesise, and to arrive at

some conclusions or understanding of the second language. We cannot ignore this complexity of learning which involves the use of L1 to understand the L2 language. Language plays the central role not only in storing and exchanging information but also in construing experience. With this use of L1, adult learners are engaged in social cognitive learning which is an essential part of L2 development.

8.3 Using L1 does not mean a lack of ability to use L2

We could see from the data that using L1 does not mean a lack of ability to use L2. The present study uses two groups of students, Group One (Level One) and Group Two (Level Two), for data collection. The data suggest that both groups of students use L1 for thinking and learning of L2. The difference for L1 use between the two groups of students is not in how often they use L1, rather it is in the way they use it.

The Chinese language is typologically distant from English. Using authentic data from the second language classroom, the present study provides opportunities to understand how Chinese adult learners use their L1 (including Mandarin and Cantonese) to construct new understanding of a language very different from their own. Data from the present study suggest that the second language learners from both levels, Level One and Level Two, use their first language, either Mandarin or Cantonese, for active learning. The Group One (Level One) students use L1 to ask for pronunciation and word meaning and to give support and encouragement in L2 learning, while the Group Two (Level Two) students use L1 for more elaborate discussion of word meaning, for consideration of the grammar, and for comparing and contrasting words with similar sound and pronunciation.

It is interesting to note that comparing the two groups of learners, Group Two (Level Two) students used more language, including L1 and L2, in ratio. Data suggest

that the Group Two students used more L1 and obviously more L2 to compare, to contrast, to define and to discuss in the L2 learning. We can see from the Group Two data that the discussion could go on smoothly for a while in L2, but then when problems came up, the conversation might switch to their L1, Cantonese or Mandarin, and eventually switched back to the use of L2 again. Through such process of interactions the students built up their L2 knowledge and proficiency. The data in the present study indicate that Group One (Level One) students appear to have used comparatively less language in the second language classroom: they used less L2 to express their idea and they used less L1 to compare and to contrast in the L2 learning. However, it is not clear whether the difference is the result of individual group difference or the difference in the ability to use language. Further research is needed to find out more about the issue.

However, the present study is not talking about the issue in terms of L1 or L2, but it intends to understand how the learners are using language and what they are doing with language. As the data show, the use of language for thinking and learning the second language is not limited to the use of L1. The second language learners in the present study use not only two languages but three languages, Mandarin, Cantonese and English, to inquire and to discuss. Some second language learners used more of their L1 while others did not use so much of it. The reason could possibly be that the first language is only one of the many tools the L2 learners use for thinking, learning and making sense of their experience.

Despite the use of L1, the initiative to learn and to understand the L2 language is implicit in the data. This can be evidenced from the eagerness to inquire about the L2 words and to use private speech attempting to self-regulate the L2 words. In other words, through the use of their first language, the second language learners are working towards L2 development, and the initiative to learn the L2 should not therefore be denied.

To sum up, the use of the first language is just a means to achieve certain ends. The first language is like a tool for mediating the learning of the second language. The data, which demonstrate the flow of L2 to L1 and then L1 back to L2, support the argument that using L1 does not mean a lack of ability to use L2.

8.4 Implications for teaching and learning

The data of the present study reveal the process of using L1 in L2 learning and the complexity of the first language use which are missing in the earlier literature of second language development. The earlier literature created a gap between theories and practices and this gap has not been well discussed and understood. The present study attempts to look at this gap and draws the link together. With the use of Vivian Cook's (1999) 'L2 user's model' which suggests a new way of seeing the second language learners, and the Vygotskian perspective which provides a new understanding of the use of the first language in the second language learning, we are able to understand the issue in a more productive way.

The present study focuses on language processes and language use and it takes a sociocultural approach to language learning. It is an approach that sees students not simply as learners to acquire linguistic structures, but as learners who have an ability to use these to perform social interactions in the language development. The second language learning is not only seen as an individual matter but as collaborative learning which involves using the first language for interactions between the teacher and the learners, and for interactions among learners.

The present study has developed a framework derived from the Vygotskian perspective. As the findings and discussion indicate, the theory of Vygotsky holds great measure for understanding the use of the first language in the second language development. The Vygotskian framework provides us opportunities to examine the learners' use of their first language in social and cultural context. Within this

framework, the first language is viewed as a dynamic tool which leads into human higher mental functions or cognitive development in L2 learning.

