The Impact of Beginning Mandarin Teachers’ Knowledge on Primary Students’ Classroom Engagement in Western Sydney Schools

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DECLARATION

I declare that except where due acknowledgement has been made this research thesis is my own work and has not been submitted in any form for another degree at any university or other institute of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

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LIST OF ABBREVIATIONS

ACARA: Australian Curriculum Assessment and Reporting Authority
CLT: Communicative Language Teaching
DEC: Department of Education and Communities
DEEWR: Department of Education, Employment and Workplace Relations
EFL: English as a Foreign Language
IWB: Interactive White Board
L1: First Language
L2: Second Language
MCEETYA: Ministerial Council on Education, Employment, Training and Youth Affairs
MFL: Mandarin as a Foreign Language
NALSAS: National Asian Languages and Studies in Australian Schools
NALSSP: National Asian Languages and Studies in School Program
NSW: New South Wales
PCK: Pedagogical Content Knowledge
ROSETE: Research-Oriented School-Engaged Teacher Education
TESOL: Teachers of English to Speakers of Other Languages
WSR: Western Sydney Region
UWS: University of Western Sydney

ABSTRACT

What teachers know guides their action in their classroom practice and plays an indispensable role in students' learning. However, the impact of teachers' knowledge on students' learning has not been investigated in the field of Mandarin as a Foreign Language (MFL) teaching and learning. This research project aims to explore how the beginning Mandarin teachers' knowledge impacts on primary students' engagement in Western Sydney Regions. The teachers under study are all from the Research-Oriented, School-Engaged Teacher Education (ROSETE) Program in the School of Education, University of Western Sydney and they share a series of essential features. A qualitative case study is designed to make an intense investigation in the real-life context with great value of empirical perspective. The teacher-researcher is also included in the case as a member of the program. Three data collection methods are applied including observations, interviews and teachers-researchers' biographical narratives in order to enhance the validity and reliability of the research through triangulation. Authentic events in the MFL classroom including both teachers' teaching and students' learning were observed and recorded. Teachers' underlying knowledge is also explored to reason and reflect their classroom practice.

Major findings indicate an integrated practical knowledge base for beginning Mandarin teachers including three main knowledge domains: knowledge of MFL as subject matter, knowledge of Australian students and their learning and knowledge of EFL as classroom language. These knowledge domains interact with each other and engage student in their MFL learning through demonstrating Chinese knowledge, contextualizing knowledge with students' life and learning from students. These three ways are conceptualized into three Chinese idioms as 先入为主 (xiān rù wéi zhǔ), 入乡随俗 (rù xiāng suí sú) and 教学相长 (jiào xué xiàng zhǎng). 先入为主 (xiān rù wéi zhǔ) implies that beginning Mandarin teachers need to value and take
advantage of Chinese knowledge they have to establish their teacher power in the MFL classroom. 入乡随俗 (rù xiāng suí sú) refers to the great impact of connecting MFL classroom with the outer world which has great significance for students. 教学相长 (jiāo xué xiāng zhǎng) suggests teachers learning while teaching so as to encourage and empower students' contribution to the MFL learning.
CHAPTER ONE
INTRODUCTION

1.0 Introduction
This study focuses on beginning Mandarin teachers’ knowledge and its impacts on students’ engagement in classroom learning. This chapter firstly pictures the research background from contextual information and personal experience to explain the researcher’s initial interest in the topic. It is followed by the introduction of the main research question and three contributory questions. Next, an overview of the research literature and the research methodology is provided, along with the significance of this study. Finally, it concludes with a thesis statement and the thesis structure.

1.1 Background of research

This study derives from the problems in the general context of Mandarin teaching and learning in Australia as well as the researcher’s own experience as a volunteer Mandarin teacher in an Australian primary school.

1.1.1 Australian context

In these days, Asian countries, including China, are developing and becoming growing influences on Australia (Ministerial Council on Education, Employment, Training and Youth Affairs [MCEETYA], 2008; Department of Education, Employment and Workplace Relations [DEEWR], 2008). Orton (2008) described China as Australian’s geographical neighbor, biggest trade partner, providing major population of workforce, students and tourists to Australia and claims no other countries have so close and dense connections with Australia now. Such relationship is believed to maintain in the future despite changes in other regions of the world (Orton, 2008). Thus, Asian languages have been assigned great importance to engage into such relationships and equip Australian young generations with competitiveness in future globalization (MCEETYA, 2008; DEEWR, 2008).
Reports from both private and government have been put forward to address the great importance of Asian Language education since 1980s (Henderson, 2003). One of the most influential reports is called Asian Languages and Australia’s Economic Future, or Rudd Report (1994) (Henderson, 2003). “Asia literacy” is called for in this report and has been accepted as a national educational policy by the Australian government (Henderson, 2003). This report suggests Asian languages and cultures be developed in Australia; and Japanese, Chinese (Mandarin), Indonesian and Korean be selected as four priority languages to learn through school-based programs (Henderson, 2007).

Consistent with this policy, a language program called the National Asian Languages and Studies in Australian Schools (NALSAS) Strategy was put forward and about $220 million was invested by government from 1995 to 2002 (Bianco, 2005). $ 62.4 million was given as funding to support National Asian Languages and Studies in Schools Program (NALSSP) from 2008 to 2011. This program aimed at a 12% of Year 12 students graduating with skills in one of the four Asian languages fluent enough for higher education or employment in commercial field in Asia by 2020 (DEEWR, 2008).

However, such emphasis on language learning cannot be shared immediately among people. In Australia, learning a new language is always regarded as unnecessary in this English-speaking country (Orton, 2008). Therefore, the national economic and political purposes underlying are unable to encourage Australian young students to learn this complicated script-based language on their own initiative (Henderson, 2007). The advocacy of compulsory learning doesn't seem to be effective in raising students’ engagement in learning Mandarin (Henderson, 2007). According to statistics at the end of 2007, only 3 % of students in Year 12 took Chinese. For 94 % of these students, their first language was Chinese and nearly 94 % of them gave up learning Mandarin immediately beyond compulsory years (Orton, 2008). Such disengagement of young Australian students generates great obstacles to the implementation of Asia Literacy.

Another huge barrier mentioned frequently is the lack of qualified Mandarin teachers.
Rudd himself admitted that it was one of the major reasons that the NALSAS Program couldn't be completed immediately (Henderson, 2007). Some also argue that the government doesn't have enough awareness of the elementary components of a qualified second language teacher (Henderson, 2007). Such serious inadequacy of qualified teachers with required knowledge has triggered great deficiencies as well.

These two main problems mentioned above are actually interlinked because of the close and indispensable connections between teaching and learning. In Chinese, teaching is translated as 教学 (jiào xué). 教 (jiào) means teachers’ teaching while 学 (xué) refers to students’ learning. There is another Chinese saying which goes “没有教不好的学生，只有教不好的老师” (mei yǒu jiào bù hǎo de xué shēng, zhī yǒu jiào bù hǎo de lǎo shī), which means that failed students only come from unqualified teachers.

Therefore, Australian students’ disengagement in learning Chinese (Mandarin) cannot be discussed alone without considering the influence on their learning from teachers’ teaching practices.

1.1.2 Personal experience

This section includes the researcher’s own experience of learning as a student in China as well as of teaching as a beginning Mandarin teacher in Western Sydney Region (WSR). All of these experiences make the researcher hold a belief that teachers’ knowledge and its application in classroom teaching considerably influence students’ engagement at young age, which offers important ideas for the formation of this research.

The researcher’s learning experience

The personal learning experiences enable me to have an intense and authentic feeling on how teachers are able to engage students in the classroom learning from the angle of a student.
I began my English learning in the primary school and my first English teacher established my enthusiasm about this foreign language since then. Young as she was, she was always passionate and loved trying new teaching approaches to make the class as lively as possible. She designed many catchy songs, poems, and interesting short stories and dances. Some were performed in school assemblies. For me, English was not an unfamiliar foreign language, but was a window to a brand new world.

As for the subject of Chinese (Mandarin), my great passion was gained in high school from my Chinese teacher. He offered me a totally different way to look at language learning and teaching. His Chinese classes were never confined to the textbooks or just focused on requirements of exams. He made a positive contribution to widening our horizons through the media of language. Therefore, instead of analyzing the meaning of each paragraph of the text or trying to figure out how to write a high-mark composition by following the models, I had the opportunities to appreciate classical Chinese music, like 《思乡曲》 (sī xiāng qǔ; Melody of homesickness) played by Sicong Ma or the famous erhu solo 《二泉映月》 (èr quán yìng yuè; The Moon Over a Fountain), to take a look at the amazing architectures both in China and overseas; to enjoy the stunning traditional dances or even to go out of the classroom and explore the beauty of existing ancient villages. Besides, he recommended us abundant books in all kinds of fields, including psychology, philosophy, art and so forth. He always would like to share his reflections and thoughts based on his reading. Instead of teaching a sterile subject required by exams, he guided us to the temple of knowledge and offered us different angles to explore it. All these supplied me a better and broader understanding of language, culture and the whole world as well as constant encouragement to read more, think more and write more as he expected.

By sharp contrast, I always did a terrible job on subjects like mathematics and chemistry. Such an imbalance among my subjects posed a great obstacle to my study which became even worse in high school. My chemistry learning experience was a nightmare. I struggled with this subject in those days. Actually, the chemistry teacher was a good teacher, with solid subject knowledge, rich teaching experience and great
responsibility. He even once tutored eight champions in the National Chemistry Olympic Contest. However, such great achievement made him establish a high standard for all of his students. His teaching pace was too fast for me to catch up with and he counted the minutes we needed for an exercise with a stopwatch. This made me really nervous for I even hardly understood what he taught. Besides, he always shouted at me in the front of the class when I had no idea how to answer the easy questions he asked. For I did worse and worse at chemistry, the huge frustration and fear I felt towards this subject left me with no motivation to improve it or even engage in his class at all.

The researcher’s teaching experience

On the basis of personal learning experience of both engagement and disengagement as a student, teaching experience with a different role guided me to a further thought of how teachers’ practices may lead to students’ classroom engagement.

In June 2011, I was selected as a volunteer Mandarin teacher to teach Mandarin in Australian primary schools. My first impression on Australian primary classroom surprised me. The whole learning and teaching environment was quite relaxed. Firstly, teachers were often sitting rather than standing in front of all the students, some even sitting on the floor with the students. Secondly, the arrangement of classes distinctly differed from that in China. There were mixed classes with students from two different grades. Thirdly and most importantly, students were so energetic and active. They felt free to express themselves and what they knew. They tended to show their enjoyment or dislike directly in front of teachers rather than hid their emotions. Whereas in China, students tend to keep quiet in class, trying to perform perfectly in an expected way and they seldom let their disagreement or dissatisfaction heard. Facing this great unfamiliarity, I started to suspect whether I would be able to engage students in my Mandarin classes.

I began to think about my research question after my first teaching experience. I started with teaching stage one students (two classes of Year 2 and one class of Year 1) how to introduce their own names as well as their friends’ names. The lesson included two similar sentence patterns: “我叫...... (wǒ jiào... My name is...)” and “我
Despite of my nervousness, my teaching in Year 2 classes went relatively smoothly. Students were engaged well. Almost all the students put their hands up when I asked if they would like to introduce their or their friends’ names to me and some students put their hand up for a couple of times. One girl even hugged me when I was leaving. I did feel then I was able to engage kids into Mandarin learning. However, the situation went opposite when I taught the same content to Year 1 students. Only few children put up their hands. The majority of the class was unwilling to introduce their names. It was getting worse when I asked them to introduce their friends’ names in Mandarin——no one volunteered! The whole class kept silent and two boys hid themselves in a corner far away. To relieve this embarrassment, I picked one boy who was active at the beginning of the class. He just kept silent. When the classroom teacher asked him to answer my question, he just said “I can’t understand” without raising his head. This answer really surprised me. I took it for granted that after learning the sentence pattern “我叫... (wǒ jiào... My name is...)” and the word “朋友 (péng yǒu; friend)”, the pattern with the same structure “我朋友叫... (wǒ péng yǒu jiào... My friend’s name is...)” could be easily understood and accepted. However, maybe for these young English-speakers, the sentences taught were too long and too hard to understand. In addition, I also ignored another crucial fact. Maybe Year 1 students’ ability to learn and understand a new language is different from those in Year 2. Lacking of knowledge on appropriate content, and students’ learning pace invited the failure in my Year 1 class. I realized the great need for adjustment of my lesson plans to different learners. All these self-reflections triggered my motivation and interest in the teachers’ impact, especially their underlying knowledge base on the students’ learning.

1.2 Research question

The main research question is:

How does beginning Mandarin teachers’ knowledge impact on students’ classroom engagement in primary schools of Western Sydney Region?

The contributory research questions are:
1. How do Australian primary school students engage/disengage in Mandarin classes?
2. What practices do beginning Mandarin teachers conduct in class that may cause the students’ engagement or disengagement?
3. What knowledge do beginning Mandarin teachers have or lack reflect in teaching practices?

The research questions are generated from the concern on the inseparable connection between teachers’ teaching and students’ learning as well as the significant influence of teachers’ knowledge on both elements. They aim to explore the knowledge underlying the teaching practice of beginning Mandarin teachers. Instead of focusing on teachers’ knowledge directly, this study starts from students’ engagement to identify their observable verbal or behavioral responses in the class as a mirror of appropriateness/ inappropriateness of beginning Mandarin teachers’ classroom teaching practices, and further the knowledge applied through these practices.

1.3 Significance of the study

Firstly, this research responds to the Australian Asia Literacy Policy. Orton (2008) claims that if there are no considerable dropouts, the numbers of students learning Mandarin as a foreign language (MFL) in Australia in 2008 would be likely to satisfy the 2020 goal. Thus, in order to reach the number required, the retention of second language learners should be the priority. However, it is important to notice that the motivation for the students to take a foreign language is their self-fulfillment and enjoyment of the language learning rather than their personal or national benefits in the future (Orton, 2008). The students’ responses in Mandarin classes in this study provide a deeper understanding of the reasons for the current issue of students’ disengagement. Such understanding is of great value in the exploration of ways to enhance as well as to maintain students’ engagement and decrease dropout numbers when they go beyond compulsory years, thus achieving the Asia Literacy target.
Secondly, this study focuses on exploring the knowledge and its application in teaching practice for the foreign language teachers who are native speakers of target language in Australian local communities. It may contribute to the improvement of Australian foreign language curriculum. Henderson (2007) and Orton (2008) both argue that the students’ discontinuing of Mandarin learning is greatly due to the great difficulties in learning this language. The low level of achievement diminishes the learning enthusiasm of Chinese as foreign language learners. Compared to mastering a European language, English speaking learners need to take 3.5 times longer to learn Chinese well (Orton, 2008). Four particular characteristics of Chinese language constitute considerable challenges for second language learners, namely “tones, homophones, characters and the system of particles and verb complements” (Orton, 2008, 30). School sector administrators don't feel excited for the reemerging emphasis on the target of Asia Literacy (Orton, 2008). They expressed their worry that the great difficulty of learning Chinese which had been proven previously would make the Asia Literacy policy fail. Investigating Mandarin teachers’ classroom practice and students’ engagement connects the real educational situation in Australian schools with foreign language teaching and provides authentic information for the improvement of Australian foreign language curriculum and teaching documents.

Thirdly, this research contributes to enhancing pre-service Mandarin teacher education. Qualified teachers are the essential basis for the start of Chinese programs as well as for the final success of Asia Literacy policy (Orton, 2008). Among all the teachers teaching Chinese in Australia, about 90% are native Chinese speakers (Orton, 2008). However, many of these teachers are not fully employed and often criticised for their unsuccessful interaction with Australian students and local communities, their unsuitable pedagogies and poor English proficiency (Orton, 2008). Especially on the aspect of teaching practice, these Mandarin background teachers are found not to be able to assist students in overcoming challenges such as tones, putting too much emphasis on character teaching and accuracy with ignorance of communicative and intercultural competence (Orton, 2008). However, in Australian language teacher training, student teachers of Mandarin only obtain common knowledge of teaching language with teachers teaching other languages. They don't have any awareness and education on specific challenges in learning and teaching.
this particular language (Orton, 2008). Therefore, exploring beginning Mandarin teachers’ knowledge and its appropriate demonstration for successful classroom practice provides insights for the training and education of pre-service foreign language teachers in Australia.

1.4 Overview of literature review

In this section, an overview of intellectual context is provided relating the research questions in this study.

1.4.1 Teacher knowledge

Teachers’ knowledge has been attached to great significance in the field of education (Shulman, 1986; Shulman, 1987; Tamir, 1988; Connelly, Clandinin & He, 1997; Watzke, 2007; Park & Oliver, 2008). The components of teachers’ knowledge base and its applications in teaching practices are regarded as the central issue in the field (Connelly, Clandinin & He, 1997). It exerts great significance on teachers’ teaching practices and students’ learning (Gatbonton, 1999; Borg, 2003; Freeman, 2002; Mullock, 2006; Akbari & Tajik, 2009). In this field, many terms have been coined and applied with different aims and focuses, including craft knowledge, practical knowledge, personal practical knowledge, pedagogical content knowledge and other relating concepts (Shulman, 1986; Shulman, 1987; Elbaz, 1981; Connelly, Clandinin & He, 1997; Park & Oliver, 2008). Since the aim of this study is to investigate the impact of teachers' knowledge on student engagement through practical teaching, the term of practical knowledge is applied because it links teachers’ knowledge with their teaching practices closely (Chou, 2008; Van Velzen, Volman, & Brekelmans, 2011). Although there is no agreed definition in previous literature, the main characteristics of practices are shared among researchers. Many researchers describe practical knowledge as composed of teachers' cognition, action-oriented and context-bound. Despite its implicitness, the components of practical knowledge are still shared by teachers (Elbaz, 1981; Meijer et al., 1999; Chou, 2008). According to the prior relevant research, the components mentioned for practical knowledge include knowledge of subject matter (Elbaz, 1981; Meijer et al., 1999; Golombek, 1998);
knowledge of curriculum (Elbaz, 1981; Meijer et al., 1999); knowledge of instruction (Elbaz, 1981, Golombek, 1998) or knowledge of instructional techniques (Meijer et al., 1999), knowledge of self (Elbaz, 1981; Golombek, 1998), knowledge of educational context (Elbaz, 1981; Golombek, 1998; Meijer et al., 1999), and knowledge of students and student understanding (Meijer et al., 1999). Among the above categories, knowledge of subject matter and knowledge of instruction/instruction techniques are most addressed by researchers. Except for the components for practical knowledge, its development is also explored by previous studies (Meijer, Verloop & Beijaard, 1999; Van Driel, Beijaard and Verloop; 2001; Arıoğul, 2007). Teachers' experience including their learning experience as well teaching practice are valued as essential source for teachers' construction of practical knowledge.

However, studies on teachers' knowledge were often explored from teachers' practice or teachers' narrative of their teaching practice alone. In these cases, the appropriateness or inappropriateness is identified from the perspective of teachers themselves alone instead of students or the researchers. In terms of subjects, science and mathematics teachers' knowledge has been most frequently explored. The studies on MFL teaching mainly involve experienced teachers or teaching to background students. Explorations on beginning Mandarin teachers teaching MFL to foreign students are little.

1.4.2 Beginning teachers

Beginning teachers are described as teachers “who are still undergoing training, who have just completed their training, or who have just commenced teaching and still have very little (e.g. less than two years) experience behind them” (Gatbonton, 2008, 162). According to this definition, all the Mandarin teachers under study can be identified as beginning teachers.

Due to lack of years of teaching practice, beginning teachers are found not competent
especially when they deal with issues concerning classroom management and students' individual needs (White & Moss, 2003; Jones & Eick, 2007; Langdon, 2011). Although their knowledge base is also considered as unstable and incomplete, researchers have found that consistency exists among beginning teachers' knowledge base (Mullock, 2006; Gatbonton, 2008; Akbari & Tajik, 2009). In addition, beginning teachers' development is also explored for its high significance for teacher education (Watzke, 2007, Van Velzen, Volman, & Brekelmans, 2011, Leshem, 2008).

1.4.3 Student engagement

Engagement is another key concept in this study which is also recognized as an indispensable element in the educational research. No common definition has been reached among researchers for student engagement. One of its definitions is put by Munns and Woodward (2006):

“student engagement occurs when students are simultaneously and reflectively involved in deep understanding and expertise (high cognition); genuinely valuing what they are doing (high emotion) and actively participating in school and classroom activities (high behavior)” (194).

Student engagement is a multi-dimensional concept including behavioral engagement, emotional engagement and cognitive engagement (Munns & Woodward, 2006; Axelson & Flick, 2010; Appleton, Christenson, & Furlong, 2008; Zyngier, 2008). In some studies, disengagement is also included into the conceptualization of student engagement to involve the status of its absence (Fredricks, Blumenfeld, & Paris, 2004; Skinner, Kindermann, & Furrer, 2009). Previous studies on student engagement are relatively mature. Different lists of influential factors or suggestions on how to improve student engagement have been provided and examined (Fredricks, Blumenfeld, & Paris, 2004; Skinner, Kindermann, & Furrer, 2009; Axelson & Flick, 2010). In the classroom context, teachers’ practice and the underlying knowledge is
claimed playing an essential role in enhancing student engagement (Klem & Connell, 2004; Zyngier, 2007; Bryson & Hand, 2007; Wang, 2009; Pianta & Hamre, 2009; Piasta, Connor, Fishman & Morrison, 2009; Mitchell & Carbone 2011; Charalambous & Hill, 2012). It is claimed that positive interaction between students and teachers as well as between peers is engaging through establishing supportive learning environment. Besides, students more tend to be engaged when the learning task is authentic, interesting, and explorative with appropriate learning content (Fredricks, Blumenfeld, & Paris; Kong & Hoare, 2011; Taylor & Parsons, 2011; Chua, Wong & Chen, 2009; Ma & Wang, 2009). But most of these examinations of potential engaging practice in classroom were often conducted in controlled studies by identifying the effectiveness of certain kind of strategy. Seldom have studies been done to identify the appropriateness or inappropriateness of teachers' practice from student engagement openly. The measurement of engagement can be conducted through both quantitative data analysis and qualitative data analysis. This study collects qualitative data mainly by teacher-researcher's observation for it is considered to put more emphasis on students’ interests and enjoyment in the learning process (Reeve et al., 2004; Appleton, Christenson, & Furlong, 2008).