The present study advocates the notion that language (including the first, the second or even the third language) is an indispensable tool for human cognitive development. Within the Vygotskian framework, cognition and language are closely intertwined. It is inappropriate to separate the language ability from the cognitive ability, and it is also inappropriate to single out the language acquisition device or similar mechanism. The present study argues that language, which inevitably includes L1, is a useful tool that enables adult second language learners to engage in thinking and learning of L2.

Figure 8.2: L1: a useful tool for L2 learning

In second language learning, the main focus needs to be on language use which takes place in a real and discernible social context. Language and social context are closely linked with each other. Johnson (2004:172) states, 'Social contexts create language and language creates social contexts; one constitutes the other.' Johnson considers these social contexts as localised rather than universal. For the second language learners in the present study, they are involved in the language use in real-life social contexts. Since there are similarities and differences between the native language contexts and the target language contexts, second language learners need to go through processes to compare, to discuss and to appropriate the new language. L1 is like a tool that second language learners can use for these processes which lead towards the L2 development.

The point which needs to be clarified is that in the present study I am the teacher as well as the researcher who is interested in how two groups of second language learners use their first language(s) in learning the second language. Observing the adult second language learners I have been struck by the way the learners were involved in the social and interactive process with the use of L1 and L2, sharing a common goal to learn the second language. As a teacher, I understand the first language of the students, including Mandarin and Cantonese as well as their social and cultural background. Having the same language and similar cultural background as the students helps me to understand the problems the students have in learning L2 and the way L1 contributes towards their L2 learning. As a researcher, I have pulled together the transcribed tape-recorded classroom discourse data and interview data from the two groups of students, and have discussed the various functions of using the first language displayed in the data from which we could learn about some aspects of the teaching and learning of L2.

However, there are limitations of the present study. The present study is just a particular case that includes the teacher and learners who speak Chinese, Mandarin and/or Cantonese, and who share a similar cultural background. As we know not many teachers teaching the second language in Australia or in other English-dominant countries can have the same language background as the students or have any language other than English, and the findings may be different when applied to a multi-lingual classroom in which more first languages are spoken.

Based on the findings, the present study argues for the positive role of the use of the first language in the second language learning. Although the present study presents limited and partial analysis of data of two groups of students from the second language classroom, the data have demonstrated a wide range of use of the first language, and it is possible to think of some implications for L2 learning regarding the use of L1. The implications include that the teacher needs to (1) be positive about the use of L1 in L2 learning, (2) acknowledge and respect the second language learner's L1 use, (3) consider the need of L1 use and make appropriate plans to

incorporate L1 into L2 learning, and the researcher needs to be aware that (4) what the learners say can be different from what the learners do.

8.4.1 Be positive about the use of L1 in L2 learning

As discussed in the beginning of this study, not many theories recognise the use of the first language in the second language learning and as Cook (2001) states, current language teaching has mostly tried to minimise the use of the first language in the classroom. The present study has developed the argument that the first language can play a complex role in second language learning. Second language teachers should be positive about the use of the first language and acknowledge the complex role the first language can play in the second language learning.

The present study has attempted to give a detailed analysis of authentic classroom discourse data which demonstrate a range of contributions that L1 could make in the L2 learning. With the understanding of the complex role L1 can play in the L2 learning, a second language teacher needs to understand the positive role of the use of L1 in L2 learning and has to consider the following questions:

How do I think about the language use in the class?
How could I make judgement not to dominate the second language learners about their use of language?
How do students use L1 and L2 in class?
How does the use of L1 contribute to the L2 learning?
How could I understand the use of L1 in a productive way?
What are the students doing with their first language in L2 learning?
In what context should L1 be used?
Have I provided the second language learners opportunities for developing their thinking and learning with the possibility of using their first language?

Have I considered ZPD in L2 learning which may involve the use of L1 for second language learners?

To what extent the second language learners are to make use of their first language in the second learning?

Presumably different second language classrooms or different second language learners may have different needs in their use of language. What I am suggesting here is that being second language teachers we should not dominate the learner's use of language and we have to be aware of the positive role of the use of the first language in second language learning. The discussion of the use of the first language for second language learning in the present study has provided some directions of the positive role that L1 can play in the L2 development. The present study argues that second language teachers have to understand the language use and be positive about the use of L1 in L2 learning. Furthermore, we need to be aware of the learning opportunities provided by the interactions which may involve the use of L1.

Learning the second language involves active participation of the learners. The present study is of the opinion that second language learners are to be engaged in dynamic learning of L2 with the understanding that L1 can play a complex role in L2 learning. Data show that opportunities to talk, to understand and to discuss about the language use, and to reflect on learners' personal experience, linguistic knowledge and social and cultural understanding enable the adult learners to initiate the motives for learning and to be engaged in dynamic L2 learning. The notion of motive, as explained in Vygotsky's activity theory, is essential for human purposeful activity. The learner's motive determines the actions and participation in the L2 learning. Learning the second language involves motives and initiative to learn.

The present study suggests that with the use of L1 as mediation, the adult second language learners become autonomous participants who take an active role to

inquire, to make assumptions, to make judgement and to make decisions which are essential processes for active learning.

To sum up, the present study argues that a second language teacher should have a clear understanding of the usefulness of L1 and should be aware of how the second language learners could use their first language constructively in the second language learning. Despite the great variety of teaching and learning approaches for second language learning, the approach to learning a second language has to take into consideration the diversity of needs among second language learners who have different prior experience of language use, different levels of education and literacy in their first languages, and different views of themselves as minority group members in the English-dominant society.

8.4.2 Acknowledge and respect the second language learner's L1 use

The second language learners have at least two languages which they could use to think or to interpret the L2. Second language teachers have to acknowledge, to respect and to value learners' use of language. In the teaching of L2, we have to consider learners' needs and aspirations and to respect the learners' use of language. The language skills the second language learners possess in both the first and the second languages can be an asset and a tool for L2 learning.

Data in the present study reveal that the first language is a useful tool the second language learners could use to explain, to inquire and to compare the use of the second language. Language plays a central role in the construal of experience rather than just simply represents experience. The present study maintains that opportunities to use language, including L1 or L2, to think and to interact in order to make sense of the learner's experience of a particular aspect of learning is essential in the L2 development.

We have to admit that second language learners may take a long time or go through a long process in L2 learning before they become competent language users. Language learning involves the learning of values and cultural practices which can be compared with those past experiences and cultural knowledge of the second language learners. The notion of 'L2 user model' (Cook, 1999, 2004) is worth noting. The term multicompetence was coined to refer to the compound state of a mind with two languages (Cook 1991). Multicompetent minds that know two languages are qualitatively different from those of monolingual native speakers.

With the understanding that L1 can play a positive role, the present study suggests that we have to show respect for the second language learners who are regarded as independent L2 users, having different language abilities and knowledge and different ways for learning the target language as compared to monolingual native speakers. The idea of respecting the learners' use of language is in line with the principles of that of Australian Education Council:

> While respecting students' home languages, English teachers have a responsibility to teach the forms and usages generally accepted in Australian English. The development of increasing proficiency in the uses of standard Australian English should be treated as an extension of, and an addition to, a student's home language. The goal should be to ensure that students develop an ever-widening language repertoire for personal and public use (Australian Education Council, 1994:4).

> That the language used by a socio-cultural group is closely connected with its values, attitudes and beliefs, and that learning any variety of language involves understanding and interpreting the culture of which it is a part. (Australian Education Council, 1994:11)

The present study agrees that in second language teaching we have to respect the students' home language and that the second language teachers have the responsibilities to teach the target language which is closely connected with its values, attitudes and beliefs. With this respect of the learner's L1, the second language learners are not to be ashamed of their first language and should feel free to explore the second language with the use of L1

Apart from respecting their L1, the present study argues that second language teachers should take a further step forward to recognise the learner's use of L1 in L2 learning. The teachers have to acknowledge the learners' first language and actively involve the use of L1 in L2 learning, and to provide students opportunities to use their L1 in a constructive way in L2 learning.