1.5 Overview of methodology

This research is a qualitative case study. A case study is “an evidence-based, empirical approach that focuses on an intense investigation of a single system or a phenomenon in its real-life context” with rich data from various sources (Lee, Mishna & Brennenstuhl, 2010, 682; Baxter & Jack, 2008). Case study is chosen because it values subjective human perspective greatly. As an intense investigation, researchers are able to gain abundant in-depth information with rich data sources in case studies. Furthermore, the phenomenon studied is often rooted in the complex real-life context. So it is suitable for this study to explore the impact of beginning native Mandarin teachers’ knowledge on students’ classroom engagement in the particular Australian educational context. Beginning Mandarin teachers within the context of Research-
Oriented School-Engaged Teacher Education (ROSETE) Program are regarded as an integrated single case due to the uniqueness of this context. They share many common features and experience both in China previously and in Australia currently. A total of seven beginning Mandarin teachers from ROSETE program were recruited including the teacher-researcher. These teacher participants are from three different groups: the fresh new group, the one-year experience group and the two-year experience group. But since the aim of this study is not to identify the differences between groups of teachers with different experience, these sub-units were explored and understood in the single case of ROSETE program. Triangulated data on beginning Mandarin teachers' underlying knowledge for their practice and the corresponding indicators of student engagement were collected from observation, interviews and researcher’s biographical narrative. Firstly, each teacher participants' Mandarin lessons were observed for two to four times according to their timetable. It assists the researcher to gain first-hand information on student engagement and teachers’ practice. During the observations, the researcher was able to utilize all the senses to see, to hear and to feel the practice directly so that the practices themselves were accessible and the actual facts were able to be discovered. Secondly, interviews are also used along with observations to obtain some particular experience, feeling and understanding on the research topic which are unobservable. Post-observation interviews were conducted after each observation for teachers to reason their practice in the observed lessons. Data on teachers' underlying practical knowledge which guided their practice were collected. Unclear issues observed were also clarified immediately and objectively through the interaction. Besides, semi-structured interviews, which lasted for 45 minutes to an hour, were also organized for each teacher participant. On the one hand, its open-designed structure encouraged interviewees to express themselves freely; On the other hand, this form of interview allowed the interviewer to verify the unclear or incomplete information by in-depth probing. In semi-structure interviews, teacher participants provided general evaluation of their MFL teaching and their knowledge base. Specific experiences and examples are also offered. Last but not the least, researcher’s journal for
self-reflection was collected as a form of biographical narrative to capture her own learning and teaching experience in Australia with great consideration of previous life experience. The method of biographical narrative enabled the researcher to make a connection between particular concrete practices and the background of the teacher so as to provide a reliable understanding of teachers’ knowledge underlying their practices and its influence on student engagement in MFL learning.

1.6 Thesis statement

This thesis argues that beginning Mandarin teachers' practical knowledge engages student in their MFL learning through demonstrating Chinese knowledge, contextualizing knowledge with students' life and learning from students as ignorant learners. These three ways are conceptualized into three Chinese idioms as 先入为主 (xiān rù wéi zhǔ), 入乡随俗 (rù xiāng suí sú) and 教学相长 (jiào xué xiào zhǎng).

Firstly, 先入为主 (xiān rù wéi zhǔ) refers to beginning teachers’ establishment of their teacher power through valuing and presenting their unique Chinese knowledge to Anglophone students. This exotic knowledge attracted the attention from Australian primary students greatly and engaged them into cognitive cultural comparison. Secondly, 入乡随俗 (rù xiāng suí sú) reflects teachers' efforts to contextualize their prior knowledge into the context of Australia in general as well as certain Australia primary schools and classrooms specifically. The contextualization of teachers' practical knowledge makes close connection between the MFL classrooms and students' personal life. Such connection empowers students in the MFL classrooms and engages them into learning. Thirdly, 教学相长 (jiào xué xiào zhǎng) indicates students more tend to be engaged when they are knowledge contributors rather than knowledge receivers. The knowledge of Mandarin learning from native speakers' perspective may prevent these beginning Mandarin teachers to engage students in practice.
1.7 Outline of the thesis

Chapter Two reviews the literature on teachers’ knowledge and practice. Definitions of teachers’ practical knowledge, beginning teacher and student engagement are discussed. Categories of components for practical knowledge as well as students’ engagement and disengagement are included. These categories served as data in the analysis concerning beginning Mandarin teachers’ practical knowledge and students’ engaging indicators towards teachers’ practice.

Chapter Three describes the application of a qualitative case study and explains the detailed process of triangulated data collection approaches (observation, interviews and biographical narrative) and thematic analysis. Ethic issues, validity, reliability and generality of this research are also addressed.

Chapters Four to Six are evidentiary chapters based on analysis of the data collected from observations, interviews and teacher-teachers’ biographical narrative. Three main knowledge domains underlying beginning Mandarin teachers' classroom practice as well as corresponding impact on student engagement are illustrated with compelling extracts concerning knowledge of MFL as subject matter, knowledge of Australian students and knowledge of EFL as classroom language.

Chapter Seven discusses the major research findings based on the evidentiary chapters and concludes the research project. The implications from the study are provided. Limitations and the recommendations for further research are indicated.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

This chapter reviews the conceptual works and empirical studies related to the literature. The main research question for this study is “how does beginning Mandarin teachers’ knowledge impact on students’ classroom engagement in primary schools of Western Sydney Region?”

To have a better understanding and preparation for the investigation, three main concepts in the question have been reviewed. They are teachers' knowledge, beginning teachers and student engagement. Regarding to teachers' knowledge, teachers' practical knowledge is particularly focused on and discussed. Four types of knowledge are reviewed to gain a deep and more comprehensive understanding of the components of teachers' knowledge base. The relating empirical studies especially on foreign language teaching are covered and the significant impact of teachers' knowledge on their classroom practice from previous researchers has been reviewed. In addition, the main source of the knowledge development is also mentioned. It follows the review of empirical studies on beginning teachers especially in the language teaching field. The characteristics of this teacher group comparing experienced teachers are discussed. Then the focus turns to the student engagement. The vital impact of teachers on students' classroom learning is reviewed. The indispensable relationship between teacher's teaching and student learning is particularly highlighted.

Although literature shows that various studies have been conducted in these relating fields respectively, the impact of beginning Mandarin teachers' knowledge on students' learning engagement is still unknown. This study addresses the key limitation in the current research. That is, what and how the knowledge beginning Mandarin teachers demonstrate to have or to lack in their Mandarin class have influenced their students’ engagement during the Mandarin learning in Australian
primary schools.

2.1 Practical knowledge

Teachers develop their bodies of knowledge of teaching and learning which is regarded as the prerequisite for teaching practice (Boyer, 1990; Reeves, 2009). The knowledge base for teaching is defined as “body of understanding and skill, of disposition and values, of character and performance that together underlie that capacity to teach” (Shulman and Sykes 1986, cited in Tamir, 1988, 99). Over the decades, what teachers know and how it develops has been attached to an increasing attention for its significance on classroom practices (Shulman, 1986; Shulman, 1987; Tamir, 1988; Connelly, Clandinin & He, 1997; Watzke, 2007; Park & Oliver, 2008). With focus on different aspects, various terms have been coined and studied through the previous studies including craft knowledge, practical knowledge, personal practical knowledge, pedagogical content knowledge and other relating concepts (Shulman, 1986; Shulman, 1987; Elbaz, 1981; Connelly, Clandinin & He, 1997; Park & Oliver, 2008).

It has been reached agreement among many researchers that teachers’ teaching actions are based solidly on certain forms of thoughts which was developed from teachers’ knowledge base (Gatbonton, 1999; Borg, 2003; Freeman, 2002; Mullock, 2006; Akbari & Tajik, 2009). For example, Borg (2003) describes teachers as “active, thinking decision-makers who make instructional choices by drawing on complex, practically-oriented, personalized, and context-sensitive networks of knowledge, thoughts, and beliefs (p. 81). Increasing research attention has been placed upon exploring the knowledge underlying teachers’ teaching practices (Elbaz, 1981; Tamir, 1991; Connelly, Clandinin, & He, 1997; Zhao & Poulson, 2006; Watzke, 2007, Arıoğul, 2007; Richards, 2008). In this study, practical knowledge is used for the aim in this research project to investigate the impact of teachers' knowledge through its application in their teaching practice.

2.1.1 Conceptualization of practical knowledge
Practical knowledge is an integrated concept which encompasses teachers’ knowledge and beliefs that guide teachers’ teaching practices (Chou, 2008; Van Velzen, Volman & Brekelmans, 2011). It has been used in different ways for analysis by various researchers.

Tamir (1991) discussed practical knowledge along with theoretical knowledge, defining practical knowledge as “the store of information and skills that guides and shapes a person’s behavior”, while theoretical knowledge is defined as “information which constitutes part of the cognitive structure of a person but, for various reasons, cannot or does not affect practice” (263). Such emphasis on its action-orientation is reflected in other scholars’ definitions.

For example Zanting, Verloop, Vermunt & Van Driel (1998) clarified it as:

...amalgam of all teachers' cognitions, such as declarative and procedural knowledge, beliefs and values, influences their preactive, interactive, and postactive teaching activities. Thus, practical knowledge underlies the visible teaching behavior, and insight into teachers' practical knowledge can therefore be of help to understand their teaching (Zanting, Verloop, Vermunt & Van Driel, 1998, 16).

Besides the emphasis between the practical knowledge and the teaching practice, its basis of teachers' cognition is also pointed out in the above definition. This is agreed by Gholami and Husu (2010) who claimed that it “includes all teachers’ cognitions (e.g., beliefs, values and motives) guiding their actions” (1520).

Similarly, Meijier et al. (1999) defined it as “the knowledge and beliefs that underlie his or her actions; this kind of knowledge is personal, related to context and content, often tacit, and based on (reflection on) experience” (60). Van Driel, Beijaard & Verloop (2001) concluded its characteristics as “action-oriented”, “person-and context-bound”, “implicit or tactic”, “integrated” and “beliefs” (142).

The characteristic as context-bound can also be demonstrated in the description by
Carter (1990) that practical knowledge is “…the knowledge teachers have of classroom situations and the practical dilemmas they face in carrying out purposeful actions in these settings” (299).

From these debates over the definition of the concept of teachers' knowledge, it can be seen that teachers’ knowledge is composed of teachers' cognition and plays an essential role in teachers’ practical actions contextually.

### 2.1.2 Components of practical knowledge

Based on the conceptualization of the practical knowledge, it is characterized as “implicit” and contextual-bound and is not easily to generalize (Van Velzen, Volman & Brekelmans, 2011). However, researchers argue that it is knowledge shared by groups of teachers and has common parts (Elbaz, 1981; Meijer et al., 1999; Chou, 2008). It is also agreed that the study of its content can provide a systematic perspective on the teaching process as dynamic expression of knowledge (Elbaz, 1981; Golombek, 1998). The development of this knowledge base is expected to connect the theories and practice of teaching, and be useful to teachers in reflecting on teaching practice (Van Driel, Beijaard, & Verloop, 2001).

Thus, categories for the content of teachers’ practical knowledge have been studied and common elements were suggested by previous researchers. For example, Elbaz (1981) categorized the content of practical knowledge as including: “knowledge of subject matter, curriculum, instruction, self, and the milieu of schooling” (48). However, she also suggested that the content of practical knowledge be changeable. Chou (2008) explored three EFL (English as a Foreign Language) teachers' practical knowledge and found that although three teacher participants had different images of teachers as a gardener, a performer, and a tailor individually, they shared practical principles as well as a set of specific rules of practice (Chou, 2008). Those listed practice rules fit into Elbaz (1981)’s five categories mentioned above. In addition, Meijer et al. (1999) explored practical knowledge in the teaching of reading and divides it into six categories: knowledge of subject matter, students, student learning and understanding, educational purposes, curriculum, and instructional techniques.
Golombek (1998, 451) proposed four main categories for teachers' personal practical knowledge as *knowledge of self, subject matter, instruction and context*” (Golombek, 1998, 451). It can be seen that the focus on *subject matter, context, curriculum* and *instruction* are shared by the above three researchers.

Different from the above specific components, Gholami & Husu (2010) claimed that practical knowledge consists of components of paraxial knowledge which “calls for responding to the normative demands of teaching” and practicable knowledge which “calls for responding to the effective demands of teaching contexts”. But the study on the components of practical knowledge is still limited.

In order to have a comprehensive understanding of the components of teachers' practical knowledge base, previous studies on relating categories are reviewed and discussed as follows individually including knowledge of subject matter; knowledge of instruction/ instructional techniques; knowledge of context; knowledge of students and students' learning (Shulman, 1986; Shulman, 1987; Tamir, 1988; Borg, 2003; Park & Oliver, 2008). These studies provide profound significance for teacher education. The impact of different knowledge components on each other and more importantly, on teachers' teaching practice is also mentioned through the following review.

### 2.1.2.1 Knowledge of subject matter

The knowledge of subject matter is recognized as one of the most basic knowledge content for teachers' teaching (Tamir, 1988; Ball & McDiarmid 1989; Ben-Peretz, 2011; Ball, Thames & Phelps, 2008). This category gives particular concern on what teachers teach and what students learn. It was coined by Schwab (1964) and is described as “compasses an understanding of the various ways a discipline can be organized or understood, as well as the knowledge of the ways by which a discipline evaluates and accepts new knowledge” (Schwab, 1964, cited in Ben-Peretz, 2011, 4).

While Shulman (1986) put it as one of the elements of content knowledge. Content here could be defined as the knowledge on “the topic or task that is the focus of instruction” (Mullock, 2006, 56). Content is the basic source provided to students to
learn and understand about the discipline, therefore teachers have significant duty to
decide and prepare what to teach, what to offer to the students in the lesson (Shulman,
1987; Ball & McDiarmid, 1989). Shulman (1986) suggested a three dimension
domain of content knowledge including subject matter content knowledge,
pedagogical content knowledge, and curricular knowledge. Subject matter content
knowledge focuses on the understanding of the subject matter major including the
structure of the subject matter, knowledge of what students already have known
within the subject, “why a particular proposition is deemed warranted, why it is
worth knowing, and how it relates to other propositions, both within the discipline
and without, both in theory and in practice” (9). Compared with Schwab's (1964)
description, Shulman (1986) attached wider concern of the relationship of subject
matter knowledge with other disciplines, as well as its relevance with students'
learning in the dynamic construction of knowledge. The lack of specific subject
knowledge was addressed in the previous studies (Piasta, et.al, 2009; Ball, Thames &
Phelps, 2008). In the field of MFL (Mandarin as a Foreign Language) teaching,
teachers' knowledge of subject matter is regarded as the basic knowledge component
Mandarin teachers' perspective on their expertise as a MFL teacher in British schools.
All the teacher participants expressed their being unsatisfied at their expertise due to
lack of knowledge through interviews. The expertise here is referred to teachers'
professional knowledge that is the “knowledge of Mandarin in relation to teaching”
(Wang, 2011, no page). The gap between what teachers know and what MFL
teachers need to know is identified. The tactic and unconscious knowledge of native
speakers cannot be transferred into the knowledge of subject matter for the MFL
teaching. The knowledge of subject matter consists of specific and general
knowledge on Mandarin linguistically and culturally. Take two instances, one
participant was asked to teach Mandarin because he was the only native speaker
regardless of his inadequacy of basic literacy skill and knowledge of subject matter.
While the other participant found what she was asked to teach by the school wasn't
consistent with her professional coursework. The knowledge of subject matter was
suggested to attach more awareness to the teacher training by Wang (2011).

As for the pedagogical content knowledge (PCK), it is put more emphasis on the
practical application of teaching content. Shulman (1986) described this knowledge consisting of teachers' knowledge of how present and formulate the teaching content; how to make the teaching content learnable and comprehensible; and of students' conceptions and misconceptions towards the learning content. The “teachability” for teachers and the learnability for students of the content was addressed (Shulman, 1986, 9). This term has been highly recognized by other researchers and has developed into conceptualization of teachers' knowledge generally rather than a sub-category of content knowledge when put forward by Shulman (1986) (Hashweh, 2005; Reeves, 2009; Alonzo, Kobarg & Seidel, 2012).

The curriculum knowledge is:

The knowledge possessed by the teacher of how the almost infinite range of possible topics and skills that might be taught to students have been organized and arranged into systematic programs of instruction is called curricula. These curricula are generally made available to teachers in the form of textbooks, films, syllabi, software, sets of instructional materials of various sorts (Shulman & Sykes, 1986, cited in Tamir, 1991, 106).

The curriculum knowledge has close association with the content representation and has been considered as an essential element to lead teachers' application of curriculum material as well as the further practical instruction (Shulman, 1986; Charalambous & Hill, 2012). Teachers' insufficient knowledge in curriculum is also underlined by researchers (Friedrichsen et.al, 2009).

In the field of language teaching, knowledge of target language has been treated specially and relating terms are discussed including linguistic knowledge, knowledge of language, knowledge about language (Reeves, 2009; Wang, 2009; Duff, 2008; Derewianka, 2012). This makes the content knowledge or subject matter knowledge more subject-related and concrete. For example, Derewianka (2012) illustrated the knowledge about language within the English as a first language (L1) teaching domain based on the language strand in the Australian national curriculum. In order to develop “a coherent, dynamic, and evolving body of knowledge about the English
language and how it works” (Australian Curriculum Assessment and Reporting Authority [ACARA], 2009, 6), the teachers are required to hold deep knowledge of linguistic grammar in terms of both form and function and how to teach it functionally and contextually through activity designing and classroom scaffolding (Derewianka, 2012). It can be noted that the knowledge about language here addresses not only what to teach concerning the specific subject matter, but also how to teach it.

Similarly, Reeves (2009) conceptualizes the linguistic knowledge as the knowledge:

- includes not only such knowledge domains as a language’s structure, social theories of language, and knowledge of the L2 learning process,
- it also includes teachers’ schema for representing linguistic knowledge to learners in comprehensible, learnable ways (110).

Reeves (2009) investigated the linguistic knowledge among teachers of English to speakers of other languages (TESOL). Two beginning teachers under study were still found lack of linguistic knowledge in terms of either declarative or procedural. Although as native English speakers, they are lack of conscious and non-spontaneous knowledge to make the English learnable and understandable for students. Furthermore, their lack of second language (L2) learning experience hinders them from having a better understanding of the students' learning difficulty and L2 learning process (Reeves, 2009). This study addresses the significance of teachers' experience as a L2 learner for teacher education, and also points out the difference of the knowledge held by native teachers and non-native teachers in the second language teaching. Although native teachers are more skilled in the target language, but their linguistic knowledge is still need to be improved so that they are able to explain why it is so to L2 learners, what may be the difficult points for learners and how to make it easier to learn (Reeves, 2009). In this way, the linguistic knowledge here equals to the content knowledge discussed above.

More studies have been conducted on what the teachers need to know about the subject matter especially for mathematics and science teaching (Baker & Chick, 2006; Ball, Thames & Phelps, 2008; Charalambous, & Hill, 2012). These increasing
studies concerning the certain subject matter illustrate the tendency to narrow down
the educational research of knowledge to certain subject domain and to lead the
teacher education to more targeted and effective ways.

2.1.2.2 Knowledge of instruction

Knowledge of instruction is another component that is frequently covered in the
domain of practical knowledge (Elbaz, 1981; Golombek, 1998; Meijer, Verloop &
Beijaard, 1999).

Knowledge of instruction represents the pedagogical knowledge that
these teachers draw upon to teach and to make sense of their teaching.
This knowledge can be general as well as specific, as expressed in
particular teaching contexts and students, including knowledge of the
role of teachers and students, the role of the classroom and naturalistic
settings in language learning, the role of lesson plans, the objectives of
tasks, evaluation of students and tasks, interaction with students, and

In the above description, the instructional knowledge is equal or at least belongs to
pedagogical knowledge. The pedagogical knowledge here is another well-known
concept for teachers' knowledge research and is much more widely mentioned than
instructional knowledge (Shulman, 1986; Shulman, 1987; Tamir, 1988; Gatbonton,
2000; Mullock, 2006; Park & Oliver, 2008).

Pedagogical knowledge is “the knowledge of generic principles of classroom
organization and management” (Shulman, 1986,17). It often includes knowledge of
general pedagogy and the more specific knowledge relating with certain teaching
content which is pedagogical content knowledge or also is termed as subject matter
specific pedagogical knowledge (Shulman, 1986; Tamir, 1988). Within the concept of
practical knowledge, pedagogical knowledge has been concerned by researchers
(Chou, 2008; Gholami & Husu, 2010). For example, for the specific purpose of the
research, practical knowledge about general pedagogy is particularly focused on by
Gholami & Husu (2010), including “teachers’ knowledge and beliefs about
'classroom management', 'instructional strategies' and 'learner, learning and teaching' " (Borko & Putnams, 1996, cited in Gholami & Husu, 2010, 1521). As for the pedagogical content knowledge which has already been discussed in the above section of subject matter knowledge, it actually is a production by combining the knowledge of subject matter and knowledge of pedagogy. Hence, pedagogical knowledge is always investigated in studies on PCK (Pedagogical Content Knowledge) (Baker & Chick, 2006; Park & Oliver, 2008; Alonzo, Kobarg & Seidel, 2012). Therefore, how to transform the content through pedagogy has been attached to great concern. For example, Baker & Chick (2006) explored the PCK of two primary mathematics teachers based on a framework which includes three aspects:

1) Clearly PCK includes those aspects which are most clearly a blend of content and pedagogy;
2) Content Knowledge in a Pedagogical Context includes those aspects drawn most directly from content;
3) Pedagogical Knowledge in a Content Context includes knowledge which has been drawn most directly from pedagogy

(Baker & Chick, 2006, 61)

The researchers asked the teachers to fill in the questionnaires with mathematic problems and asked teachers how they are going to teach or help students to solve these problems. Interviews with similar questions were also asked. Such data collection methods enable the researchers to understand teachers' pedagogical knowledge concerning the concrete mathematic content specifically. But unfortunately, this study explores the teachers' PCK from teachers' narratives and questionnaires only instead of basing it into the authentic classroom teaching practice. Other studies like Watzke (2007) also used teachers' own narratives such as written journals without actual classroom practice. However, there is a gap between what the teachers think they know and what they are able to apply in their practice (Ozverir & Herrington, 2011; Woods and Çakır, 2011). While some studies has explored teachers' pedagogical knowledge with observation of teachers' authentic practice (Gatbonton, 1999; Mullock, 2006; Akbari & Tajik, 2009). The researchers videotaped the teachers' teaching practice and applied interviews for teachers to reflect on their pedagogical knowledge.
Instead of regarding pedagogical knowledge as part of a wider concept, pedagogical knowledge has been expanded into a complicated and more independent concept (Gatbonton, 1999; Mullock, 2006; Akbari & Tajik, 2009). Gatbonton (1999) conceptualizes it with six subcategories (see Table 2.1):

Table 2.1 Components of pedagogical knowledge

<table>
<thead>
<tr>
<th>Item</th>
<th>Definition</th>
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<tbody>
<tr>
<td>1. Handling language items</td>
<td>knowledge of how to manage specific language items so students can learn them</td>
</tr>
<tr>
<td>2. Factoring in student contributions</td>
<td>knowledge about the students and of the factors that students bring with them to class</td>
</tr>
<tr>
<td>3. Determining the contents of teaching</td>
<td>knowledge about the goals and subject matter of teaching, including awareness of keeping the goals of the lesson in constant view</td>
</tr>
<tr>
<td>4. Facilitating the instructional flow</td>
<td>knowledge about techniques and procedures: a sense of how the lesson should unfold</td>
</tr>
<tr>
<td>5. Building rapport</td>
<td>knowledge about how to achieve appropriate classroom relationships</td>
</tr>
<tr>
<td>6. Monitoring student progress</td>
<td>knowledge about evaluating student task involvement and progress during the lesson</td>
</tr>
</tbody>
</table>

(Gatbonton, 1999, 42)

The studies of pedagogical/instructional knowledge illustrate the essential relationship with teachers' classroom practice (Gatbonton, 1999; Mullock, 2006; Akbari & Tajik, 2009). It is found that majority of pedagogical knowledge is shared by teachers (Gatbonton, 1999; Mullock, 2006). This research outcome provides an essential base for studies on the components of teachers' knowledge.

In the field of MFL, Wang (2011) also underlined the significance of teachers' pedagogical knowledge and she argued that there was a big gap in this knowledge domain. Teachers in that study were found hard to make the subject matter teachable through appropriate pedagogical knowledge. It was also noted that the knowledge of subject matter and pedagogical knowledge was especially necessary to transform a
native speaker into a good language teacher.

Another term need to be mentioned within the aspect of knowledge of instruction is its subcategory as “knowledge of classroom management” (Van Tartwijk, den Brok, Veldman & Wubbels, 2009; Gholamia & Husu, 2010). Teachers' knowledge of classroom management is recognized as an essential element for appropriate and effective pedagogical practice. Van Tartwijk, den Brok, Veldman and Wubbels (2009) focused on teachers' practical knowledge underlying successful classroom management in secondary schools. This includes three main competences concerning classroom management: 1) monitoring and managing student' behavior; 2) creating and maintaining positive relationships; 3) teaching for student attention and engagement. However, comparing enhancing students' engagement and attention and teacher-student relationship, teachers reflected more frequently on setting and reinforcing rules among students. Teachers are also found regarding themselves as the authority in the classroom as well as showing respect to students, which impacts their classroom practice greatly.

2.1.2.3 Knowledge of student

Having a good knowledge of students is regarded as indispensable in the interactive classroom teaching and considered as the vital element for a good teacher (Mayer & Marland, 1997; Mullock, 2003; Leung & Lewkowicz, 2006; Harmer, 2007; Woodgate-Jones & Grenfell, 2012). Teachers' knowledge of students is regarded as essential components of knowledge base (Mullock, 2006; Chou, 2008; Friedrichsen et.al, 2009). It includes the knowledge of “prior understandings that students of given ages and backgrounds bring with them to the study of particular topics”; “developmental differences among students”; “cultural and social characteristics”; and students’ “motivations, aspirations, learning modes, cultural and linguistic backgrounds” (Shulman & Sykes, 1986, cited in Tamir, 1988, 106).

Teachers' knowledge of students are frequently explored as a component of a wider knowledge concept such as practical knowledge (Mayer & Marland, 1997; Meijer, Verloop & Beijaard, 1999; Golombek,1998; Chou, 2008; Gholami & Husu, 2010);
PCK (Watson, Callingham & Donne, 2008; Park & Oliver, 2008; Kılıç, 2010) or pedagogical knowledge (Gatbonton, 1999; Mullock, 2006). Although the studies on this part of teachers' knowledge is not as many as knowledge of subject matter or knowledge of instruction, its significance can never be ignored. Quite a few studies claim that this knowledge element is found one of the most frequently mentioned knowledge components for teachers' classroom practice (Gatbonton, 1999; Mullock, 2006; Gholami & Husu, 2010). Mullock (2006) found that knowledge of students is the first or second most frequent reasoned knowledge item for all the teachers under study. Similarly, teacher participants in Chou's (2008) study were found all holding the principle that as the English and a Foreign Language (EFL) teacher, they should scaffold student learning English as a foreign language by having a good knowledge of students and their learning. Gholami and Husu (2010) also noted that knowing characteristics of learners is one of the major elements for teachers' application of practical knowledge. Researchers address that knowing students enables the teachers to engage all students into the classroom learning by adapting the teaching approach to students' capacities, interests, needs, background, and all other factors (Mullock, 2006; Leung, & Lewkowicz, 2006; Gholami & Husu, 2010).

Many empirical studies relating to knowledge of students also illustrate the importance to integrate itself with other knowledge components, especially the knowledge of subject matter (Meijer, Verloop & Beijaard, 1999; Mullock, 2006; Park & Olive, 2008; Watson, Callingham & Donne, 2008; Kılıç, 2010; Jenkins, 2010). In Meijer, Verloop and Beijaard's (1999) study, the knowledge of students were specified to make connection with subject matter of reading. It is divided into “student knowledge" and "knowledge of student learning and understanding” (64). Student knowledge refers to the general knowledge of students aging 16-18 while knowledge of student learning and understanding is described concerning reading comprehension. Kılıç (2010) explored the teachers' knowledge of students with main concern on teachers' knowledge of students' misconceptions and difficulties and how to scaffold students to solve these problems. Students' understanding and conceptions on learning content of mathematics, especially those underlying students' errors were highly addressed, which was found as the most common weakness among beginning mathematics teachers. In this case, teachers' knowledge of students is combined intensely with the knowledge of subject matter and knowledge of instruction. Similar emphasis is also...
given in other studies with different subject matters (Watson, Callingham & Donne, 2008; Mullock, 2006). In the field of foreign language teaching, students' prior linguistic knowledge is found of great importance for their L2 learning (Cook, 2010). Concerning the native Mandarin teachers in English-speaking context, Wang (2009) also addressed the differences for these teachers to develop their knowledge of students with different backgrounds. Since English is a second language for most native Mandarin teachers abroad, it is not easy to build an intimate relationship with students without free communication and understanding of their discourse.

### 2.1.2.4 Knowledge of context

Another components shared by researchers in the study of practical knowledge is knowledge of context (Arıxoğlu, 2007). It is described as “the institutional and sociopolitical setting along with the time, place, and actors within the setting” (Golombek, 1998, 452). While Shulman (1987) named it as “knowledge of educational contexts” to specify the field of education, which was illustrated as “ranging from the workings of the group or classroom, the governance and financing of school districts, to the character of communities and cultures” (8). Grossman (1990) also included students as one element in the context, which included knowledge of students into it (Park & Olive, 2008). This also demonstrates the intertwined relationship among different knowledge categories.

It has been agreed that teachers' knowledge of context influences teachers' pedagogical practice considerably (Sharkey, 2004; Hashweh, 2005; Mullock, 2006; Shin, 2008; Wang, 2011; Gholami & Husu, 2010). Teachers' choices of teaching content, instructional strategies and even the understanding of students can be distinguished in distinct contexts relating to groups of students, culture of classroom, schools and the holistic national, even world background. For example, Wang (2011) addressed her study of MFL teachers in the context of British schools. The great intension between the increasing interest in MFL in Britain and the lack of qualified teachers is attached to great attention to understand the teacher participants' narrative of their ideas on teaching and teachers themselves. Gholami and Husu’s (2010) conclusion is that teachers’ claims of their practice as well as the underlying practical knowledge are
contextual. Such contextual grounds are mainly represented in three aspects: difference in pedagogical variables, particularity in teachers' understanding and pedagogical obligations. Here *pedagogical variables* refer to “variables that had an effect on pedagogical decisions and actions” (1523) including contextual elements such as time, class size, nature of specific curricular and learners. She claimed that the reason she would change the setting in the class was to decrease students’ tiredness due to the last period of the day and maintain their freshness. She suggested the great importance of a deep knowledge of context in this case.

Teaching is a context-bound and complicated process. Researchers' recognition of the knowledge of context acknowledges the root of specific context for teachers' teaching practice. However, such awareness of context still needs to be improved among the researchers relating to teachers' knowledge. As a duplicated study based on Gatbonton (1999), Mullock (2006) identified “institutional factor” as an important knowledge base for their practice through teachers' reasoning on their videotaped classroom teaching. But this item is absent from the research outcome in Gatbonton (1999). Mullock (2006) explained this difference from the perspective of methodology that authentic classroom context is situated while in Gatbonton's (1999), the lessons were organized purposefully for the research. The lack of real setting in the research plan is also found in other studies. For example, although Friedrichsen et.al (2009) acknowledged the importance of the knowledge of context as great influence for teachers' practice, they did not apply real classroom context to collect data, but employed lesson preparation for a hypothetical situation and interviews. This context-free method leads to the absence of teachers' knowledge of context in the research results.

Due to the influence of knowledge of contexts, its conflict with other knowledge domain is also mentioned in previous researchers (Glombek, 1998; Wang, 2009; Wang, 2011). In Wang's (2011) study, although being aware of the significance of communicative language teaching (CLT) approach for the realization of communicative competence in the worldwide context of globalism and multilingualism, MFL teachers still found it was hard to apply this method due to the limitation in the curriculum material, particular characteristics of Chinese character learning and teaching, background of students and other factors. Hence, appropriate
adaptation of teachers' knowledge base to the teaching context is of great significance. Likewise, Wang (2009) points out the great differences between Chinese educational environment and the one in western countries generates a gap in teachers' knowledge of pedagogy and classroom management for native Mandarin teachers in UK. The teacher-centered style of teaching and classroom management which is common in China is not suitable for western students. Gholami & Husu (2010) also identify this intension between teachers' practice and the teaching context. They claim that practical knowledge is able to build an effective balance between the pedagogical principles and various contexts by dealing with both practice and theory. Researchers also suggest teachers to reflect on their practice by reasoning those actions to promote their teaching and future studies on practical knowledge in different teaching context need to be done. This is echoed with Woods and Çakır's (2011) research result that the conflict between the theoretical knowledge and the practical teaching leads teachers to a reconstruction and development of their knowledge when they are in real practical teaching settings.

2.1.3 Sources for knowledge

Besides the exploration of the components for teachers' knowledge, another main topic discussed is about the sources for the knowledge development.

Shulman (1987) suggested that there were four main sources for teachers’ knowledge base. The first source is scholarship in content disciplines that is teachers’ own understanding, attitude and professional education in subject matter knowledge. The second is educational materials and structures. Shulman (1987) contended that educational contexts as well as curriculum, institutions, school systems and rules, government policies and finance provided important sources for teachers’ knowledge base. The third source is formal educational scholarship which includes all the literature that enhances teachers' knowledge and understanding on school, students and teachers themselves. The fourth source is the wisdom of practice. Such wisdom forms rules and conception of teaching and will be represented in the practice.

In the field of practical knowledge, teachers' experiences, especially practical
teaching experience are considered the basic root for teachers' development of their practical knowledge (Meijier, Verloop & Beijaard, 1999; Van Driel, Beijaard and Verloop; 2001; Arıoğul, 2007). In Elbaz (1983)'s study, practical knowledge “encompasses firsthand experience of students’ learning styles, interests, needs, strengths and difficulties, and a repertoire of instructional techniques and classroom management skills” (Elbaz, 1983, cited in Arıoğul, 2007, 170). Fenstermacher (1994) highlighted the role of experience and defined this concept as “the knowledge teachers themselves generate a result of their experiences as teachers and their reflections on these experiences” (cited in Meijeijier, Verloop & Beijaard, 1999). Van Driel, Beijaard and Verloop (2001) also clarified practical knowledge as an integrated construction which was developed from teachers' experience.

As for empirical studies, teachers' prior experience seems to be given more attention as a source for their knowledge development (Borg, 2003; Arıoğul, 2007; Reeves, 2009). Arıoğul (2007) explored three experienced English as a Foreign Language (EFL) teachers’ practical knowledge in Turkey and concluded that there were three key sources of knowledge, namely “language teachers’ prior experiences as language learners, their prior experiences as language teachers, and their professional coursework” (171). These three sources emphasize the significance of language teachers' experience both as a learner and a teacher in their development of practical knowledge. Similarly, Arıoğul (2007) found that the practical knowledge of all the three teachers under study was developed from their early English learning. Especially those negative experiences guide them to make changes in their teaching. One participant felt limitation of speaking practice during her own learning, thus she encouraged her students to practice oral English greatly. The other teacher preferred not to correct students’ mistakes instantly and directly because she found it would discourage herself when she was a learner. These experience as a language learner provides them better understanding of their students and effective teaching practices. This is also agreed by Woods and Çakır (2011) that beginning teachers' knowledge in language teaching was influenced greatly by their prior personal experiences.
2.2 Beginning teachers

Beginning or novice teachers are “those who are still undergoing training, who have just completed their training, or who have just commenced teaching and still have very little (e.g. less than two years) experience behind them” (Gatbonton, 2008, 162). The experience of beginning teachers is often described as survival, stressful or struggling due to the obstacles and challenges they are facing (Watzke, 2007; Le & Paré, 2010). As for the classroom practice, they are found challenging especially in terms of classroom management, individual needs of students and making appropriate decisions on content and pedagogy (White & Moss, 2003; Jones & Eick, 2007; Langdon, 2011). For example, in Crosswell, Beutel & Henderson's (2011) study, it was found that the graduates under study were eager for practical strategies especially for student behavior management.

Beginning teachers' knowledge base is often thought as unstable and incomplete (Gatbonton, 2008). However, despite various insufficiencies, it is surprisingly found that similar knowledge base is shared by beginning teachers and their experienced counterparts (Mullock, 2006; Gatbonton, 2008; Akbari & Tajik, 2010). For example, Akbari and Tajik (2010) investigated pedagogical knowledge base of EFL teachers with different teaching experience in Iran. Their research outcomes illustrate that pedagogical knowledge items including language management, self-refection, knowledge of students, procedure check, note behavior, progress review, and affective are the six most common types for both experienced and less experienced teachers. Based on this positive finding, researchers argue that experience does not play an essential role in teachers’ practice. Although the degree of similarity may vary among different studies, such commonness suggests that beginning teachers have already held certain teachers’ knowledge base at the preliminary stage (Mullock, 2006; Gatbonton, 2008; Akbari & Tajik, 2010).

However, the difference is also undeniable between these two groups. Gatbonton (2008) concluded that beginning teachers tended to be more passive in their practice. More active practical items such as providing talk, improving quality of student output, anticipating students to use language, describing task types used, monitoring
*classroom tasks, organizing group and pair work* are all missing from beginning teachers’ units of thought. This may be because these active practices can only be learned through the interaction with the field, which highlights the impact of length of experience in this profession. Mullock (2006) identified that novice teachers are more likely to self-criticize and to mention their personalities than experienced teachers. As for Akbari and Tajik's (2010) study, compared with experienced teachers, beginning teachers demonstrate a higher degree of thoughts on *language management, progress review, content, and materials comment* but lower percentage on items of *decision, past experience, affective and self-reflection*. Less experienced teachers’ dependence on *progress review, problem check and level check* is understood as an awareness of students’ learning. However, in all above three studies, the teacher participants are EFL teachers teaching teenagers or adults rather than teaching Mandarin for primary students.

To facilitate the knowledge construction and development for beginning teachers, they have done abundant studies on their professional development. Mentoring is agreed as a significant approach for beginning teachers' learning (Van Velzen, Volman & Brekelmans, 2011). Besides, teaching education program is also found functioned as the guidance to provide references for beginning teachers in their practice, especially in their initial weeks (Leshem, 2008).

The development of beginning teachers is typically characterized as progressing through identifiable stages (Watzke, 2007; Langdon, 2011). For novice teachers with one-year experience, their concerns are mainly self-related, including their identity as teachers, survival and classroom management. The more years of experience teachers have, they are more likely to focus on students’ learning (Watzke, 2007; Langdon, 2011). Watzke (2007) studied the development of beginning foreign language teachers’ PCK and concluded four main changes. Firstly, they tend to apply prior knowledge of their own teaching experience rather than their own learning experience. This suggests the value of learning through the practice which is also supported by other researchers (Leshem, 2008). Secondly, they tend to not regard control of students as part of teaching. The losing control of students indicates the pedagogical shift from teacher-centeredness to student-centeredness. This change is also identified by Jones & Eick (2007). But in their case, one teacher turned to be
more student-centered while the other became more teacher-centered. Thirdly, they tend to assist students in enhancing their language performance and communication in real life rather than ask them to memorize language knowledge. Last but not least, they try to win students’ affection through a specific language focus rather than academic purpose.

Although previous studies have covered the practical challenges, knowledge insufficiency and knowledge development for beginning teachers, there are rare studies on the practical knowledge by beginning MFL teachers.

2.3 Student engagement

Engagement is recognized as an indispensable element in educational research and a series of studies have been done into ways of enhancing students’ learning engagement or eliminating their disengagement from learning (Appleton, Christenson & Furlong, 2008; Reeve et.al, 2004). It has also been attached to international interest and has been cited in the government reports and policies concerning education in the countries like Australia (e.g. Fair Go Project by Department of Education and Training, 2006) (Harris, 2010).

For students, it impacts on the quality of their academic learning and development. Skinner, Kindermann and Furrer (2009) considered it as evidence of students’ success in learning. For schools, it plays an important role in the promotion of students' completion and continuance. Furthermore, teachers regard it as a noticeable sign of students gaining a better understanding of what they are learning (Reeve et al., 2004; Skinner et al., 2009). However, the debate in this area focuses terms such as student engagement, academic engagement or school engagement (Appleton, Christenson & Furlong, 2008).

2.2.1 Definition of student engagement

Engagement has no common definition in the literature. Some researchers define it in general ways. Axelson and Flick (2010) described student engagement as “students’
level of involvement in a learning process” (41). Skinner, Kindermann and Furrer (2009) described it as “the quality of a student’s connection or involvement with the endeavor of schooling and hence with the people, activities, goals, values, and place that compose it” (494). More specifically, Reeve et al. (2004) defined it as “the behavioral intensity and emotional quality of a person’s active involvement during a task” (147). They involve behavior and emotion as key elements of engagement. Similarly, Marks (2000) regarded engagement “as a psychological process” and describes it as the “affective and behavioral participation in the learning experience” (154-155). Furthermore, Munns and Woodward (2006) added cognitive aspect into the conceptualization of engagement and describe it that “student engagement is when students are simultaneously: reflectively involved in deep understanding and expertise (high cognition); genuinely valuing what they are doing (high emotion) and actively participating in school and classroom activities (high behavior)” (194). This study will adopt Munns and Woodward's (2006) definition due to their integrated and comprehensive understanding of student engagement.

2.2.2 Conceptualization of student engagement

In this study engagement is conceptualized as a three-dimension construction including behavioral engagement, emotional engagement and cognitive engagement (Munns & Woodward, 2006; Axelson & Flick, 2010; Appleton, Christenson & Furlong, 2008; Zyngier, 2008). However, some research also includes intellectual/academic engagement (Appleton, Christenson & Furlong, 2008). Behavioral engagement is always regarded as the representation of emotional and cognitive engagement (Axelson & Flick, 2010). It focuses on participation and involvement in learning activities (Appleton, Christenson & Furlong, 2008). Finn (1989) divided students’ participation in school into four levels: responding to requirements, class-related initiative, extracurricular activities and decision making (130). These four aspects involve the participation both passively and actively. Later studies concerned different aspects. For example, Fredricks, Blumenfeld and Paris (2004) referred it to “participation in academic, social and extracurricular activities” in a more general way (60). While Chapman (2003) put more attention to active
involvement and described it as reflection of “the extent to which students were making active responses to the learning tasks presented (e.g., active student responding to an instructional antecedent, such as asking relevant of a positive volition to learn and often a social aspect of learning) (cited in Mitchell & Carbone, 2011, 259).

Emotional engagement addresses students’ affective response. Fredricks et.al (2004) referred it to “positive and negative reactions to teachers, classmates, academics, and school” (60). Similarly, Chapman (2003) claimed that it “reflects the level of students’ investment in, and their emotional reactions to the learning tasks (e.g., high levels of interest or positive attitudes to the learning tasks) (cited in Mitchell & Carbone, 2011, 259).

Cognitive engagement concerns “self-regulation, learning goals or investment in learning” (Appleton, Christenson & Furlong, 2008, 370). Chapman (2003) used it to examine “the extent to which students are attending to and expending mental efforts in the learning tasks encountered” (cited in Mitchell & Carbone, 2011, 259). Detailed examples as indicators of cognitive engagement are also provided including connecting new knowledge with prior knowledge, applying cognitive strategies to facilitate their understanding or presented high-order thinking (Mitchell & Carbone, 2011; Rotgans & Schmidt, 2011).

Appleton, Christenson and Furlong (2008) concluded in their literature review that all these definitions of engagement had a component of behavioral engagement; the emotional dimension could be found in most studies, while academic or cognitive aspects were not mentioned by many researchers. It is also claimed that behavioral engagement is always regarded as the representation of emotional and cognitive engagement (Axelson & Flick, 2010).

Disengagement

Some research also includes disengagement in the conceptualization of engagement (Fredricks, Blumenfeld & Paris, 2004; Skinner, Kindermann & Furrer, 2009). Disengagement is the contrary concept of engagement which refers to “the absence
of engagement” (Skinner, Kindermann & Furrer, 2009). It includes behavioral disengagement and emotional disengagement. Skinner, Kindermann and Furrer (2009) reconceptualized disengagement in terms of disaffection. The components of disaffection are similar to those of disengagement, and include behaviors and emotions as well. In their study, disaffected behaviors refer to “passivity, lack of initiation, lack of effort, and giving up” and “lack of attention” (496). Emotional disaffection is divided into “enervated emotion (tired, sad, bored), alienated emotion (frustration, anger), and pressured participation (anxiety)” (Skinner, Kindermann & Furrer, 2009, 496).

Disengagement is included in this study as part of student engagement to investigate the influence of lack of teachers’ knowledge on students’ learning.

2.2.3 Engagement and motivation

Studies of learning engagement tend to overlap with studies of student motivation (Fredricks, Blumenfeld, & Paris, 2004). Motivation is another key concept in educational research and the debate over whether it differs from engagement remains (Appleton, Christenson & Furlong, 2008).