8.4.3 Consider the needs of L1 use and make appropriate plans to incorporate L1 into L2 learning

Since the present study argues that L1 can be a useful tool for thinking and learning L2 and L1 is a mediation for L2 learning, the second language teachers should consider the use of L1 according to the needs of the learners, with the understanding that L1 can play a complex role in L2 learning. As the classroom discourse data reveal, some second language learners manage to use L2 to talk, to discuss and to interact, but only switch to L1 for occasional support; while other learners have to rely more on L1. Furthermore, the interview data also indicate that some learners are in need of more L1 use.

The present study suggests that the second language teachers have to assess the need of L1 use and to plan for how to incorporate the L1 use into the L2 learning. An interesting point to consider is whether monolingual teachers can adopt a bilingual approach that involves the use of L1. In the present study, the data suggest that having a bilingual teacher facilitates the monitoring of L2 learning with the use of L1. Piasecka (1988) advocates the use of L1 in L2 learning and having a bilingual teacher who is able to monitor the process of referring back to mother-tongue equivalents that goes on in learners' minds. Ellis (2002) argues for the merit of non-native teachers and suggests that teachers' practices are heavily informed by their knowledge, beliefs and experience. The present study agrees that a bilingual teacher having the same L1 as the students could be a resource in understanding and guiding students in L2 learning.

However, Collingham (1988) argues for a bilingual approach which incorporates the classroom methodology of evolving ways of utilizing students' other languages and cultures in the learning of English and implies that monolingual teachers can adopt a bilingual approach (refer to Chapter 2, p.53). Cook (1999) argues that language teaching can apply an L2 user model, and suggests that teachers can deliberately use the students' L1 in teaching activities. The present study suggests that when learners use L1 in their learning of L2, the second language teachers, including monolingual and bilingual, should consider how to make judgement not to dominate their use of language, and should think of how to understand their use of language and how to incorporate L1 use in L2 learning. The teachers have to consider ways of constructing the class and ways of grouping the students according to their L1 to work together in an attempt to encourage L2 development.

During the lessons, if a number of students have the same L1, the teacher can ask the students 'What is your first language for that?' or 'Could you write that on the board?'. The teacher needs to provide guidance and be vigilant in maintaining the L2 context. However, the teacher should not prohibit the learners from using bilingual dictionaries that help in understanding the L2. The students should be able to use their L1 as a tool to engage in a productive way, in active thinking and constructive learning of L2.

Some teachers may disagree with the position I have put forth in the present study that L1 should play a certain role in L2 learning. Some would argue that second language learners need as much exposure as possible to L2 during the limited class time, and there will be no time for the use of L1. Others would argue that using the L1 in class would minimise their opportunities to interact in L2. Some second language teachers may argue that the potential danger of allowing the use of L1 in second language classroom will result in the first language taking over the classroom, and therefore will minimise the opportunity to learn the second language.

The findings of the present study suggest that L1 is like a tool that learners make use of when they need it, and they can switch back to L2 after they have resolved their problems with the use of L1. Through the use of L1, data shows that learners can actively construct the L2. Allowing the use of L1 may not minimise the opportunity to learn the second language, but may, on the contrary, help to build into the L2 learning. Wigglesworth (2003:244) points out that a 'potential result of increased use of the L1 is that the advantage of using English communicatively in the classroom context will be lost. Conversely, the danger of not using the first language in the classroom is that it wastes a valuable and useful resource'. The first language is a valuable and useful tool if the second language teachers know how to make use of it, and how to maintain a balance of L1 use in the L2 learning.

Ohta (2001:236) mentions the dichotomy of her second language teaching of Japanese to English speaking learners, 'In the teacher-fronted mode of instruction, it is possible for the instructor to avoid the use of English and to prohibit students from using English. However, when peer learning tasks are introduced, the teacher gives up turn-by-turn control of learner language use.' Many second language teachers are facing a similar problem, with the knowledge that even though the first language is prohibited in the classroom, the second language learners use their first language privately in inner speech, in private conversation or with the use of bilingual electronic dictionary. Being second language teachers, we need to deal with the dichotomy in a constructive way. We need to consider carefully how the learners are using their first language and the consequences in prohibiting the second language learners from using their first language.