Through reviewing previous studies, Appleton, Christenson and Furlong (2008) explain that motivation addresses the embedded personal psychological reasons for certain behaviors, including “autonomy, relatedness/belonging and competence” while engagement considers the person-context relationship and is used to analyze evidence of a person engage in certain tasks or activities (Appleton, Christenson & Furlong, 2008, 379). Reeve et al. (2004) also claimed that “it (engagement) is a broad construct that reflects a person’s enthusiastic participation in a task and subsumes many interrelated expressions of motivation…” (147). Thus, in these cases, motivation can be understood as a necessary element in the study of student engagement with hierarchic relationship.

While in other studies, motivation and engagement are regarded as similar (Fredricks, Blumenfeld & Paris, 2004; Skinner, Kindermann & Furrer, 2009), in Fredricks, Blumenfeld & Paris's (2004) study on engagement, they reviewed relevant literature
on motivation and considered it as part of engagement. Skinner, Kindermann and Furrer (2009) also regarded these two concepts with no distinct difference. They studied engagement from the perspective of motivation and argued that engagement and disaffection were observable demonstrations of motivation.

In this study, motivation is considered as the psychological bases for engagement rather than an equivalent.

2.2.4 Impact of teachers on students learning engagement

What may trigger student engagement has been debated for a long time (Axelson & Flick, 2010). The suspected causes could vary from individual to holistic context including different dimensions such as family, classroom, school and the national educational context (Fredricks, Blumenfeld, & Paris, 2004; Skinner, Kindermann & Furrer, 2009; Axelson & Flick, 2010).

The elements at the individual level primarily concern belonging/relatedness with teachers, parents or peers, autonomy of learning or participating into learning activities, beliefs about control, strategy and capacity (Fredricks, Blumenfeld, & Paris, 2004; Skinner, Kindermann & Furrer, 2009; Taylor & Parson, 2011). Students' attitudes and personalities may hinder teachers from engaging students. Some student may express “negative” or “no interest" towards target language learning while some were too shy or anxiety to engage themselves in learning activities (Harmer, 2007; Sakui & Cowie, 2012).

In the classroom context, teachers' effective classroom practice as well as underlying knowledge is acknowledged as the main element for student engagement (Reeve et al., 2004; Klem & Connell, 2004; Zyngier, 2007; Bryson & Hand, 2007; Wang, 2009; Pianta & Hamre, 2009; Piasta et.al, 2009; Mitchell & Carbone 2011; Charalambous & Hill, 2012). Hattie (2003) argued that the impact of teachers was powerful on students’ learning. Guilloteaux and Dörnyei (2008) examined the influence of teachers’ motivational practice on students’ behaviors in EFL classes in South Korea. They also proved students’ learning motivation and engagement during classes were
significantly and directly impacted by teachers' practice.

Among classroom contextual factors suggested by various researchers, two main aspects are especially addressed: one relates to classroom interaction and the other concerning learning tasks (Fredricks, Blumenfeld, & Paris, 2004; Skinner, Kindermann & Furrer, 2009; Harris, 2010; Taylor & Parson, 2011). The Interaction here refers to respectful and interdependent relationships and interactions between students and teachers or among students during classroom teaching and learning (Taylor & Parsons, 2011). These interactions can be either emotional or instructional support (Pianta & Hamre, 2009). The student-teacher interaction has been considered as a vital element for student engagement (Munns, 2007; Bryson & Hand, 2007; Downer, Rimm-Kaufman & Pianta, 2007; Harris, 2010). Munns (2007) crystallized five dimensions for student classroom engaging messages: knowledge, ability, control, place and voice from the perspective of discourse of power. It is found that students more tend to be engaged when their own opinions are respected when they are valued as individuals and learners. As independent knowledge holder, students have strong willing to be respected equally and understood by their teacher through interaction and sharing (Munns, 2007). Therefore, teachers need to have a detailed knowledge of how students learn, what they understand and what they do not in order to provide students a more supportive and interactive learning environment (Mullock, 2006; Chou, 2008; Friedrichsen et.al, 2009; Frisby & Martin, 2010). In Sakui and Cowie's (2012) study, participant teachers admit that when teachers are unable to understand students or make correct expectation for students' reaction, they would fail to support students' learning and in further, to diminish students' motivation and engagement. Besides the student-teacher interaction, peer interaction is also considered as an influence on student engagement during classroom learning (Fredricks, Blumenfeld & Paris, 2004). Philp, Walther and Basturkmen (2010) investigated the peer interaction in foreign language classrooms. They claimed that students were more afraid to make mistakes when facing the whole class or the teacher than when they were in groups or pairs. Their emotional anxiety and uncertainty towards the foreign language are found greatly decreased through peer interaction.

The second main element is task characteristics. Task characteristics suggest
learning engaging tasks be authentic, interesting, challenging but appropriate, able to
adjusted to students with various learning strategies, and allow students to share
personal opinions, and are open to cooperation (Fredricks, Blumenfeld & Paris, 2004;
Yeigh, 2008). It has been found that appropriate teaching content and learning tasks
enhance students learning engagement considerably (Kong & Hoare, 2011). Students
are more willing to gain the knowledge through explorative learning rather than
simply accepting what is prepared by teachers (Taylor & Parsons, 2011). This
argument echoes the research conducted by Chua, Wong and Chen (2009). Chua,
Wong and Chen (2009) illustrated that "task orientation" had the strongest
association with students' motivation in learning Chinese language. Students are
more easily engaged if the learning tasks are authentic and related to their real life
context, especially to students’ experience, culture and interest. Also in the MFL field
in Australia, Ma and Wang (2010) studied improving students learning of Mandarin
as a foreign language through using authentic language material. Their results show
that although there are difference between different groups, application of singing is
a "practical, feasible and enjoyable" approach in the mandarin teaching. In addition
to singing, in the wide context of Internet and globalization, multimedia technology
is also applied as an effective approach to enhance student learning (Borau, Ullrich,
Feng & Shen, 2009; Taylor & Parsons, 2011; Power & Shrestha, 2010). They are
providing access to knowledge, to people, and to the wider world beyond the
classroom, which makes elements of learning interaction, exploration and relevancy
increasingly necessary (Taylor & Parson, 2011).

On the contrary, the failure of providing appropriate learning task, student
engagement will be hindered considerably. In a study on MFL teaching and learning
in a UK secondary school, Wang (2009) examined the reasons for the high dropout
rate in that school through questionnaires. Among 35 responded questionnaires, more
than 20 students gave up learning because of the difficulty of the Mandarin Chinese.
More than 1/3 students dropped out because of the teacher with boring teaching
strategy. Hence, the learning task with appropriate difficulty of the teaching content
and interesting learning activities are essential for high student engagement.

Overall, in the context of classroom, students' learning engagement is an issue related
to teachers' teaching practice. Teachers play a significant role in students’ learning
engagement (Guilloteaux & Dörnyei, 2008; Pianta & Hamre, 2009). Teachers are responsible for designing learning tasks, applying pedagogies, managing students’ behavior and providing assessment. However, how the student engagement is influenced by teachers' knowledge underlying their practice in MFL classroom is still unknown.

2.2.5 Assessment of student engagement

Student engagement has been studied and assessed in terms of individual or integrative aspects of behavioral, cognitive and emotional aspects (Munns, 2006; Appleton, Christenson & Furlong, 2008). Quantitative data are more applied in earlier stages with focuses on achievement dimension, which mainly includes attendance or truancy, academic examination scores and graduation rates (Taylor & Parsons, 2011). However, although students’ learning may be foreseen through student engagement, there is no necessary link between students' engagement and their academic achievement (Fredricks, Blumenfel & Paris, 2004; Axelson & Flick, 2010). Increasingly, student emotional enjoyment and cognitive involvement are more concerned as essential components for student engagement and are evaluated (Reeve et al., 2004; Appleton, Christenson & Furlong, 2008).

Observation is one of the major methods used in engagement studies and student assessment (Appleton, Christenson & Furlong, 2008). Reeve et al. (2004) measured students’ engagement by observing whether students were absent-minded or paid intense attention; whether students acted slowly, passively or quickly, and energetically; whether students kept silent or were willing to participate into discussion or other verbal activities; when students encountered failures or other troubles in learning, whether they tried their best to overcome them or just gave up immediately; whether students’ tone was flat or joyful when speaking. Based on observations with specific targets, they concluded that engaged students tended to be “goal-directed, focused, intense, persistent, and interested” while disengaged students expressed their apathy, rejection or depression (148). Skinner, Kindermann and Furrer (2009) also argued that disengagement/disaffection was observable, and thus regarding observation as an ideal way for engagement assessment. They observed two Year 4 classes of 56 students to evaluate their engagement in a public
primary school in New York (USA). Based on collected data, they developed three categories with sub-categories for coding (see Table 2.2).

Table 2.2 Engagement assessment categories

<table>
<thead>
<tr>
<th>On-task behavior</th>
<th>On-task Active Initiative</th>
<th>e.g. raise hands; volunteer to go to the board</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-task Working</td>
<td>e.g. reading, working on a problem; continuing an activity; answering a question</td>
<td></td>
</tr>
<tr>
<td>On-task passive</td>
<td>e.g. listening to the teacher or a classmate making an on-task contribution</td>
<td></td>
</tr>
<tr>
<td>Off-task behavior</td>
<td>Off-task initiative</td>
<td>e.g. disrupting a classmate or interrupting the teacher with a nonacademic issue</td>
</tr>
<tr>
<td>Off-task working</td>
<td>e.g. building paper airplanes, participating in a classmate’s active off-task behavior</td>
<td></td>
</tr>
<tr>
<td>Off-task passive behavior</td>
<td>e.g. daydreaming or listening to a classmate’s off-task contribution</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>All other events</td>
<td></td>
</tr>
</tbody>
</table>

(Adapted from Skinner, Kindermann & Furrer, 2009, 503)

However, Skinner, Kindermann and Furrer (2009) admitted that behavioral indicators were more observable than emotional indicators while positive indicators were more easily to observe than passive ones. For instance, observation of on-task passive behaviors can be easily confused with off-task passive behaviors. Thus, the validity of observable assessment worries researchers because of these limitation and because effort, emotion or thoughts are unobservable (Fredricks, Blumenfel & Paris, 2004). Students may hide their emotional or behavioral disengagement by acting obediently instead of learning actively (Skinner, Kindermann & Furrer, 2009).

Some studies also used questionnaires (Appleton, Christenson & Furlong, 2008; Skinner, Kindermann & Furrer, 2009). For instance, Appleton, Christenson & Furlong (2008) mentioned two assessment instruments, namely the Student Engagement Instrument and the High School Survey of Student Engagement. Both collected data on students’ experiences and their views on student learning beliefs, goals, belongings and other relating indicators to gain a better understanding on engagement. Skinner, Kindermann & Furrer (2009) designed these self-report
questionnaires for both students and teachers, presuming that would be “excellent reporters of their own engagement and disaffection” although they may not have clear ideas about the reasons (496). However, students may pretend or conceal their true emotion and situation when asked to report on their learning engagement/disengagement.

The questionnaires for the students include behavioral engagement (e.g. I try hard to do well in school; In class, I work as hard as I can; I pay attention in class), emotional engagement (e.g. class is fun; when we work on something in class, I get involved), behavioral disaffection (e.g. When I’m in class, I just act like I’m working; when I’m in class, my mind wanders) and emotional disaffection (e.g. When we work on something in class, I feel bored; When we start something new in class, I feel nervous) (Skinner, Kindermann & Furrer, 2009, 519-520). Most of these items are not that detailed and specific. Some behaviors and emotions like wandering, pretending, paying attention or working as hard as possible may be unconscious and not fully realized by oneself. Some research suggests the application of approaches like “experience sampling techniques” where participants are asked to take notes about their feelings and behaviors at certain points in lessons (Fredricks, Blumenfeld, & Paris, 2004).

For the teachers, the items in questionnaires are also divided into the same four aspects, including “this student appears involved; when this student doesn’t do well, he/she works harder; in class, this student appears happy; when we start something new in class, this student thinks about other things; when faced with a difficult assignment, this student doesn’t even try; …this student looks bored/ seems worried/seems unhappy/seems uninterested” (Skinner, Kindermann & Furrer, 2009, 520-521). Words like happy, bored, unhappy or uninterested are vague descriptions. It would be more objective if these emotions could be identified from the external demonstration through behaviors.

The student participants in this study are all primary students, they have not fully developed with capacity of expression and self-reflection. Hence in order to gain a more objective data, observation is applied in the current study which is described in the next chapter of research methodology. The observation is based on engaging
indicators suggested by previous researchers. The engagement of literature in the data collection can also facilitate the beginning researcher in ensuring the validity and reality.

2.4 Conclusion

This chapter has reviewed both conceptual and empirical works conducted in the fields of teachers' knowledge, beginning teachers and students’ engagement. It aims to better understand what have been already studied and what haven’t been explored related to the impact of teachers’ knowledge on students’ engagement. The current literature indicates that teachers’ knowledge has been evaluated from the perceptions of teachers themselves and their students. However, there is little research exploring teachers’ knowledge relating to students’ actual classroom engagement. Although some studies identify the lack of certain knowledge of teachers, its impact on students’ learning is not involved. There is even less research on beginning Mandarin teachers’ knowledge in western (Australian) primary classes. Therefore, the research questions were refined and generated through the review of literature as “how does beginning Mandarin teachers’ knowledge impact on students’ second language learning engagement/ disengagement in primary schools of Western Sydney Region?” The next chapter addresses the methodology of this study including the research design, data collection, data analysis and the qualitative research principles.
CHAPTER THREE
RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the research methodology applied in this research project. The application of the qualitative case study is explained with the connection of its theoretical basis with this research topic. Then the detailed research design is provided including the participation selection, triangulated data collection and data analysis. Lastly, the research principles which embeds in the whole process of the study is discussed, mainly on teacher-researchers' ethical consideration, research validity and reliability as well as the generality of the study.

3.1 Research orientation

It can be seen from the previous research on teachers’ knowledge, either qualitative, quantitative or mixed methods are applied for different purposes. For this study, it is to gain a deep understanding of how teachers’ knowledge underlying their teaching practice impacts on students’ engagement. It does not target to seek out cause-effect relationships, which requires precise number calculation and comparison (Stake, 2010; Flick, 2009). Thus, qualitative methods rather than quantitative ones are chosen to describe and interpret the application and related influence of teachers’ knowledge (Stake, 2010; Flick, 2009).

Qualitative research is “oriented towards analyzing concrete cases in their temporal and local particularity and starting from people’s expressions and activities in their local contexts” (Flick, 2009, 21). Since this study was to form a more realistic understanding of beginning Mandarin teachers' knowledge as well as their practice, therefore the effectiveness of certain teaching strategies is not measured and compared quantitatively. The qualitative methodology enables the researcher to consider the subjective influence and interactions within the classroom teaching as
essential elements, including teachers and students’ personal affect, understanding, prior experience and school context. To understand and explain educational problems or phenomena such as student learning cannot be conducted in an isolated way (Flick, 2009). Qualitative research assists to lead to a more realistic research outcome instead of simplistic conclusions and less applicability due to their lack of relevance and familiarity with everyday school life (Stake, 2010). To this end, a qualitative study was designed to gain a comprehensive and reliable understanding on the research topic.

3.2 Beginning Mandarin teachers in ROSETE Partnership: A case study

3.2.1 Case study

Oriented from qualitative research, case study was employed as the main methodology for this research project. Case study is described as follows:

A case study is a specific instance that is frequently designed to illustrate a more general principle. It is "the body of an instance in action". It strives to portray “what it is like" to be in a particular situation, to catch the close up reality and " thick description" of participants' lived experiences of, thoughts about and feelings for a situation (Cohen, Manion & Morrison, 2007, 253).

This approach has great value and extensive application in educational research. Baxter and Jack (2008) argued that case study is based on a constructivist paradigm. It recognizes the value of human perspective and allows researchers to have close interactions with participants to gain vivid and detailed information relevant to the research questions (Baxter & Jack, 2008). Thus, case study assists the researcher in gathering in-depth evidence from individual beginning Mandarin teachers about their practical knowledge in Mandarin teaching in Australian primary schools in a cohesive context. These detailed and vivid empirical data illustrates teachers' underlying practical knowledge. Since the previous studies on practical knowledge mainly focus on individual teacher, looking at it within a context which leads the researcher to gain a more general and broader perspective on the research topic.

Case studies are characterized as empirical, intensive and rooted in complex real-life
contexts and closely connect with theories (Lee, Mishna & Brennenstuhl, 2010). This research strategy fits situations especially well when the particular social, cultural, or historical context is associated with the phenomenon under study (Baxter & Jack, 2008). The variables in the context are not limited or could not be controlled by the researcher, but are considered necessary for providing abundant and deeper description, explanation or interpretation of a study's subject. Thus, case studies are suitable for exploring how teachers' knowledge works in the students' learning process and how such knowledge exerts influence on students' learning outcomes in addition to what this knowledge is (Lee, Mishna, F & Brennenstuhl, 2010). Further, the particular Australian primary school context is also able to be considered through case study.

3.2.1 An exploratory single case

This research is an exploratory single of beginning Mandarin teachers in the context of ROSETE (Research-Oriented School-Engaged Teacher Education) Partnership. Exploratory case studies “explore those situations in which the intervention being evaluated has no clear, single set of outcomes” (Baxter & Jack, 2008, 548). In this study, teachers' knowledge is regarded as the intervention in their practice and its impact on their practice, and more importantly on students’ learning is evaluated.

Beginning Mandarin teachers in ROSETE Partnership is studied as a single case with sub-units in this research project. Case is described as “a phenomenon of some sort occurring in a bounded context” (Merriam, 2009, 25). Besides, with regard to the number of cases, case studies can also be classified as a single case study, or a single case with sub-units study, and a multiple/collective case study. A single case with sub-units looks at a holistic single case like the single case study; however, in this wider case data can be grouped and analyzed within, between or across a set of subsidiary units to give a better understanding of the wider case. The subsidiary units share same context as the wider phenomenon. Thus, refocusing on the general case follows the study of separating units individually. However, in multiple/collective case studies, the cases studied have different contexts and the researcher will often make comparisons between different cases to discover similarities or distinction (Baxter & Jack, 2008).
For this study, ROSETE partnership is embedded as the wider context of this study, due to its contextual uniqueness as well as the similarities shared by the teachers involved in this program. The Partnership has been produced through the successful cooperation among the Western Sydney Region (WSR) of the New South Wales Department of Education and Communities (NSW DEC), the University of Western Sydney (UWS) Centre for Educational Research and the Ningbo Municipal Education Bureau People’s Republic of China. Up to 10 Chinese university graduates have been selected every year since 2008 to take part in the program to stimulate Mandarin teaching and learning in WSR for 18 months. During the conduction of this research project in the year of 2012, there were 13 members including one from the second generation recruited in 2009, two from the third generation recruited in 2010, three from fourth generation recruited in 2011 and 7 from the newest fifth generation recruited in the early of 2012. All these participants shared a list of common characteristics including the qualifications and the responsibilities required under this specific circumstance of program, which made it as the single case.

Firstly, all of the participants in this program met the required qualifications through the recruitment. Among seven basic requirements demanded, four of them focusing on candidates' education background as well as relating teaching and language skills during the recruitment of the participants are as follows:

1) 具有本科及以上学历，获对外汉语专业本科及以上学历者可优先考虑；
   Bachelor degree and above; Major of teaching Mandarin as a foreign language is preferred.
2) 普通话标准，持有普通话二级甲等及以上证书；
   Standard Mandarin speaker with Mandarin Proficiency Test certificates (2nd grade, A level and above)
3) 持有教师资格证（应届毕业除外）；
   Teaching certificate is required (except new college graduates)
4) 具有较高的英语水平，能熟练使用英语开展工作；雅思成绩总分 6.5 以上，
   各单科不低于 6.0，或托福成绩总分 89 以上。
   High English proficiency with skillful capacity to work in English; with IELTS (the
International English Language Testing System) score over 6.5 in average and each subject 6.0 or above; or TOEFL score over 89 in total.

Apart from the above requirements indicating the shared similarities among ROSETE participants, another similarity is worth noting that they are bilingual speakers of Mandarin and English. However, there are some distinctions among them. With respect of age and experience, most of participants are newly graduates under the age of 35 with no or little teaching experience and some of them have gained teaching experience as English tutors, teachers in part-time jobs or teaching-related major seniors. But these experiences are very limited and no more than two years based on which they are labeled as beginning teachers. None of them had taught Mandarin as a second language to Australian students before their participation in this program and not all of them have prior professional learning experience as a teacher. Another difference among participants is that their majors varying widely from English, Teaching (Chinese), Teaching (Society), Teaching Chinese as a foreign language to engineering.

Secondly, as ROSETE participants, there are a set of responsibilities as volunteer Mandarin teachers in local schools. They are allocated to teach Mandarin as a foreign language weekly in primary or high schools in WSR as volunteer teachers. Teaching methodology training is provided by NSW DET and UWS (for the fifth group) with professional learning for volunteer teachers. The training includes introduction of Australian educational context, Chinese-related policies, Chinese culture, students' learning style, quality teaching, and teaching approach (e.g. communication language teaching), teaching strategies and activities, Interactive White Board (IWB) technology as well as interaction of field including school visit, observation and microteaching. It provides the volunteer Mandarin teachers an access to adapting themselves into Australian educational context and becoming a Mandarin teacher more easily with local-oriented teaching knowledge. After this intensive teaching training, they started their teaching of Mandarin in Western Sydney Schools. The student population in these schools is very multi-cultural but all of them speak English in the classroom. The population of students as Mandarin or Cantonese speakers was very limited.
Thirdly, paralleled with their teaching practice, they are all student researchers in the Centre for Educational Research in UWS. Three participants from the second and the third generation is pursuing a PHD degree while others are Master (Honors) students. Their research focused on their practical teaching experience as a volunteer Mandarin teacher. In this way, ROSETE partnership is not a volunteer program only. This is a program that produces bilingual teacher-as-researchers with dual role of volunteer Mandarin teachers and the student researchers. Different from traditional research supervision tutor, weekly workshops are conducted to discuss issues arisen in teaching and research between all the volunteer Mandarin teachers and supervisors. These volunteer Mandarin teachers have built a tight and close relationship with each other. Since the researcher of this study belonged to this program as well, case study fit the conduction of this research. It facilitates the teacher-researcher to take a further step into her colleges' teaching with the existing rapport during the data collection as well as the interpretation of the collected data.

During these weekly workshops as well as research seminars held by UWS and with cooperation with other universities addressed on research methods and literacy. Critical thinking and knowledge exchange is high encouraged, which significantly enhances ROSETE students' knowledge as a researcher. All the participants in ROSETE program share this dual role as a teacher-researcher. That is to say they actively engage their academic knowledge into classroom practice through individual research study to investigate certain educational area purposefully. It is believed by Barry and King (1999, 660) that “the combination of a teacher with a researcher is probably the best arrangement, blending the classroom expertise and research expertise toward the betterment of classroom practice”. Such efforts of “betterment” with conscious knowledge involvement provide an easier access for the researcher in this study to explicit teachers’ knowledge components as well as their impact on students' learning. What’s more, the selection of case study with ROSETE program not only enables the researcher to collect data on individual knowledge base within a similar context to provide a more comprehensive investigation on research topic, but more importantly, to engage the researcher herself as well as other participants who are teacher-researchers in their own studies to make critical and more deep reflection and narrative on beginning Mandarin teachers' practice, students' learning as well as underlying thoughts.
In conclusion, all participants in the ROSETE Partnership share a set of common characteristics:

1) They are all native Mandarin speakers speaking standard Mandarin; at the same time they are bilingual speakers with recognized EFL (English as a foreign language) capacity;

2) Except one teacher, all of them are beginning teachers with less than three years of teaching experience;

3) They are all teaching Mandarin as a foreign language in Australian local schools weekly as volunteer teachers; None of them had experience in teaching Mandarin as a second language to Australian students before their participation in this partnership and they had received similar second language teacher training;

4) They are all research students in Educational research center in UWS and have received similar academic instruction on educational research.

Due to the above consideration, the case of the beginning Mandarin teachers in the ROSETE Partnership is regarded as a single case. But the situations vary from primary schools to high schools. In primary schools, all volunteer teachers teach independently with presence of classroom teachers in the classroom while some high schools have recruited qualified Mandarin teachers and volunteer teachers are acting a role of assistant. Therefore, this research project mainly focuses on Australian primary schools because these teachers have more independent practical opportunity.

With the methodology of case study, this research project was designed with abundant data collected from triangulated methods through observation, interviews and self-reflection journals to gain a realistic and general understanding of the impact of beginning Mandarin teachers' knowledge in Australian primary schools.

3.3 Research design

The research design outlines researchers’ arrangement of the process. The structure concerns on three steps as participant recruitment, data collection and data analysis.
3.3.1 Participant recruitment

This research project was designed as a qualitative case study. Volunteer Mandarin teachers within the context of ROSETE Partnership were regarded as an integrated single case due to the uniqueness of this context. To have a comprehensive understanding of these beginning mandarin teachers' teaching experience at different stages, three groups of teachers were recruited. They are two-year experience beginning Mandarin teachers, one-year experienced beginning Mandarin teachers and newly arrived beginning Mandarin teachers with less than half a year teaching in Australia. To enhance the generality and integration of the study, different groups were involved as three sub-units in this case.

A total of seven volunteer Mandarin teachers including the researcher herself from the ROSETE Partnership were invited to participate in this study from the three groups. They were consented to taking part into this research. Due to the focus on the primary school teaching, all the participants were teaching in primary schools in WSR. They had different education background and had no experience of teaching Mandarin to foreign learners. All research participants used pseudonyms selected by themselves in the study. There were one two-year experience teacher Frank, three one-year experience teachers Kelly, Lavender and the researcher herself, and three newly-arrived teachers Miya, Cameron and Catherine. Due to the dual role of volunteer teacher and the student researcher, the researcher herself is mentioned as teacher-researcher in the following description as well as in the data analysis chapters.

3.3.2 Data collection

The main research question in this project is: How does beginning Mandarin teachers’ knowledge impact on students’ classroom engagement in primary schools of Western Sydney Region? To address this question, strategies were applied to collect data to identify students’ learning engagement, relating teachers’ practice and the underlying teachers’ knowledge. They included observations with field
notes, retrospective interviews after observation and semi-structured interview, as well as the teacher-researcher’s biographical narrative through self-reflection journals. The application of various data collection strategies enhances the triangulation of the research project.

**Triangulation**

Triangulation "is an epistemological claim concerning what more can be known about a phenomenon when the findings from data generated by two or more methods are brought together" (Moran-Ellis, et al., 2006, p. 48) Triangulation can be applied in different aspects (data, theory, and investigator) and has several types including data triangulation, investigator triangulation, theory triangulation and methodological triangulation (Yin, 1994; Flick, 2009; Lee, Mishna & Brennenstuhl, 2010). Such exploration from various aspects enables the researcher to eliminate bias to a large extent as well as to confirm the trustworthiness of the research progress.

One main advantage in case studies is the higher possibility for diverse sources of data (Yin, 1994). The researchers can make efforts to explore the studied case from different angles to achieve the completeness of the study (Flick, 2009). Specifically in this study, data triangulation and methodological triangulation are realized. Data triangulation “refers to the use of different data sources, which should be distinguished from the use of different methods for producing data” (Flick, 2009, 444). It enables the researcher to construct systematically subgroups or locations within the study among different teacher participants (Flick, 2009). According to the research design, data was collected from different angles, including the researcher herself, other Mandarin teacher participants and students. In order to show the respect for participating Mandarin teachers, three subgroups of teachers with different teaching experience were explored to gain a more integrated understanding of beginning Mandarin teachers’ knowledge.

Methodological triangulation is mainly reflected by the various ways of data collection (Flick, 2009). Triangular data from observation, interview and biographical narrative present a clear picture of the beginning Mandarin teachers’ knowledge and its application in their teaching practice. The increasing triangulation
through multiple evidence sources from observation, interview and biographical narrative assists the teacher-researcher in having a comprehensive investigation of the teachers’ knowledge when she had a broader and various interactions with the authentic Mandarin lessons as a foreign language in Australian primary schools. Based on triangulated evidence, the research findings are more convincing and reliable (Yin, 1994). Figure 3.1 shows the triangulation in this study through three main data sources:

![Triangulation of data source](image)

**Figure 3.1: Triangulation of data source**

These triangulated data source are related with each other to gain a comprehensive understanding to answer three contributory research questions step by step to achieve the research outcome (see table 3.1)
Table 3.1 The relationship among research questions, data triangulation and research outcome

<table>
<thead>
<tr>
<th>Contributory Research Questions</th>
<th>Data collection</th>
<th>Research outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How do Australian primary school students engage/disengage in Mandarin classes?</td>
<td>Observation; Interview; Biographical narrative</td>
<td>Student engagement</td>
</tr>
<tr>
<td>2. What practice/s do beginning Mandarin teachers conduct in class may cause the students' engagement or disengagement?</td>
<td>Observation; Interview; Biographical narrative</td>
<td>Corresponding teachers' teaching practice</td>
</tr>
<tr>
<td>3. What knowledge do beginning Mandarin teachers have or lack that will reflect in teaching practices?</td>
<td>Interview; Biographical narrative</td>
<td>Teachers' underlying knowledge</td>
</tr>
</tbody>
</table>

Observation

In order to understand the impact of teachers' knowledge on students through teaching practice, students engaging or disengaging responses and the relating practice were gained and identified through observation. Observation was applied as the major method to gain and discover the actual facts in Mandarin classroom. Observation is an important source of knowledge about the real world as well as an effective and widely-used method in educational research (Lynda, 2006). It is defined as involving "the systematic recording of observable phenomena or behavior in a natural setting" (Gorman & Clayton, cited in Lynda, 2006).

Qualitative observation was applied as a vital source of data in this study because of its high suitability for case study and the topic of this research project in particular. Firstly, with design of case study, the nature of observation enabled the researcher to utilize all the senses to see, to hear, and to feel the practice directly in the classroom so that all the information related could be noticed. A more valid and detailed data with a comprehensive interaction with the context was established (Flick, 2009; Pianta & Hamre, 2009; Stake, 2010). This would effectively lead to rich but unique description collected on the studied case.
Secondly, for this research topic particularly, qualitative observation assisted the teacher-researcher to gain systematic record in the natural classroom setting with particular address on interactions between teachers and students as well as the effects (Pianta & Hamre, 2009). Due to the young age of student participants, it was not easy for them to assess and report on their own learning process or evaluate teachers' practice due to memory limitations and relatively low self-expression capacity (Cotton, Stokes & Cotton, 2010). However, they are found open to express their affect and ideas. So observation is more suitable to identify students' observable engaging indicators instead of self-assessment by students themselves. While for teacher participants, it is impossible to memorize and record what is happening in the classroom during the teaching. As a Chinese saying goes “当局者迷，旁观者清” (dāng jū zhě mí , páng guān zhě qīng)" which means the spectators see more clearly than the players themselves. As “当局者 (dāng jū zhě, players)” for teacher participants, it is hard for them to note and memorize students' responses all the time. Even to their own practice, they could not recall every practice in detail since the teaching plan keep changing due to specific situations. For example as Catherine claimed that “...the situation in each class varies. So the learning process could not be exactly the same, and after teaching two classes, I always forgot whether I used this method in this class or that class...” (Catherine, Post-observation interview 2, 22/08/2012). Therefore, the addition of the perspective from a “旁观者 (páng guān zhě, spectator)” enables the teacher-researcher to have a direct look of what is happening “rather than relying on second-hand accounts” (Cohen, Manion & Morrison, 2007, p.396). Besides the memory limitation, it avoids the teacher participants describing their teaching practice with “selectivity” or “post-hoc rationalization” by offering “a rational explanation for the action after the event, rather than a report of what actually guided their actions at the time” (Cotton, Stokes & Cotton, 2010, 464). It assists the teacher-researcher to eliminate the bias or ignorance that may bring in by teacher participants through the narrative of their own teaching practice. Hence observation has its unique advantages over other data collection methods not only because of its appropriateness for case study, more important, it suits this particular
research project significantly.

Except the teacher-researcher herself, all the participants in this research were observed within a selected class for two to three times in a row. Since they had more than one class to teach in a single school, one class was picked by participants themselves concerning their own convenience to be observed. 134 students from 7 classes across K to Stage 3 participated in this research with their parents’ consent. Almost all of the students in selected class are English-speakers. They are all beginning Mandarin learners. The general description of seven participants and selected classes is given in Table 3.2 as follows:

Table 3.2 General description of participants (excluding the teacher-researcher)

<table>
<thead>
<tr>
<th>Teacher participant</th>
<th>Bachelor major</th>
<th>Experience</th>
<th>Observed class</th>
<th>Length of the lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frank</td>
<td>Business-related</td>
<td>About 2 years</td>
<td>Stage 3 (18)</td>
<td>1 hour</td>
</tr>
<tr>
<td>Kelly</td>
<td>Teaching-related</td>
<td>About 1 year</td>
<td>Stage 2 (27)</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Lavender</td>
<td>Engineering-related</td>
<td>About 1 year</td>
<td>Stage 2 (23)</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Miya</td>
<td>Teaching-related</td>
<td>&lt; 4months</td>
<td>K/Stage1 (11)</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Catherine</td>
<td>Teaching-related</td>
<td>&lt; 4months</td>
<td>Stage2 (25)</td>
<td>1 hour</td>
</tr>
<tr>
<td>Cameron</td>
<td>Language related</td>
<td>&lt; 4months</td>
<td>Stage3 (30)</td>
<td>45 minutes</td>
</tr>
</tbody>
</table>

Pre-prepared observation templates were filled in simultaneously during the teacher participants' classroom practice. Research interests in teachers' instructional practice as well as the concurrent responses from students were particularly focused on, in order to investigate the impact of teachers' knowledge on students' learning. During this stage, the engaging or disengaging indicators from previous literature were engaged to identify students' response towards to teachers' practice (see Table 3.3).
Table 3.3 Observable indicators of student learning engagement/disengagement

<table>
<thead>
<tr>
<th>Behavioral engagement/disenagement</th>
<th>Engaging Indicators</th>
<th>Disengaging Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral engagement/disengagement</td>
<td>positive conduct: following the rules; adhering to classroom norms; absence of disruptive behaviors</td>
<td>Disaffected behaviors: passivity, lack of initiation, lack of effort, giving up and lack of attention</td>
</tr>
<tr>
<td>Involvement in learning and academic tasks: effort; persistence; concentration; attention; asking/answering questions; raising hands; volunteering to go to the board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional engagement/disenagement</td>
<td>Positive affective reaction towards to school, teacher and learning task: interest; happiness; value</td>
<td>Enervated emotion: tired, sad, bored</td>
</tr>
<tr>
<td>Alienated emotion: frustration, anger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressured participation: anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive engagement/disenagement</td>
<td>Being strategic or self-regulating: use learning strategies such as rehearsal, summarizing, and elaboration to remember, organize, and understand the material; manage and control their effort on tasks by persisting or by suppressing distractions</td>
<td></td>
</tr>
<tr>
<td>Cognitive investment in learning: a desire to go beyond the requirement; a preference for challenge; flexibility in problem solving, preference for hard work, and positive coping in the face of failure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These data collected from students constitutes the main database for the first research question "How did Australian primary school students engage/disengage in the beginning Mandarin teachers' classes?" They assist the teacher-researcher to capture the most authentic observable reactions of students with main concern on how they behaved, what they said, their facial expression and their learning outcome.

As a student researcher, teacher-researcher practiced herself data gathering before the actual observation. She practiced herself taking note during the observation of classroom teachers, which polished her skill of observation and recording considerately. The researcher tried to record what was observed objectively without
involving personal feeling, assumption, or understanding to enhance the validity and reliability of the study. All the recordings were shown to the teacher participants during the post-observation interviews to ensure the objectivity of the description. The following is part of observation recording (see Table 3.4):

Date: 22/08/2012  Teacher: Catherine  Duration: 1 hour  Student number: 25

<table>
<thead>
<tr>
<th>Teaching practice</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review the words in the last lesson 11:30-11:35</td>
<td>Catherine asked students which animal was the first zodiac animal. Students had a good memory and many of them handed up. But when Catherine asked them how to say rat in Chinese, they didn't remember it at all. She addressed that the u, you can't pronounce it as ju, you should pronounce it as u. She asked students to pay attention to the shape of the mouth and added the gestures for the tones. Students were really engaged, although the whole practice was simple repetition. Students followed her gestures and repeated loudly.</td>
</tr>
</tbody>
</table>

Table 3.4: Example of observation record

In addition, field-notes were also recorded before or after the observation on what happened in the field. In this study, it mainly includes student-teacher interaction out of classroom as well as feedback or comment from classroom teachers and students. It provides another perspective to illustrate the impact of teachers' knowledge.

However, not everything could be observed including teachers' previous experiences, intention, beliefs, understanding or on-spot reflection. However these inner unobservable elements are crucial sources to understand teachers' knowledge and their practice. Therefore, collecting data via interview was also employed.

*Interviews*

Due to the inherent limitations of observation, interviews were also conducted to enhance the validity and reality of this research. Along with observation, interview has major advantage in discovering unobservable data through purposeful conversations between researcher and participants (Crouch & McKenzie, 2006; Ikeda, 2007; Stake, 2010).
Abstract as knowledge is, teachers’ teaching thoughts about their teaching are more accessible to investigate since they are formed by teachers’ knowledge (Akbari & Tajik, 2009). These thoughts are continually involved during teachers’ teaching (Gatbonton, 1999). Therefore, interviews are essential in this study to explicit the knowledge through probing teachers' thoughts prior, during and post the practice. Post-observation interviews and semi-structured interviews were employed in this study. Interviewees are the six teacher participants, whose Mandarin teaching has been observed by the teacher-researcher.

Post-observation interviews were conducted after the observation of teacher participants' classroom practice. Teacher participants were asked to retrospect their teaching thoughts and intention for the certain practice based on teacher-researcher's observation scheme. So "why" questions were mainly involved to guide teacher participants' recall according to individual observed practice instead of pre-decided question lists. To enhance the validity and reliability, the interval between the observation and following interviews was kept to the minimum. Due to various time schedules among participants, interviews were conducted straight away for Lavender, Miya, Catherine and Cameron, 45 minutes for Kelly and an hour for Frank. The amalgamation of observations and interviews on the one hand, compensated for the limitation of observations significantly and “revealed existing knowledge in a way that can be expressed in the form of answers and so become accessible to interpretation” (Flick, 2009, 160); on the other hand, it enabled the researcher to verify her own observation as well as teacher participants' narrative during the interviews, enhancing the validity and reliability considerately. Individual post-observation interviews were transcribed and added to the specific observation schemes, generating a more integrate data base.

A semi-structured interview was also conducted to compensate for observation. Unlike post-observation interviews focusing on specific observed practices, the semi-structured interviews emphasized on the teachers' general understanding, beliefs and their prior knowledge and experience which was of great significance for teachers' knowledge construction. With open-designed structure, semi-structured interviews provides more opportunity for participants to express their own
perspectives or tell personal stories relevant to the questions and the research topic more freely than standardized-structure interview (Barriball & While, 1994; Flick, 2009, Stake, 2010). In addition, semi-structured interviews also have another advantage of allowing for in-depth probing (Barriball & While, 1994). Semi-structured interviews enable the researcher to verify the unclear or incomplete information offered by asking probing questions (Barriball & While, 1994). This information includes personal understanding and experience varied widely and individually. Thus, the further clarification, supplementation and reflection by interviewees help eliminate the bias of the interviewer to assist in achieving higher reliability and validity.

All the six teacher participants were interviewed by the teacher-researcher for 45 minutes to one hour. The whole process of the interviews was recorded and transcribed. Because of the different teaching experience among teacher participants, the questions designed had a little variation with same main focuses: 1) teachers' general understanding and feeling as a beginning Mandarin teacher in Australian primary schools; 2) students' general response and teachers' engaging strategies; 3) teachers' self-assessment of their knowledge base. The questions were listed as below:

1. How do you feel your teaching in Australian primary schools?
2. How do you understand your image as a teacher?
3. How did the students react towards your teaching in your classes? How did you engage students in your lessons?
4. As a Mandarin teacher in Australian primary schools, what do you think is the easiest and hardest thing in your teaching? Why?
5. Can you name some successful lessons you taught? Why do you think they are successful?
6. Can you name some less successful classes you taught? Why do you think they are less successful?
7. What do you most want to learn if there is another training for beginning teachers?
The sequence of questions was changed based on the teacher participants' response to make the process as smooth as possible. Related detailed questions were asked to probe, check and reconfirm interviewees' accounts. Of course no assumption can be made about the exact validity or reliability of the interviewees' presentation, and no researchers are able to remove all bias during an interview as well as the analysis which follows. However since the teacher-researcher in this study spent a lot of time studying and teaching with other teacher participants in daily life, these interaction and communication built a good rapport with interviewees and enabled the teacher-researcher to comprehend their narrative more reliably.

**Biographical narrative: self-reflection journals**

Besides observations and interviews, biographical narrative was also employed in this study to involve the teacher-researcher as an important and independent participant. This approach has been attached to an increasing recognition today, being widely applied to educational studies, especially to teachers’ image, knowledge, identity and teaching contexts (Zhao & Poulson, 2006).

A wide range of media are available for the teacher-researcher to collect data through the method of biographical narrative, including “natural discourse or speech, field observational notes, original interviews and other forms such as journal writings and drawings” (Zhao & Poulson, 2006, 124). In this research, teacher-researcher’s own self-reflection journals were used to collect her own experience and to gain insight into her thoughts and actions to enrich the data set (Stroobants, 2005). Self reflection journals are claimed as being effective in aspects of:

- Developing new insights about teaching, making connections between thought and action, making connections between the classroom situation and broader frameworks, assessing the effectiveness of teaching strategies, and determining how well students are learning (Pine, 2009, 194)

Besides the description of events in the class, teacher-researchers’ personal
introspection and thoughts based on her experience and knowledge was also captured in the journal. Therefore, the biography was not limited to personal stories. Through the collection and presentation of data about rich individual life stories, the integral relationships with outer society may also be uncovered (Stroobants, 2005). That is to say, biographical narrative built a connection between particular concrete classroom practices with the underlying social and cultural surroundings out the classroom as well as the background of teachers themselves (Stroobants, 2005; Zhao & Poulson, 2006). In this way, comprehensive and successive data reflecting upon successful or unsuccessful practices were collected with consideration of potential influential factors involved in the social and cultural context.

In this study, the self-reflection journals were written from the start of teacher-researchers’ experience in Australian primary schools from the fourth term in 2011 until the end of the second term in 2012 when sufficient data has been collected about teacher-researcher’s own experience in Australian primary schools. Although the teacher-researcher was also teaching in a high school, only practice in primary schools was included due to the focus in this study. Except those weeks when there were no Mandarin lessons because of holidays or school activities, Mandarin lessons in 21 weeks were reflected with 85147 words. As a form a biographical narrative, teacher-researchers' reflection journals mainly focused on detailed descriptive narrative of her experience in Australian primary schools including her observation of local teachers and volunteer Mandarin teacher from the last ROSETE generation, her independent teaching as well as her interaction with teachers and students. This narrative was reflected based on research questions concerning students' learning engagement, teachers' practice and the underlying teachers’ knowledge. Several questions were asked to guide the narrative: 1) what did the teacher teach? 2) How did the teacher teach this content step by step? Anything special? 3) Why did the teacher apply this approach? 4) How did students respond to this approach? 5) What was the potential trigger of this response? Two "how" questions guided the teacher-researcher to provide a detailed illustration of the teaching process, teaching strategies and students' reaction. While the third and fifth question encouraged the teacher-researcher herself to probe in further about the underlying knowledge and understanding about teaching content, strategies, students' learning and herself. Especially for teacher-researcher's own lessons, such narrative with reflection
enabled herself to combine the perspective of "旁观者 (páng guān zhě, spectator)" and "当局者 (dāng jú zhě, player)". The role of "当局者 (dāng jú zhě, player)" provides abundant data on teacher-researcher's underlying knowledge with high familiar with how these instructional practice decided, while the role of "旁观者 (páng guān zhě, spectator)" decreases the bias may occur because of subjectivity considerately with relatively comprehensive narrative and critical reflection.

3.3.3 Data analysis

A primary purpose of data analysis is to generate conclusions from the data using a record of evidence (Runeson & Höst, 2009). The unit of analysis for a case study can be bound by time, space, events or context (Baxter & Jack, 2008). So a set of similar samples or subjects are included in one unit of analysis.