Through the analysis of the data in the present study, we can see that the second language learners use their first language for various functions which contribute towards the L2 learning. We have to understand that a language is constructed in social and cultural context, and learning a language requires students to manipulate information and ideas in ways that transform the meaning to the learners. The transformation occurs when students combine knowledge and experience to

explain, hypothesise, generalise, or arrive at some conclusions. The second language learners strive to make links of the new knowledge of L2 with their prior knowledge in L1. It is inevitable for the second language learners to turn to using L1 for thinking and understanding L2. As Ohta (2001) points out even though some teachers prohibit second language learners from using L1 in class, they still use it privately or in small group discussion. L1 is an essential means for the second language learners to mediate their L2 learning.

8.4.4 What the learners say can be different from what the learners do

Comparing the data from the classroom discourse to the data from the interview, there are discrepancies between what the learners say and what the learners do. In the present study, the classroom discourse data reveal what the learners do with the L1 in L2 learning, and the interview data reveal what the learners say about their L1 use. The interview data, though they coincide with some of the findings of the classroom discourse data, are not able to reflect many of the aspects of L1 use obtained from the classroom discourse data, such as the use of L1 for scaffolding learning, for metalinguistic awareness, for private speech, or for L2 construction.

The views expressed by the learners can also contrast to the actual practice in the L2 classroom. For example S5 from Group Two holds the view that when learning L2 one should use L2 while in practice she keeps on using L1 for checking the meaning of L2.

Such discrepancies suggest that in conducting research on L1 use, it is not reliable just to depend on personal views of learners, but the research needs to reveal what goes on in an authentic classroom. Research findings cannot provide the whole picture if they are based only on abstraction or personal views. The present study therefore recommends that in conducting research on the learners' use of language or

L1 use, the research findings should not just be based on abstraction or personal views, but have to reveals what goes on in the classroom and what the learners are doing with the language.

8.5 Recommendations for further studies

In the present study, the discourse data we have gathered are of interest since few data on the actual language use have been considered and discussed to the same measure in other research on L1 use. Despite the small size of the study and the confinement to particular L1 learners, the present study is able to demonstrate some substantial data which contribute toward the discussion of the complex role of L1.

Several recommendations can be offered for more rigorous research for further studies of the role of the first language. Firstly, data collection must be carefully selected and validated, taking into consideration that merely relying on the learners' view or the teachers' view may not reflect the whole picture of the L1 use. Secondly, the study of the role of the first language can be extended to other adult learners using L1 for L2 learning in a multilingual classroom, or to younger students of new arrival who have prior knowledge of L1. Regarding the present study, although the learners' L1 includes Mandarin and Cantonese, the written form is more or less the same. Many of the learners can manage both spoken forms which make it easier to use L1 for the L2 learning. It would be interesting to explore how L1 can be used in a multilingual classroom setting. Thirdly, comparative research can be conducted to find out how different strategies can be used to incorporate L1 in L2 learning for teachers who speak the same L1 as the learners and for teachers who do not speak the same L1 as the learners, or to compare strategies used in various ESL classrooms.

8.6 A summary of Chapter Eight

To sum up, the present study sought to understand the complexity of L1 use through the use of classroom discourse data and interview data. The central argument in the present study is that the first language can make contributions towards L2 learning and that the first language plays a complex role in second language learning. The present study agrees that second language teachers should maximise the opportunities for the second language learners to use and to practise the target language in the second language classroom. However, the present study argues that based on the findings that the first language can be a useful tool for L2 learning, second language teachers should understand the positive role L1 plays in L2 learning and respect the learners' use of L1.

Furthermore, the findings of the present study point the way to engaging second language learners in dynamic L2 learning with the use of L1. The use of L1 in L2 learning can serve to trigger their motives to learn, and to provide opportunities for them to think and to learn in the zone of proximal development. With the use of the first language, the second language learners are able to explore the word meaning, to discuss further about the use of the language, and to take part in social interactions. All these are not achieved to the same degree if they are conducted in the second language only. The present study suggests that second language teachers should not only acknowledge and respect the L1 use, but should also deliberately incorporate L1 into L2 learning.

The present study recommends that it is time for second language research to start a new chapter to explore ways of using L1 in second language classrooms in order to provide opportunities for second language learners to engage in active thinking and constructive learning processes in L2 learning. Research on the use of L1 should go beyond mere common sense belief, and there is still plenty of scope to find out how L1 can be used constructively for L2 development, and furthermore how L2 can in return benefit L1.

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