In this study, the data collected and generated from participant observations, the semi-structured interviews and biographical self-reflections were analyzed thoroughly and interpreted systematically through thematic analysis. Thematic analysis was “a method for identifying, analyzing and reporting patterns (themes) within data” (Braun & Clarke, 2008, 79). Themes are concepts that represent key features of the collected data as they relate to the research questions and studied context. They enable researcher to synthesize and illustrate the data briefly and systematically. The process of thematic analysis is divided into six steps beginning with familiarization with the data, generating initial codes, generating initial themes, refining the themes, defining and naming themes, and producing a report (see Table 3.5).
Table 3.5 Phases of thematic analysis

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description of the phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Familiarization with data</td>
<td>Transcribing, reading, re-reading and noting</td>
</tr>
<tr>
<td>2. Generating initial codes</td>
<td>Coding features of data systematically and arranging data according to codes in order</td>
</tr>
<tr>
<td>3. Generating initial themes</td>
<td>Integrating codes into themes and arranging data according to themes in order</td>
</tr>
<tr>
<td>4. Refining themes</td>
<td>Checking initial themes by examining both semantic and latent content of collected data</td>
</tr>
<tr>
<td>5. Defining and naming themes</td>
<td>Giving appropriate name and explicit definitions for themes</td>
</tr>
<tr>
<td>6. Producing the report</td>
<td>Selecting and analyzing compelling extracts; connecting the analysis with literature and research question; giving systematic and academic analysis report</td>
</tr>
</tbody>
</table>

(Adapted from Braun & Clarke, 2008, 87)

Firstly, all the data generated were transcribed and noted. Seven folders were prepared for each teacher participant with their individual data. The researcher took weeks to review the data to fresh her memory and to have a comprehensive understanding of the database. Some points which seemed to be useful concerning research questions were highlighted and noted in the margin of pages. After familiarization of the data, initial codes were generated by coding some features in the data through coding. Coding is a process “by which data are broken down, conceptualized, and put back together in new ways” (Flick, 2009, 307). It contains abstraction from the empirical data into concepts. The coding in this study began with open coding which was a fundamental analytic procedure to identify and develop concepts (Flick, 2009). The purpose of open coding is for "developing substantial codes describing, naming or classifying the phenomenon under study or a certain aspect of it" (Flick, 2009, 310). Its procedure was outlined by Strauss and Corbin (1990):

1) asking of questions about the data;
2) Making of comparisons for similarities and differences between each
incident, event and other instances of phenomena;
3) Similar events and incidents are labeled and grouped to form categories.

(Cited in Flick, 2009, 310)

In this study, the teacher-researcher asked herself three sequential questions concerning the research question through the coding as 1) How did students response? 2) What did the teacher do? 3) Why did the teacher do this? In this way, observations, interviews and self-reflection journals were divided into units of teaching practice (T) along with students' response (S) and teachers' underlying thoughts (Th). The following is an example of breaking down part of observation & post-observation interview scheme into units (Table 3.6):

Table 3.6 Example of open coding: breaking down the data into units

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:40-12:45</td>
<td>Teacher said if I asked you to &quot;ting&quot; must stop and freeze T1</td>
<td>T1: kinetic activity with doing and listening</td>
</tr>
<tr>
<td></td>
<td>Teacher gave the instruction while doing at the same time with the students T2</td>
<td>T2: provide model to students</td>
</tr>
<tr>
<td></td>
<td>All the students were actively doing the actions asked S1. Some kids even made a funny pose purposefully when they were asked to freeze. They were laughing at each other’s pose happily S2.</td>
<td>S1: active participation</td>
</tr>
<tr>
<td></td>
<td>After two rounds, the teacher stopped doing with them, but still gave gestures. T3</td>
<td>S2: enjoyment</td>
</tr>
<tr>
<td></td>
<td>They were responding to the teachers’ instruction more quickly S3. When some did wrongly, they corrected quickly when they found their actions were different from others.</td>
<td>S3: better learning outcome</td>
</tr>
<tr>
<td></td>
<td>R: Why did you design this game? N: Because students love acting, moving and they will remember more quickly through moving because they love moving. Th1</td>
<td>S4: self-correction</td>
</tr>
<tr>
<td></td>
<td>R: Why did you do with the students? And later give gestures? N: It was hard for them to retain the memory after two weeks. If I did not give them examples, I’m afraid most of them would not know what to do Th2. Later I felt they could recall by themselves, I stopped and gave those gestures only. After all not all of them were able to recall by themselves Th3…</td>
<td>Th2: difficulty for word retain for students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Th3: students’ different learning ability</td>
</tr>
</tbody>
</table>
With the interaction of the three questions, the phenomenon was understood as a whole with connecting the units. Still take the above data as an instance, the relationship between the underlying teachers' knowledge and observable teachers' practice as well as that between the teachers' practice and students' response was revealed. And the initial codes focusing on the impact of teachers' knowledge on students' learning was generated as follows (Figure 3.2)

![Figure 3.2 Example of open coding: generating initial codes](image)

The implicit relationship between teachers' knowledge and students' engagement was able to be captured through the coding. The teacher may have applied more than one single action within one practice, and it was noted on whether the relation was evident. Like in above example, the teachers' practice of providing modeling to scaffold students' learning was embedded in her organization of kinetic activity rather than an isolated action that separated from kinetic learning activity. Therefore it did not lead to students' engagement necessary. When the general thoughts or beliefs were expressed without specific teaching practice, they were coded...
independently as components of teachers' knowledge.

Then second coding cycle was applied through focused coding. Because data analysis is never a simple one-off procedure, but a procedure with "conjecture and verification, with correction and modification, and with suggestion and defense" (Saldaña, 2009, 148). Focused coding assisted the researcher to "categorize [categorized] coded data on thematic or conceptual similarity" (Saldaña, 2009, 151). In this cycle, the teacher-researcher focused on codes on the aspect of teachers' teaching thoughts without extra attention on the triggered teachers' practice and the relating students' response. Same or similar codes from first coding cycle were merged into a more cohesive and abstract initial code. And the individual participants' knowledge elements demonstrated in the database was outlined. The same process was applied to other teacher participants’ data. The newly developed codes for individual participants were compared with other participants’ “to assess comparability and transferability” (Saldaña, 2009, 158). The separate segments were integrated to have a comprehensive understanding of the studied case. It was claimed by Charmaz (2006) that "your study fits the empirical world when you have constructed codes and developed them into categories that crystallize participants' experience" (54). Group comparison was not made purposefully to identify if there were any differences among teachers with different teaching experience. This is because the purpose of involving three subgroups is to understand the beginning Mandarin teachers’ knowledge as a whole instead of focusing on their group differences. Forty-three main codes were generated from the data in this stage.

These codes on similar events were categorized into more abstract and general themes and later into more conceptual categories through further abstraction based on shared features. Themes under each category and corresponding data were examined closely to ensure the common concerns relating to each category across the whole database. And the definitions of final categories were used to eliminate the overlaps among each other (Gatbonton, 1999). Three categories of knowledge were demonstrated as knowledge of MFL as subject matter, knowledge of Australian students and their learning, and knowledge of EFL as classroom language..

In the producing phase, categories of teachers' practical knowledge from previous
literature like Elbaz’s (1981) study was engaged to check and refine the generated category, achieving a holistic and deep understanding about the studied case. At the same time indicators for students' engagement and disengagement concluded from the literature was also engaged in this stage to identify students' learning engagement. Compelling evidentiary excerpts, including counter examples dealing with both students’ responses of engagement/ disengagement and teachers’ practices were selected and analyzed to provide a vivid report of the research outcome.

3.4 Research principles

Research principles including ethical considerations as well as the validity, reliability and generality of the thesis were also of full awareness during the whole writing process.

3.3.1 Ethical Consideration

Research ethics is referred to “how values and moral principles are integrated in the actions and reflections of research” (Stige, Malterud & Midtgarden, 2009, 1511). Ethical issues could be generated in every step of the research process (Flick, 2009), thus researcher took ethics into consideration during the whole process of this study. This research follows the principles of research ethics and considers the needs and interests of participants to keep them from any harm (Flick, 2009).

This research project does not involve any harm or risk. The participants in this research were informed of main content of this research and all invited to give written consent to voluntarily participate (Flick, 2009). They were free to withdraw if they felt uncomfortable or unwilling to continue. All the names appeared are replaced with pseudonyms to ensure confidentiality (Flick, 2009). It is true that participant teachers know and are identifiable to each other since members within ROSETE Program spend abundant time studying teaching, even living together. But this study will not expose them to risk. Participants' right to withdraw and right to comment are ensured in this study. All participants in this study also received transcripts of data collected from their interviews to check for accuracy and amend material from it if necessary. During the data collection, the time of interviews and observations were
considered to accommodate the participants’ schedule. Furthermore, no harsh questions were asked and participants' private life was not disturbed. No interference was made during the observation. The data collected from individual participants were not judged (Flick, 2009). These data were not used for other purposes except this research. All interpretations were based on the data themselves instead of being fabricated (Flick, 2009).

This study was approved with ethics approval from University's Human Ethics Committee and the SERAP from the NSW Department of Education. And all the teacher participants consented to take part in the study voluntarily. Observation records with specific information of students who did not consent their participation were not used in this thesis.

3.3.2 Validity and Reliability

Validity and reliability are two essential criteria to ensure the quality of educational research.

Validity is used to determine "whether the research truly measures that which it was intended to measure or how truthful the research results are” (Joppe, cited in Golafshani, 2003, 599). However, due to the complicated and ever-changing of the context as well as the subjectivity of the research participants, such definition is not suitable in this research (Merriam, 1995; Flick, 2009). In this study, validity is treated as “a contingent construct, inescapably grounded in the processes and intentions of particular research methodologies and projects” (Golafshani, 2003, 602). Mishler (1990) redefined validity as "the social discourse through which trustworthiness is established elides such familiar shibboleths as reliability, falsifiability, and objectivity” (Mishler, cited in Flick, 2009, 389). Validity is divided into internal validity and external validity (Lee, Mishna & Brennenstuhl, 2010). Internal validity is understood as credibility, focusing on the validity of the research process itself. In this case study, credibility was examined in terms of the relations established among components in the case; the amount and important details about the case were available, and whether “internal coherence of findings in the data analysis” was ensured (Lee et al., 2010, 684). External validity is understood as transferability or
generalisability, which puts the emphasis on the possibility of this study applying to other similar cases. Although there are great difference in the meaning of validity, it is still of necessity in this research (Merriam, 1995; Golafshani, 2003; Flick, 2009).

Reliability typically refers to:

the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable (Joppe cited in Golafshani, 2003, 598).

However, such static replication also is unable to realize in real context for the whole society as well as human because their behavior and understanding is ever-changing and dynamic. There were no two things exactly same in real life. Additionally, because of the empiricism of educational research, the repeated assessment of a phenomenon may lead to repeated wrong results instead of the truth (Merriam, 1995). The quantity of the data collected from a large number of people is unable to ensure reliability (Merriam, 1995). Educational research was not aiming at producing truth or rules. For a better and deeper understanding of what is studied, reliability is understood as dependability or consistency in educational research, focusing on the consistency of the collected data on the studied case (Merriam, 1995; Golafshani, 2003; Lee et al., 2010).

In this study, these two qualities were taken into full consideration. Instead of controlling variables and replication, a set of approaches were applied to ensure the validity and reliability, including triangulation of data collection methods, collecting detailed information and sharing data interpretations with participants (Baxter & Jack, 2008).

3.3.3 Generality

Generality is understood as “the extent to which findings from an investigation can be applied to other situations is determined by the people in those situations” (Merriam, 1995, 58). It is another important quality that needs to be considered in this research. Readers in situations which are similar with those of the studied case
are the ones to determine this quality (Merriam, 1995). Thus, detailing the context in which this research was conducted is of great importance when thinking about the generality.

Since this case study investigated the beginning teachers' knowledge in the ROSETE Partnership with particular context, there were limitations in reaching high generality. Thus, two strategies were applied to enhance it in the conduction of this research. First, detailed description was provided about the case, so that readers would have a judgment whether the findings or conclusions derived from this study could be applied or transferred into other settings (Merriam, 1995). It would provide an example for other situations with beginning language teachers in L2 educational context. Second, specific data of classroom teaching was provided through the evidence chapters. Intense connections were made between the contextual Mandarin teaching as a foreign language with the broader second language classroom teaching practice, so that to establish a reference of beginning teachers' practice which might engage or disengage students especially for second language teaching.

3.5 Conclusion

In conclusion, this chapter has introduced, explained and justified the research methodology employed in this study. The theoretical basis of the research methodology, data collection and research principles was connected with this particular research project closely. This study was explained as a qualitative case study with detailed description of the selected case as beginning Mandarin teachers in ROSETE Program as well as the selected participants. Triangulated data collection methods through observation, interview and biographical narrative with self-reflection journals were adopted to gain a comprehensive and rich database. Thematic data analysis procedure was applied with two cycles of coding to have a thorough analysis and reliable interpretation on the collected data. Last but not the least, ethical issues, research validity, reliability as well as generality was considered as indispensable part through the whole conduct of the study.

In the following three chapters, beginning Mandarin teachers' knowledge categories
generated through data analysis will be reported in detail with both evidential excerpts and teacher-researcher's interpretation to illustrate their impact on students' learning engagement in Australian primary classrooms.
CHAPTER FOUR

KNOWLEDGE OF MFL AS SUBJECT MATTER

4.0 Introduction

This chapter focuses on the first domain of knowledge categorized from the data: the knowledge of MFL as subject matter. It mainly includes content knowledge held by beginning Mandarin teachers within the subject of "Mandarin" as a foreign language specifically. To demonstrate the impact of teachers' practical knowledge concerning teaching content on students' MFL learning in Australian primary schools, this chapter triangulates evidence from class observation of six beginning Mandarin teachers, interviews with them and the teacher-researcher's self-reflection journal. There are two main parts included: the first part is the beginning Mandarin teachers' knowledge of subject matter during the determining stage which is often prior to the actual practice. The teachers' general knowledge of why certain content is taught and why it is worth teaching is explored; the second part focuses on the stage of practical classroom teaching. Teachers' knowledge in presenting teaching content in actual practice, including what and how specific-content knowledge these Mandarin teachers have and employ in teaching pronunciation, written characters and grammar.

4.1 Determining the teaching content

The first section focuses on teachers’ knowledge functioned in their determination of teaching content before actual classroom practice. General understanding of MFL and its learning is exerted profound impact on students' learning.

In China, teaching content for a discipline is pre-decided. There are pre-determined
textbooks in each school for each year and each subject, which are national- or provincial- wide. There are many kinds of corresponding teaching materials and exercise books for teachers to choose to facilitate their teaching based on the content in textbooks. However, this is not the case in Australia. There are no fixed textbooks for teachers to follow. Teachers have to make their own choice of what to teach to fit their students best. It is quite a shock and unfamiliar situation for the beginning Mandarin teachers under study. Their previous learning experience is all about textbooks, from primary learning to university studies. It is argued by McLaughlin et al (2005) that “[A]t the most general level, learning occurs through the cognitive engagement of the learner with the appropriate subject matter knowledge” (cited in Kong & Hoare, 2011, 309). As a result, picking and preparing of appropriate content became the very first challenge these beginning teachers faced. However, some of them found that it was a demanding task:

你选择一个内容给学生上吧，其实也挺难选的，肯定要选很久嘛，但是一旦确定了要教什么，想想怎么教对我来说还是比较容易的。

It is actually quite hard to choose a topic to teach. It always takes me a long time to decide. However, as soon as the content is determined, it is relatively easier for me to think how to teach.

(Kelly, interview, 17/08/2012)

The knowledge applied in teachers’ determination of teaching content is revealed by the teachers through post-observation interviews and semi-structured interviews. They basically list three key subthemes: difficulty, connectivity and significance. The impact of the choice of content on students is illustrated through the teacher-researcher's classroom observation. The content taught in observed 17 lessons are list in the Appendix 9.

4.1.1 Content difficulty
One of the most frequently mentioned understanding among these teachers is the difficulty of the content in Mandarin learning. All the beginning Mandarin teachers mentioned their concern about how to make the content easy for students to learn.

It is realized among the beginning Mandarin teachers that the difficulty of the teaching content exerts significant impact on students' learning engagement. For example, Kelly regarded it as the very first reason for high engagement among students in her Mandarin lessons:

K (Kelly): (Very excited and cheerful) They [students] usually all listen to me very seriously and are engaged with high activity. The last class of the stage 3 is a little bit noisy, the rest classes are all well behaved.  
T (Teacher-researcher): It can be seen that students love your lessons. Have you ever thought why they love your lesson?  
K: Firstly, I think that is because what I taught was in line with their cognitive level, they won't find it very difficult...  

(Kelly, interview, 17/08/2012)

According to Kelly's description, students were highly engaged in her Mandarin classes behaviorally and cognitively. She believes that the suitability of teaching content is the primary reason for such engagement. Once students find they are capable of mastering it, they are willing to make efforts. However, when the teaching goal is beyond the students’ cognitive ability, the situation becomes unpredictable. The teacher-researcher observed and reflected on a MFL lesson given by a beginning Mandarin teacher Miss Sue to stage3 students. The content in that lesson is a Chinese modern poet called 乡愁 (xiāng chóu, homesick):

Miss Sue explained that 乡愁 (xiāng chou) meant homesickness and asked the students whether they knew what does “homesickness” meant. Only two students handed up. One student was picked up and answered that “it means when you are far away from home, you will miss your families”. This answer is literally correct. However, it is questionable whether these kids can emotionally understand such “miss”. These stage3 students have only learned simple Chinese words like countries, food, animals, colors which are basic for daily life so far. It would be a
little hard for these young learners most of whom have never left home to understand such vague Chinese emotional expression. Even I myself didn’t learn it until year 9! Then Miss Sue emphasized the time-related phrases of ‘小时候’ (xiǎo shí hòu; in one’s childhood), ‘长大后’ (zhǎng dà hòu; when one is grown-up), ‘后来’ (hòu lái; later on), ‘现在’ (xiàn zài; now)” and asked students to drill through English-Chinese translation. Only three students in the first row repetitively handed up while others, especially those in last two rows, were not listening at all, and keeping doing art works from other subjects. They even hardly raised their heads… After the class, Miss Sue said that today’s teaching was quite thorny and the topic was way too difficult. She even didn’t want to continue especially during the latter part of the lesson.

(Self-reflection Journal, 26/07/2011)

Only a small proportion of students had been involved into the Mandarin learning in the above lesson. Most of these students even didn't understand the English meaning of the topic literally, not mention emotional aspect. The majority of the students showed no willingness to learn, busy doing their own work or letting their mind wander freely. Miss Sue realized the great unsuitability of the teaching content to students through the teaching and she also claimed that it was tough to teach this content when it was unaccepted by students. Students easily get shield and resistant to the content as well as to the teacher when it is "way too hard". Such passive emotion led students to disengagement and discouraged the teacher herself at the same time. This illustrates the close interaction between student engagement and teacher engagement.

Concerning the specific content taught, it is concluded that teachers make efforts to grapple with a balanced difficulty level for students by mixing hard and easy words. For example, Cameron selected eight words about animals in his first lesson. He explained that he chose the word ‘狮子’ (shī zi, lion) to balance the content difficulty:
As for "狮子 (shi zi, lion), actually I didn't choose lion particularly because of its pronunciation. I chose it because it was relatively simple. So students would found it easy to learn. And it has been proved that they did think it was simpler.

(Cameron, post-observation interview 1, 21/08/2012)

Cameron expressed his sensitivity to the difficulty of the individual word and a good knowledge of the suitability of the teaching content. It guides him to add certain simpler word "狮子" purposefully into those harder ones to reach an acceptable difficulty in general.

Similarly, Miya determined to teach other two words 水 (shuǐ, water) and 茶 (chá, tea) after teaching three Two-syllable words about drinks with consideration of the content difficulty:

I usually determined the new words based on their difficulty. 水 (shuǐ, water) and 茶(chá, tea) both were single words. It should be acceptable to add these two.

(Miya, post-observation interview 1, 16/10/2012)

Teacher’s thoughts during the teaching plan are able to be revisited through the teachers’ narrative. So teachers’ practical knowledge is not only composed of knowledge applied in practice, but also in the stage of lesson planning. Armed with such knowledge of making the content learnable, the teachers are also to attempt to facilitate students' learning with appropriate expectations. Take another instance from Cameron, when he asked students to do an Interactive White Board (IWB) game in front of the class individually, students were reluctant to hand up:

Only two students handed up at the beginning. The first student came to the front of the Smart-board and asked “Do I have to say the name?” Cameron said “No, you don't have to. You can have a try. These words are a little bit difficult for you guys. You just need to choose which one is the correct answer.” Students seemed to be quite relieved. After the first student picked the correct Pinyin on the screen, more and more students handed up....it was very successful and engaging.
When talking about showing Pinyin for students to choose rather than asking them to say by themselves, he revealed his concern about the difficulty level of new words during the follow-up interviews:

...because the content taught today is relatively difficult for primary students. Few students in primary school are learning how to say hippo (河马; hé mǎ) in Chinese, many students are learning how to say horse (马; mǎ), but not hippo.

Compared with the usual words to be taught to other primary students, Cameron has a clear idea about the challenge of the content for students. According to the observation, despite the fact that the IWB game was attractive, students were still worried about saying out the words at the beginning and hesitated to try. However, when they were told they “don't have to” and just needed to pick the correct Pinyin, they found it not difficult and were activated again. Consideration of the content difficulty for students guided Cameron to set a suitable expectation of language recognition rather than independent language output. This effectively removed students’ shield caused by the difficulty of the content and made his teaching practice suitable for students. Therefore, such consideration motivated the teachers to scaffold and engage students’ learning through their practice by decreasing the difficulty of the content.

In summary, knowledge of the difficulty level and suitability of the content for learners is demonstrated by these beginning Mandarin teachers. It is constructed with interaction between the teachers’ understanding of the nature of the content and the students’ cognitive level. This knowledge enables the teachers to engage students with learnable content.

4.1.2 Content connectivity
Connectivity among content is also mentioned by these beginning Mandarin teachers when deciding what content to teach. Here connectivity mainly refers to the relevance between individual language items, topics or subjects. Within the subject, teachers identify associations between words, phrases, and sentences based on their knowledge on subject matter. Some attempt to connect these items into coherent teaching goals with other knowledge element. For example, when asked why he chose the specific words to teach after the observation, Cameron explained:

...the first reason is for the pronunciation. For example, the sound of x, 大象 (dà xiàng, elephant), 犀牛 (xī niú, rhino), and there is also an x in my name, this can deepen their impression [on this sound]...

(Cameron, post-observation 1, 21/08/2012)

That lesson was also observed and recorded by the teacher-researcher:

He began to teach “大象 (dà xiàng, elephant)”...He asked students “Do you remember what is x in Chinese? Who can have a try?” One kid handed up and answered with a quite low voice. Many of other students were looking at him while he was answering. His pronunciation was very correct. Cameron repeated and appraised him “[xi], very good!” ...He began to teach 犀牛 (xī niú, rhino). He wrote xi on the board and asked “Do you remember this? What is xi?” Some students were pronouncing it by themselves, and four kids handed up. One pronounced it like [ʃ]. Cameron said “yeah! Something like that!” Other three kids were still putting their hands up. Cameron asked another student to have a try. He pronounced it like a Chinese! Then Cameron asked students to repeat after him [x], [x]. Students all looked at Cameron’s model and followed him loudly.

(Cameron, observation 1, 21/08/2012)

Cameron didn't select the content randomly but with focused consideration of high connectivity. He believes such connectivity between contents can facilitate students' learning. Therefore, words like elephant and rhino were chosen and linked purposefully with the same sound of [x] in these two words. Since it was his very first lesson, he also connected his name with the words to integrate the separate items
into a coherent teaching goal. Although not many students volunteered themselves to recall the pronunciation, students were paying attention and making efforts during the repetition rather than being off-task. In terms of cognition, they showed their increasing familiarity with the pronunciation of x when it was mentioned. The awareness of content connectivity directs the beginning Mandarin teacher to apply his expertise in Mandarin language in order to make decision on what to teach, and how to assist students' learning using repetitive recognition.

In more cases, the beginning Mandarin teachers under study display this knowledge through the connected topics they teach. It is found except one teacher, all other teachers make efforts to teach the topics and content with connection. While the other teacher believes it will be better to teach as more topics as possible. Knowledge of connectivity in subject matter not only guides them to provide linked content, more importantly leads them to underline the consistency of students’ learning with the connectivity of the content. For example, Lavender taught the topic of “action” and “direction” sequentially to form a more complicated phrase “[nǐ] (xiàng, towards) + direction + action”. She reviewed words of “action” at the beginning of the lesson:

Lavender asked “what did we learn in the last lesson? How many words did we learn?” Then she asked them how to say these words individually.

Some students handed up immediately. Some were counting the number of the words while more students were quickly looking up in their notebooks.

(Lavender, observation 1, 23/10/2012)

She talked about her teaching thoughts of her revision after the class:

There must be review in a lesson...it allows students to review [the words]. Furthermore, they are relevant to today's topic...on the one hand, it reviews their knowledge, on the other hand, you also could have an idea of how many of them have learned, have mastered so that to make adjustment in the following teaching...

(Lavender, post-observation interview 1, 23/10/2012)
The thought underlying her practice about review could be tracked from the above narrative. Lavender concluded that two aspects needed to be considered in language teaching. Firstly, the content to be taught in two different lessons needed to be relevant. Secondly, the students should be assessed whether they were ready for new knowledge through reviewing the content learned. This continuity of knowledge learning is not merely emphasizing relevance between topics, but more importantly, is the stepwise construction of the knowledge cognitively. This ideology encourages Lavender to apply lesson review and to assess students’ prior knowledge cognitively. In addition to cognitive engagement enhanced through connecting with students’ prior knowledge, students were also engaged behaviorally by recalling or referring to notebooks as observed at the same time.

However such connection between lessons may exert side effect on students’ learning, due to the external reason such as unexpected students’ absence from the class. Lavender found it hard to teach connected content systematically despite the knowledge of connectivity:

That girl who helped me to hand out the number cards asked me if she could withdraw herself from the game. She said she wasn't there when I was teaching the topic of action. This was a common case among many students, being absent from now and then. So it’s really hard to teach systematically.

(Lavender, post-observation interview 1, 23/10/ 2012)

The lack of continuity of students’ learning triggers a wide gap in their knowledge construction. Although reviewing what has been learned previously has been proved as an effective practice to engage students cognitively and behaviorally in the new lesson, it is impossible to cover the whole previous lesson within a few minutes of review. Those who were absent from the previous lesson were disturbed by such break and easily disengaged from the new learning. Therefore, although the teachers has a good knowledge of conducting review before a new lesson starts, this teaching practice is sometimes badly influenced by such unexpected situation.
Secondly, the content connectivity is also established through connections across subjects. But this practice was only observed from Cameron. The application of the content from other subjects removes the knowledge boundaries to achieve interdisciplinary learning. It provides a valuable opportunity for students to recognize the significance of the learning content in the wider context. The following is part of the follow-up interview after Cameron's first lesson on African animals:

T (Teacher-researcher): Why do you choose to teach animals in Africa?
C (Cameron): Because they just learned about it.
T: So why do you want to teach the content they've just learned?
C: [I] just want them to know how it is like to translate some knowledge into another language...

(Cameron, post-observation interview 1, 21/08/2012)

Cameron's thought of his determination on the topic was revealed during the interview. He tried to demonstrate Mandarin learning with something students had already been familiar with. The conceptual connection built between the subjects is able to be provided. It facilitates students’ learning and engages them by applying their prior knowledge base into the new knowledge learning. Following is part of observation note of the teacher-researcher’s how he taught the word “meerkat” in Mandarin:

Cameron asked students “what does kat stand for?” Students answered cat quickly. Then he said “Chinese people also think meerkat is a kind of mammal, a kind of cat. You've all learned cat is 猫 (māo , cat)...So in English you have meerkat, but in China, we have cat meer.” Students were all listening carefully and all laughed when they heard the last sentence.

(Cameron, observation1, 21/08/2012)

The selection of the animal “meerkat” provided an opportunity for students to connect their knowledge of this topic from their previous learning. More importantly it allowed them to gain an intercultural understanding of language learning. Students were encouraged to link and compare their prior knowledge in English context with
that in Chinese language. They were observed as interested in the similarities and differences provided and concentrated on listening.

Overall, the teachers’ knowledge of connectivity within the specific content, within the subject matter and beyond the subject matter is unwrapped through their teaching practice. The illustration of connectivity assists students’ cognitive development and it positively impacts on students’ cognitive engagement in new knowledge learning. The content connectivity here echoes with the consistency and coherence of teaching content suggested by Bryson and Hand (2007) and they claimed it as one of the positive features when students were engaged.

**4.1.3 Significance of Mandarin learning**

Significance of Mandarin learning in this context refers to the Mandarin teachers’ understanding of the worth of learning certain content. Two main dimensions are found to attach significance by the Mandarin teachers in their teaching: communicative competence and intercultural understanding.

**4.1.3.1 Communicative competence**

Communicative competence is considered as the prior purpose of the language learning (Borau et.al, 2009). It is “the ability to use language effectively and appropriately to achieve a range of purposes” (Power & Shrestha, 2010, 20). All the beginning Mandarin teachers under study express their concern on whether what students are learning can be applied in real communication. This awareness influences their determination of the learning content. It is firstly illustrated through the emphasis of the accuracy of pronunciation by some teachers.

...I find sometimes when foreigners are saying Chinese words; Chinese people cannot understand them. So I believe it is necessary to teach them the accurate way to pronounce. In a Mandarin lesson in a high school, I could not understand what they were reading. One student
talked to me once about automatic train. His relative went to China and took some photos for him...But I just could not understand him. His accent was very strange...I had to ask him the English meaning and finally knew what he was talking about.

(Cameron, post-observation 1, 21/08/2012)

Cameron addresses the reality of being “unable to understand” the Mandarin used by Mandarin learners. This embarrassment in real communication is not a single case. It hinders the authentic interaction with native speakers in target language and makes the learning meaningless. Cameron also points out that the strange accent is the main cause. This underlying knowledge explains his choice of the certain words in order to practice some tricky pronunciation in Mandarin.

Students are starting to pay attention to the pronunciation. After the highlighting, most students have gained a good grasp on the pronunciation of [e]. None of them pronounce the ‘e’ in 蛇 (shé) and 河 (hé) as [i] again when the word is asked again, although not sounds exactly as Chinese.... (In the game) some students pronounced it as she again, but they corrected it by themselves immediately.

(Cameron, observation 1, 21/08/2012)

This piece of data displays how these teachers' understanding of the significance of Mandarin learning: pronunciation in oral communication is given priority. Despite the fact that no obvious behavioral or emotional indicators were observed, it was undeniable that the students were cognitively engaged in the learning with satisfying learning outcome. The teacher's emphasis on the pronunciation of ‘e’ through the practice of two relating words left impression on their mind. It led them to concern it as well with self-monitoring and as justifying answers by themselves.

Besides, such communicative teaching purpose is also demonstrated through teachers' efforts to establish a more interactive and real language learning environment. The following is one piece of field notes, from the researcher’s observation:
Kelly asked one student to say hello in Mandarin in the front of the class with a Monkey king mask. She also asked other students to say hello back. It went smoothly and the whole atmosphere was really activated… Students who were sitting responded to the greeting happily and loudly. They added the name of the student and waved to him/her. Not a single student was disengaged!

(Kelly, observation 1, 14/08/2012)

It can be seen that all the students participated into the interaction among peers behaviorally. Such interaction contained a cognitive process of language input as well as output, which developed students’ capacity of listening and speaking greatly. At the same time, they were highly enthusiastic and enjoyed themselves which was in accord to emotional engagement.

Such determination of task design was found originated from Kelly’s understanding of the significance of communication within the language:

...just like the English textbook we used when we were learning English, if Lilei (a male character in the textbook) said “Hello, Han Meimei (a female character in the textbook)” , Han Meimei would definitely respond him saying “Hello, Li Lei!” . After all, in our daily life, if I say “Nǐ hǎo (Hello)!” , you will say “Hello!” back without exception...

(Kelly, post-observation interview 1, 14/08/2012)

It can be found clearly that the early experience of learning English influences Kelly as a beginning Mandarin teacher. It provides her a strong awareness of communicative authenticity which formulates part of her knowledge of language learning. She asked students to greet with each other as in the real life. Such social interaction is an essential component of learning (Ozverir & Herrington, 2011). It encourages students to use the target language functionally and facilitates their understanding of language naturally with high engagement. Here is another example from the teacher-researcher's biography:

To review all the content learned in this term about food and money, I decided to conduct a “big game” … I divided the whole class into six
groups. Each group would run a food shop. I asked them to think of a cool name for their shop, decide on the price and design their own menus in 15 minutes. All the students would have 30 Yuan fake money and they could go to other shops to buy food. The profit was calculated and the shop with the most profits was the winner. Students were really engaged during the whole activity. Many students jumped to me excitedly and report their shopping lists. “Miss, I just bought a pie!” “Oh, I already spent all my money in one shop!” “I bought three pieces of pizza!” One student said to the classroom teacher “It is awesome, isn’t it?” When I was checking how everything was going. I found the students were copying Chinese characters on the menu and they were bargaining in Chinese. “Sì Kuò! (Four dollars!” “Sān Kuò! (Three dollars!” When I clapped and reminded them that the shops had to be closed. Many students shouted no! Some shops even made a clearance, the owner was shouting “Buy one get one free! Clearance sale!” Many students asked “Can we do this again?” and said “It is fun!”

(Self-reflection Journal, 26/06/2012)

This piece of self-reflection journal draws a vivid picture of how students engaged in a scenario-based language practice. The teacher-researcher set up a common daily-life situation for students relating to buying food and drinks. Young learners showed high interest into the given task. They brought in their creativity and enjoyed the whole process with great enthusiasm. Furthermore, they applied target language learned consciously to process authentic information and solve real-life problems of selling and shopping. In this scenario, most of the students were able to connect the Mandarin lesson with real life out of the classroom, with their life and thereby recognizing the significance of language learning.

Creating communicative learning scenario is important in Mandarin class to engage students’ Mandarin learning (Ozverir & Herrington, 2011). The authentic communicative context makes close connection between the foreign language classroom learning and the real life. Free task-based interaction releases learners' mind from dull drill of memorizing isolated words or sentence patterns and stimulates their creativity and initiative in solving authentic task through the interactive practice of target language.
However, such integration of the teaching content into coherent communicative practice could not happen frequently due to the limitation of the teaching time which occurred once a week or each fortnight. Even in this case, the teachers were still found to make effort to build communicative environment into teaching content. In one observed lesson, Miya taught three drinks and the verb “喝 (hē, drink)”. She demonstrated her endeavor to introduce the picture of real-life language usage into Mandarin learning with simple phrases:

She asked two students to come to the front of the classroom to do role play. One student was the waiter while the other was the customer. Both were given a card according to their roles. They were taught how to say “waiter” and “customer” in Chinese. The waiter picked a drink randomly through the IWB and then ordered this drink by saying the target language “喝+drink”. At the same time, the waiter was asked to turn back to the screen. So the waiter had to listen to the customer’s request to hand out the correct flashcard.

(Miya observation1, 16/10/2012)

The teacher helped the students to undertake the practice of the language with a meaningful setting through playing a familiar social role. It was proved to be a successful way to engage students:

Almost all the students handed up, waving to get the attention. Some students introduced their role on their own happily, saying “I'm 服务员 (fú wù yuán, waiter/waitress)” or “I’m 客人 (kè rén, customer)”. Some forgot how to say their roles; they asked Miya to tell them again...Other students were watching carefully. When a student picked water, many students sighed out of disappointment. Some called out, “I don't want 水 (shuǐ, water)”, “I want 可乐 (kě lè, coke)” to show their likes and dislikes...When the customer picked coke, all the students cheered and clapped...

(Miya observation1, 16/10/2012)

The students were found highly interested in holding the “identification card” to play their roles. They were willing to make effort to learn the Chinese words and play their roles. The rest students were not isolated from the
practice either. They were paying attention to the game and making response along with the players. These responses were in line with indicators for student engagement.

Miya reflected on this practice after the class:

I tried to make it situated learning. The students would feel they could use it in real situations. It would be better with some real materials for customer and waiter, providing more real scene. For example, I could put a picture of restaurant or the counter for ordering drinks on the screen. I thought these details could also affect the outcome of the activity.

(Miya, post-observation interview 1, 16/10/2012)

The above narrative with self-criticism assisted the teacher-researcher in having a good look at the knowledge underlying the practice. The teacher represented her dissatisfaction towards the lack of more “real material” and her expectation to provide a “more real scene”. It can be concluded that creating real learning environment was her fundamental purpose of this practice. This strong sense of communicative usage of language led to a positive effect on students’ learning. Playing roles as customers and waiters established a close association between the classroom learning and the reality where students experienced in daily life. This made the learning of the Mandarin words meaningful. Therefore, the communication-oriented Mandarin learning isn't restricted to the high proficiency of students’ language ability. It is possible and practical to be realized in this case due to the significance and emphasis these Mandarin teachers put on.

Some of the teachers were observed to make endeavor to engage students into real interaction in class. For example, Miya was observed to encourage the students to say 谢谢 (Thank you!) when she was handing out the worksheet:

...She came up to a student with the worksheet and asked him “how to say when I give you the worksheet?” The boy shook his head and didn't say anything. Miya taught him by saying "谢谢 (Thank you!)" The boy
just kept silent. She kept saying “谢谢 (Thank you!)” even though some kids didn't make response. But gradually, more kids repeated after her and she still kept saying it. Those who were waiting for the worksheet started to practice by themselves following the teachers' repetition...

(Miya, observation 2, 30/10/2012)

Persistent attempts were made by the teacher to promote students' communicative ability. Such efforts turned into some improving indications from the students' reaction. The repetitive exposure of students to the target language stimulated them to be increasingly comfortable to say it aloud. Although the students were more likely to repeat rather than make actual responses, the progressive willingness of this repetition was also a result of emotional acceptance and cognitive involvement.

The underlying knowledge is revealed through Miya’s explanation of the above practice from following motives:

On the one hand, I want to reinforce them to say the sentence “thank you” in Mandarin. On the other hand, I want to provide a context for students. Maybe someday they will have a chance to go China or maybe just Chinese restaurants here, they can use it when they are served or in other situations. Actually Australians say “Thank you” quite often. It's like a tradition here. When I take the bus, all of passengers would say thank you when they get off. So it is possible for them to use it in their [students’] life.

(Miya, post-observation interview2, 30/10/2012)

High anticipation for using Mandarin in a long run is illustrated in this teacher’s clarification. Her understanding of the communicative significance is constituted by the dual knowledge on both Chinese and Australian context. She values the Australian culture of and immerses this part of local communication opportunity into a foreign language (here Mandarin) teaching and learning.

Based on the teacher’s understanding, using Mandarin to communicate is not something over there (in China), but more importantly and practically, this communication in Mandarin could occur in the local community. This makes MFL
accessible to Australian students' daily life. The significance of MFL learning, no matter in general or certain language items, is able to be established in students’ awareness and thus engaging them into Mandarin learning behaviourally, emotionally and cognitively.

In conclusion, these teachers' knowledge of attaching significance of language to the application in real communication is shown through their teaching practice. These interactive and authentic teaching practices trigger high student learning engagement. High meaningfulness is provided to the content which made it connected with students and worth learning.

4.1.3.2 Intercultural understanding

The second dimension about the teachers' knowledge on the significance of subject matter is termed as "intercultural understanding". It is described as follows:

...develop a greater understanding of their own lives in the context of exploring the lives of others. They learn to look at things from another’s perspective, giving them insight into the people, culture and traditions of other cultures. Children become more aware of the similarities and differences between peoples, their daily lives, beliefs and values. (Department for Education and Skills [DiES], 2005, cited in Woodgate-Jones & Grenfell, 2012, 335)

Within ROSETE Program, the beginning Mandarin teachers illustrated this concern through their practice basically in three modes: teaching culture as an independent content; teaching culture through the explanation of linguistic knowledge and through bringing in Chinese authentic elements.

*First*, Chinese cultural knowledge is introduced to students as an important element of the content in Mandarin lessons. Here is an excerpt from the teacher-researcher’s observation of Frank's Mandarin class:
He displayed a video titled as “an overseas friend in China” from Happy Chinese with daily-life Chinese and English subtitles. Many students who were sitting at the back started to move their chairs to the front, or stood up. The video was about an American girl going to a Chinese friends' home to celebrate Chinese Festival in Beijing. All the students were looking at the screen. They burst into laughter when there was something funny now and then. Since the size of subtitles was not very big, students asked their partners what was that in the subtitles... The video lasted for 15 minutes with three parts. At the end of each part there were some explanations about the language items like the difference between 您好 (nín hǎo; Hello! [Formal]) and 你好 (nǐ hǎo; Hello! [informal]) ...Students at the rear row sat down when the teacher instructed the grammatical function of “吗”...Students discussed enthusiastically about the video even after the whole episode was over...

(Frank, observation 1, 09/10/2012)

The students' engagement indicators could be identified from the above description. In terms of behaviors, the students expressed their initiatives towards the video by adjusting themselves to a better position as well as their concentration for the most of the showing time. The students' enjoyment towards the content was highly demonstrated when there was a laughing point. Such enjoyment was based on their understanding of the contextual meaning by watching and reading the subtitles.

When moving to the pre-asked questions, students' cognitive engagement was demonstrated while they were watching. Among eight questions, three were about linguistic knowledge; three about cultural knowledge on Spring Festival; one was to identify a character name in the story; the last one was to ask students to ask questions. It was found that the students were found more prone to answer cultural-rated questions which were shown on the video. The teacher-researcher recorded that:

When asked the first question of “What do they do for the preparation of Chinese New Year?” More than half of the class raised their hands swiftly......as for the second one of “What’s the difference between 你好 (nǐ hǎo, hello) and 您好 (nín hǎo, hello)?” Only two girls volunteered to have a try and the class was very quiet.

(Frank, observation 1, 9/10/2012)

The above excerpt indicates that students have made an effort to gain a good
understanding of cultural knowledge but did not try as hard on linguistic knowledge. This is consistent with the teacher-researcher’s other classroom observations. In general, the students were found less engaging with the teacher’s linguistic explanation, but more active at engaging in the learning of cultural knowledge. Therefore, the teachers' practice of applying the cultural content through information technology into Mandarin class can be an effective way to engage the students’ language learning.

As one of the typical “authentic materials” in foreign language teaching, videos are the major form to present cultural knowledge in this case. They could efficiently invite language learners into a real language context. Kelly shared reflection different story of video use in language class during the interview:

T (Teacher-researcher): Do you think all the videos can engage students?
K (Kelly): (shaking her head) eh, it could not. I feel it very strange the cultural videos I showed to the students didn't always work very well. I thought they would definitely be more interesting than pure oral narrative...I showed them that video of oil painting with Jay Chou (a Chinese singer)'s song. They showed no reaction to it at all! Maybe these students just had no interest in this cultural content from their bottom of their heart. Or maybe to these students in kindergarten, they prefer activities which allow them to move than these videos...
(Kelly, interview, 17/08/2012)

The form of video did not lead to the kindergarten students' learning engagement in Kelly’s culture teaching. The interplay of the cognitive suitability of the content itself possibly has exerted a strong influence on the students' learning interest and engagement. The selection for appropriate teaching material to suit for practical goals and the students’ cognitive level constitutes one of the tough challenging for beginning Mandarin teachers.

Secondly, the beginning Mandarin teachers build cultural elements into the language teaching to enhance the students’ intercultural awareness. Intercultural comparisons
on specific items are often made and illustrated by these teachers. The following is an extract of how Cameron involved cultural elements into his language teaching:

When it came to “河马 (hé mǎ; hippo),” he didn't teach the word directly. He asked students how to say mum in Mandarin? Students answered him that is “mā mā.” Then he said “But if you say it in third tone, it turns out a horse. You know the difference between a horse and a house. They have similar pronunciations but they are really two different things” ... There was no obvious response from students. They were just looking at Cameron and listening... “It's like seahorse. Is it a horse? ... So you have seahorse, but it [is] not a sort of horse. And we have river horse. It is 河马 (hé mǎ; hippo). Is it quite a fat, chunky, chubby horse?” When hearing this, students all were nodding excitingly, calling out “Yeah! Yeah! It really looks like a horse!” They sounded they found a wonderland.

(Cameron, observation 1, 21/08/2012)

Cameron tried to engage his students through explaining conceptual similarities of a particular word in Chinese and in English. Students showed great interest in listening to the teacher. Obviously they were more excited at recognizing the resemblance between a hippo and a horse. They nodded their heads indicating their cognitive acceptance of this Chinese concept in this context. The teacher's instruction offered the students a foreign perspective to look at things they were familiar with. More importantly, the teacher provided an opportunity for the students to comprehend the Mandarin words in a more meaningful and vivid way through involving the cultural aspect of those words. In this case, the teacher triggered the students’ cognitive efforts to understand a Mandarin word from Chinese way based on its origin. The successful establishment of mutual understanding through intercultural explanations stimulated the students' sense of achievement and led to positive appreciation of foreign language learning. Cameron explicated his initial motives thoroughly:

...Some students would find some same pronunciation with different meanings. A sense of emotional discouragement might come into being. They might ask why there were so many “ma” here? So I employed these examples to tell them that same situation also existed in their English language...like the word “horse” and “house” shares similar pronunciations, but they were two distinct things...many people may
think it funny why hippo (hé mǎ) become a kind of horse (mǎ)? For this I took seahorse for an example. In English, they call it seahorse, but it isn't the real horse in the sea...These things are in every culture. Therefore you need to suggest these students it was not a right way to think foreign language stupid. These kids are still in growing age. When they encounter some cultures dissimilar with theirs, they may find it interesting, or contrarily stupid sometimes...just like when we were learning English...So I believe teacher could suggest students that Mandarin is not a complicated or boring language as imagined. It shares similarities with English.

(Cameron, post-observation interview 1, 21/08/2012)

The teacher demonstrates his great concern about the side effect because of students' unfamiliarity to the target language and underlying cultural concepts during foreign language learning. The negative attitudes towards a foreign language learning such as "stupid" or "funny" may occur when students confront cultural conflicts. Such bias to a foreign culture would lead to emotional disengagement to foreign language learning.

Therefore, Cameron provided a comparison of two groups of intercultural similarities to the students while teaching the word “河马 (hé mǎ; hippo)” in terms of pronunciation and meaning respectively. Instead of trying to insert the Chinese concepts into the Australian students’ minds alone, the teacher demonstrated his respect to and knowledge of what the students already owned in their language and knowledge bank. It eliminated the students' potential resistance and motivated them to rationalize “stupid” foreign concepts with common ground. A sense of intercultural understanding generated through the cognitive imagination by the students themselves encouraged them to be open to this foreign language and be engaged into this language learning.

The application and illustration of the intercultural knowledge relies on the teachers' own intercultural understanding. This is not a simple cultural introduction which mainly includes the uniqueness of China like holidays or traditions, cultural immersion during the linguistic instruction. This requires the teachers to be familiar
with both English culture and Chinese culture. The better intercultural understanding held by teachers themselves, the greater awareness of its significance would be generated and underlined during their teaching.

Thirdly, teachers also introduce some authentic Chinese elements into their MFL teaching to bring students vivid experience about China. The most regular representation lies in the greeting routine at the beginning of the Mandarin class. This practice is shared by six out of the seven beginning Mandarin teachers. The following is the teacher-researcher’s observation of it in one class:

...she asked students to stand up by saying “起立 (Stand up)!”. All the students followed her instruction and stood up. Then she bowed and greeted to students “同学们好 (Hello, students)!” All the students then bowed back to the teacher while replying “老师好 (Hello, teacher)!”. The teacher then instructed students to sit down “请坐 (Sit down)!”. Then all students sat down as asked to...

(Miya, observation 2, 30/10/2012)

The above record describes the traditional way of classroom greetings between the students and their teachers in Chinese classroom. This practice was considered as engaging students mainly from two aspects. On the one hand, the students were involved into behavioral involvement through this routine. On the other hand, the students were interacting with the teacher in Mandarin. Their linguistic knowledge was recalled and reinforced through this practice.

The teacher’s account for this practice was given as the following:

I tried to do this at the beginning of my teaching here. Such greetings could be found almost in each Chinese class in China. This is a form of Chinese classroom cultural. Actually such culture exists in Australian classes as well, like the students would greet the teachers saying “Hello, Miss!” or “Good morning, Miss!”...

(Miya, follow-up interview, observation 2, 30/10/2012)

In this case, an authentic scene of Chinese classroom has been duplicated partially.
An authentic experience of Chinese culture occurred in this Mandarin class. A foreign culture is no longer something intangible and meaningless but deeply rooted in everyday practice in class. This shows great realistic significance. The students are able to experience it by themselves. Despite the routine of bowing and standing up, greetings in the Australian primary classroom are familiar to young learners. This also constitutes the common ground for students to be involved in this practice with intercultural understanding.

The establishment of Chinese authentic learning environment could also be achieved through authentic material, and this proved to be useful in engaging students’ learning. Here was an example from the teacher-researcher’s narrative of a lesson on the topic “money”. She brought some real Chinese “ren min bi” notes to the class:

When I showed them the money, they were so excited, staring at me, or more precisely, the money in my hands…Then I asked them to pass the money in turns. I also told them to look at it from the bottom and they would find a watermark on it…They took the money from their partners carefully, and raised the money as I recommended. Some of them even opened their mouth with great surprise while looking. Others who were waiting showed their greatest patience, no one rushed. …They kept asking “Miss, are they real?” or pointing at the Chairman Mao on the surface of the money “Miss, who is this man?” “Miss, how much is it worth in Australia?” “Is it equal to Australian dollar?” …They also showed to their classroom teacher enthusiastically “Look, Mr H, this is Chinese money!”

(Self-reflection Journal, 19/06/2012)

The presentation of real Chinese money to Australian students in the Mandarin lesson triggered the students’ great engagement. The exoticism of foreign material resulted in instant excitement among students emotionally and behaviorally. Moreover, the distinctions between the Australian money notes and the Chinese ones furthered such curiosity. It stimulated them to conduct the cultural contrast unconsciously based on their prior knowledge with questions unfolded, which was in line with cognitive engagement.
The authentic material presented to the students fuels the students’ learning based on its close connection with real-life context, including students’ experience, culture and interest (Ma & Wang, 2010; Taylor & Parsons, 2011). A sense of cultural exoticism and diversity is provided and results in more enjoyable learning experience. This emotional engagement motivates the students to explore more knowledge on this exotic culture as well as target language with better learning results.

In general, the teachers’ underlining of intercultural understanding within the content led to engaging in teaching practice, mainly including the presentation of Chinese recourse, intercultural comparison and cultural setting. These practices encourage the students to experience exotic culture. This increases the students’ intercultural understanding and learning with enhancing engagement.

4. 2 Handling the Mandarin linguistic elements

The second section focuses on the beginning Mandarin teachers' knowledge revealed from their dealing with specific linguistic elements. Unlike English and many other alphabetic languages, Mandarin has separate phonetic systems. The distinct contrast between Mandarin and students’ mother language English poses an enormous intrinsic difficulty for students’ learning (Orton, 2008). However, the understanding of such difficulty in a learner's perspective rather than that from native speakers’ perspective constitutes a big challenge. Consequently, deep knowledge of subject matter is realized as necessary by the beginning Mandarin teachers to demonstrate and explain the individual linguistic content in an understandable and learnable approach.

...We are good at content knowledge, but superficially. Things [Mandarin] that we are teaching are so common in our life. We don't need to pursue the reason or special links among them. But we need to think about them in our teaching...What I think more difficult for us than local Mandarin teachers is that the content we are teaching is so
natural just like breath, no one would answer questions like why we breathe...

(Lavender, interview, 06/08/2012)

Among observed lessons, Chinese words, phrases or sentences and culture construct the main body of these beginning Mandarin teachers’ teaching content. The discussion above has covered culture instruction. This section focuses on Chinese language. The teachers’ practical knowledge towards teaching pronunciation, characters and grammatical structures are explored.

4.2.1 Teaching Chinese pronunciations

4.2.1.1 Pinyin as a learnable tool

Chinese Pinyin is the Romanization system approved by Chinese government in 1958. It has twenty-six Roman alphabet letters and shares a lot of similarities with English. Due to its alphabetic feature, these beginning teachers share the belief that Pinyin is an effective tool for Australian students’ Mandarin learning.

In my view, Pinyin is just the access to make Mandarin learnable, at least in the terms of teaching students how to pronounce, Pinyin is the way.

(Kelly, interview, 17/08/2012)

It was found that all the beginning Mandarin teachers presented Pinyin during the teacher-researchers’ observation. Such great sensitivity and familiarity to alphabetic letters motivates the students to learn new knowledge. Its employment engages these students successfully. Here is a description to illustrate the impact of this application on the students’ learning engagement:

... Catherine began to teach the word “羊 (yáng, sheep)”. As soon as the Power Point was showed, many students started attempting to pronounce the word on their own according to the Pinyin “yáng” on the screen, “Yon?” “Young?” Although not exactly the same, but they were quite close...They were looking at the Catherine, trying different possible ways to spell and seeking for the confirmation from the teacher...
It could be clearly seen that the students made positive and immediate reaction towards the Pinyin while learning Chinese words. They were attracted by the word on the PowerPoint. They were making efforts to read and spell the new word by themselves and what's more, they were not afraid of making mistakes. These learners discovered the similarities between English and Chinese pronunciation and were trying to apply the pronunciation rules in English to their learning of Chinese pronunciation. Making the links between the prior knowledge in English pronunciation and new knowledge in Chinese sound system is one of the indicators of the students’ cognitive engagement.

However, this understanding did not come to the teachers naturally, but was developed gradually through their teaching practice. Due to the similarities between Pinyin and English, some teachers are worried that the differences of the two systems may exert extra memory load for the learners who are still learning English spelling:

> You know the situation in my two schools. I taught in the school A firstly and then began teaching in school B. Students in school A were learning Pinyin. But it didn't mean they were able to read them very well. On the contrary, they were confused by it. So when I had a new school to teach, I didn't intend to teach Pinyin, but just planned to present Chinese character as the only form...

(Kelly, interview, 17/08/2012)

From the teaching experience in school A, Kelly found that the students were prone to mix the Chinese Pinyin with English spelling rules because of the similarities of letters shared by these two systems. Kelly has developed an understanding for Pinyin learning as confusion for English-native speakers. With such awareness, Kelly decided to prepare her presenting material with Chinese characters only. However, it didn’t work well as expected.

> So when teaching the content of “我叫（wǒ jiào, I’m called…）, I didn’t present the Pinyin. This lesson was given as a trial lesson in front of
Eva (a DEC trainer). Eva asked me directly that why there was no Pinyin. She said the characters you wrote were very beautiful, but made no sense to me. At that time, I thought if I pointed to this character and told students it was pronounced as wŏ, students were able to make a schematic connection between this pronunciation and this character after hundreds of my repetition. This idea was from some research literature I read. But actually they couldn’t …

(Kelly, interview, 17/08/2012)

As a beginning Mandarin teacher, Kelly assumed that presenting characters could enable the students to make associations between the pronunciation and the meaning of the Chinese words. However, these characters seemed to be nothing meaningful but some strange unfamiliar symbols to these western learners. In the trial lesson, from the perspective of a western learner, the DEC trainer also questioned the missing of the Pinyin and believed Pinyin instead of Chinese characters could make more sense to her while learning Mandarin. For these alphabetic-language speakers, the Romanized Pinyin system assists them to transfer the foreign language into something readable and understandable. It encourages them to establish links between what they knew and what they are going to learn. Their sensitivity towards Romanized letters is much higher than expected. Similarly, the teacher-researcher herself recorded one related event in her self-reflection journals:

…One page of today’s PPT was mistaken. The sentence should be 我爱妹妹 (wŏ ài mèi mèi, I love little sister), the characters typed into the computer were correct, however, the Pinyin was accidentally typed as “wŏ ài jiē jiē” (I love big sister)…I didn’t notice that when I showed them the page and said the sentence “我爱妹妹” (wŏ ài mèi mèi) directly. To my big surprise, a girl noticed that immediately and called out “this is not 妹妹 (mèi mèi, little sister)” … I was so embarrassed and astonished! I always thought there was no big difference whether the Pinyin was presented or not, but actually there was! They were actually reading, spelling and thinking!! For me, characters count, while for them, these letters count!

(Self-reflection Journal, 05/09/2012)

This self-reflection suggests how the teacher-researcher develops her understanding of the impact of Pinyin on Australian young learners through her practice. For this
teacher-researcher, a native Mandarin speaker, characters are the symbols that carry the meanings but Pinyin is not. On the contrary, Pinyin is something that matters for these Australian students. It could be seen from the description above that students were involved into learning using Pinyin system. Based on this tool, they were able to actively process the received information by themselves instead of passively being stuffed.

Although Pinyin is rarely used in Chinese daily life, it is the first thing to learn Chinese for Chinese kids in primary schools. The beginning Mandarin teachers in ROSETE Group regard it as a useful instrument to make Chinese more learnable with progressive knowledge development. Involving this readable Romanized system as teaching material makes the language visual, familiar and meaningful for young Australian learners. It profitably eases the students’ anxiety and frustration they are facing during their Mandarin learning.

4.2.1.2 The tones of the Mandarin language

Tone is an indispensable element in Mandarin for its lexical significance (Orton, 2008). Four tones are characterized individually: first tone "—" is the “high-level tone”; second tone "/ " is the “high rising tone”; the third one "\" is the “falling-rising tone” and the fourth tone "\" is “the falling tone”. It could be seen that different pitches are the basic features to identify the tonal differences. Even containing with same syllables, each word with different tones could result in carrying completely different meaning.

Unlike alphabetic Pinyin system, the four tones with corresponding marks are entirely unfamiliar to Australian students (Orton, 2008). The beginning Mandarin teachers in this research found it challenging for the school students to master them. However, they also believe that it is vital to address the tone learning in the Mandarin class. Here is a piece of data about the teachers’ practice with tones:
When asked how to say “stop” in Mandarin, a student pronounced it 听 (tīng; listen) with the first tone instead of the correct one 停 (tíng; stop) with the second tone... The teacher asked the whole class which tone was 听 (tīng; listen)? ... She emphasized that 停 (tíng; stop) was in the second tone and asked students to repeat it after her ...

(Lavender, Observation1, 23/10/2012)

The teacher revealed her high attention on the tones. When the student pronounced it wrongly, she didn’t simply correct her. She guided the students to think about the tones to realize the differences of the tones on their own. Repetitive practice was also conducted during the learning. However, no obvious indicators of students’ engagement were identified through the observation. She thought tonal practice was a key obstacle for students’ learning:

... I find the biggest problem in this class is not they are not able to pronounce words. You could see that they could guess most of them [the pronunciations of the words]. So the biggest problem is the issue of tones. Actually this 停 (tíng; stop) was a good example; they could easily pronounce it when they saw its Pinyin. They could pronounce it without my teaching, but they had trouble in tones...

(Lavender, post-observation interview 1, 23/10/2012)

Lavender repetitively claimed that the tone was the “biggest problem”. Based on her practical experience, she detected students’ learning difficulty in tones. The teacher’s instruction and assistance in the students’ practice of tones was considered as vital in their Mandarin learning.

Besides observations on students’ learning, the beginning Mandarin teacher developed her knowledge of teaching tones through the interaction with other local teachers. For example, Kelly shared an approach to teach tones she learned from a local teacher in her first few days of teaching:

She imaged tones as four sections of car driving. In the first section, the road was flat. It was first tone which was very flat and sounded like a long flat “cheeeeeeese”. The second section was steep. It was the
second tone which sounded like “what?” with big surprise. Then there was a big deeper, which was the third one. It sounded like when you went home very late being very hungry and calling your mum “muuuuum” with a falling-rising tone. Then the car came down, and it was the fourth tone which sounded like a quick and strong “stop!”

(Kelly, interview, 17/08/2012)

The local teacher’s explanation of tones profoundly affected on Kelly, the beginning Mandarin teacher’s knowledge development:

As native speakers, we take many things for granted. We have been speaking a language with tones since we were born. But the concept is different for these English speakers. When they know the syllable “ma” can turn into four words with completely different meanings, they find it unbelievable. But as a native speaker of this language, you will never realize it. Therefore, I never regarded tone as a special thing that I need to address to my students…

(Kelly, interview, 17/08/2012)

The shift of the teacher's understanding of tone teaching can be traced. Through interaction with the local teachers and students, this Mandarin teacher was encouraged to fill up the conceptual gap between the native Chinese speakers and the non-native learners. The role as a native speaker could be a double sword. The inherent habit of language usage is easily led into ignorance of the nature of the subject matter. The perspective of non-native Chinese speakers including both the local teachers and the students provides a valuable opportunity for the Mandarin teacher to reveal these blind points as well as to develop a more appropriate contextual-based knowledge. This refines teachers’ value of tone knowledge as part of the subject matter significantly and promotes their teaching practice.

As a result, tonal elements in daily life are discovered to make this concept more common and acquainted for students. Here is an example of one of the Mandarin teachers employing musical sounds to instruct the students’ tone learning:

...the teacher asked students “Let's sing the tones”. Students just like sang the songs and pronounced the tones with syllables “la”: lā lā lā
lā...they devoted themselves into practice happily. Their voices were much louder than earlier repetition. Many of them were still repeating by themselves when the whole class practice finished...

(Lavender, observation1, 23/10/2012)

Lavender recalled her thought of this practice as follows:

... I just taught this in the last lesson...I mentioned the tone issue before. I told them all the key points, like for the first tone it was high pitch but flat. I used the hand gesture and asked them to practice with me, but they never memorized it at all. One day I saw a way to identify the first tone with musical language “la on the internet, I modified it. Actually lā là là là were in the same form of the practice of ā á ā à, I just tried to find a syllable which they would be willing to open their mouth to practice. “La” is used for voice training in music. Many kids today love singing. They love things related with music...Actually the music and tone are the same. They are all sounds with changes in voice...

(Lavender, interview after the observation1, 23/10/2012)

An enhancement of the students’ engagement was noticed during the teacher-researcher’s observation. The students were much more enthusiastic in practicing the tones after the teacher used music language to explain the nature of the tones. As the teacher mentioned, it was a newly taught content without frequent revision. However, the students showed good memory of it and were able to utter it as soon as asked. It could be suggested that learning Chinese tones compared to music left the students deep impression.

It could be seen that the teacher has experienced an exploration stage for the appropriate approach to teaching tones to Australian learners. The teacher's expectations as well as her worry are clearly noted. She employed a more traditional way of explaining the key points and using gestures in her earlier teaching practice. But it was not effective. A connection was suggested between students' unwillingness and their unsatisfied learning outcome. Emotional refusal impacted students' learning and memorizing considerately (Harmer, 2007). As a result, the tension between the tonal instructions with the students' negative affect needs to be resolved.
The musical learning approach gave an external supplement, stimulating the teacher to look into the essence of the tone as the "changing voice" instead of a special linguistic term. This fresh perspective constitutes the possible base for positive transfer from traditional practice of drilling four tones one by one into an innovative method with musical elements. The teacher's verbal usage of "sing" is also a demonstration of her consideration of the content in a different way. For the students, tones are interesting, familiar and prevalent in daily life rather than confusing and boring part of the Mandarin. It substantially lessens the unfamiliarity of the content for the students and enhances the possibility to engage them behaviorally, emotionally and cognitively. This shift of understanding of the learning content is the result of the teacher's knowledge of students' interest and the teacher's reflection of prior practice, relying on the supplement of external sources. Knowledgeable teachers are not those who know all the professional terms, but who can make these terms understandable in most common words (Shulman, 1986). Abandoning the native and "professional" viewpoint and developing “ignorance” of being a learner, the teacher gains more useful student-centered content knowledge and more engaging teaching practice.

Compared with the above musical approach, using gestures is more frequently observed during the conduction of this study. It is consistent with Orton (2008)'s claim that "kinetic support" is the most popular method to teach tones by MFL teachers. Here is an example of a Mandarin teacher while teaching the word 大 (dà, big):

…a student said “大（dà）” with correct pronunciation but in a rising tone. He showed his hand and did a swift cutting gesture from top to the bottom, saying "It's a falling tone. Imagine you are slashing something. Let's say it together. Use your hand." Students were immediately activated. They repeated after the teacher with quite a big voice 大（dà）! 大（dà）! At the same time, they were all using their hand acting like that they were slashing something as told.

(Cameron, observation 1, 21/08/2012)
The teacher identified the inaccuracy in the student’s tone and corrected him. He applied hand gesture to facilitate his modeling and encouraged the whole class to copy his body language. It stimulated all the students’ willingness to practice. Their loud voice and enthusiasm of doing the action revealed their emotional engagement. Moreover, the description of the movement as “slashing” offered a vivid idea for students to visualize the fourth tone in their cognition.

The tones and body movements are unconsciously connected. For instance, people are more prone to rise their eyebrow when feeling surprise or asking questions while strong hand gestures are often made when an argument is addressed. Due to exposure to tones for years, Mandarin speakers have developed habitual ability and sensitivity of tonal characteristics. But this is not the case for English-speaking learners. When told as "falling tone", they could not get the idea instantly and pronounce it as expected. However, it is easier for them to imagine this "falling" as "slashing" with a quick and strong movement from up to down. The gesture and the vivid clarification visualize the fourth tone with behavioral and conceptual connection. It assists students' understanding and stimulates their passion for learning.

4.2.2 Teaching Chinese Character

There is always a controversial topic whether there is a need for Australian young learners to learn characters (Orton, 2008). Within the ROSETE program, it is found that all the beginning Mandarin teachers in this research have taught characters. To those native Chinese speakers, the significance of characters in Chinese language learning is undoubted. Compared with tones, these teachers have realized its great challenge to Australian students much earlier due to its sharp distinction from alphabetic written system. Therefore, they have attempted to establish a sense of learnability among students towards characters. One popular practice is coloring characters:
After reviewing the six words of drinks, Miya handed out worksheets with pictures of coffee and characters of “咖啡 (kā fēi, coffee)” to color-in. She asked students to follow the arrows which showed the sequence of strokes. Students loved coloring. All of them devoted themselves into coloring, but few people followed the arrows. Miya also encouraged kids who finished quickly to copy the characters on their own...

(Miya, observation 2, 31/10/2012)

Miya’s class could be found high occupied with character coloring behaviorally and emotionally, although it was hard to tell whether students were engaged with the character practice or the coloring only. A tension between the teacher's desire of teaching characters and her hesitation due to its difficulty was revealed from the teacher's practice. She did not instruct the two characters as an independent content, but involved it through the coloring material which was always a fancy for young learners. At the same time, she demonstrated her emphasis on strokes and efforts to stimulate students' initiative practice.

This tension was clarified from her understanding of character teaching as well:

I did such practice every fortnight. I just hope they could be familiar with the style of characters during coloring. In a lesson two week ago, I asked them to copy the process of how characters "水 (shuǐ)" and "果 (guǒ)" evolved. I wanted them to get an impression that characters were not hard and that they were developed from pictures. They could also get a better knowledge on that [character]. For today, 咖啡 (kā fēi) is a kind of drink. Both of these two characters contain mouth-radical. When they were writing, some of the kids found out this same part. Kids can know some information and knowledge about character from this practice. They would find that it is not hard, but learnable...Character recognition is an absolute necessity. When students learn further, they should be definitely taught how to write...

(Miya, post-observation interview2, 31/10/2012)

Two main underlying purposes for this design could be concluded. Firstly, teacher attempted to infiltrate the knowledge of characters into the students' minds naturally through reproduction or pure coloring. In the teacher’s lesson plan, individual words
were selected purposely to demonstrate different aspects of characters. As pictographic characters, “水 (shuǐ)” and “果 (guǒ)” were developed from the earliest shapes of the real objects of water and the fruit tree. The second aim the teacher built in her lesson was to enhance the students' confidence in learning characters for their future study. The teacher was worried that the students would found it hard to learn. This fear drove her to teach characters writing in detail. These two purposes are related to the increasing knowledge of characters the teacher has and a belief that this strategy would enhance students' sense of learnability of Mandarin. They are in line with the teacher's high value of characters in Mandarin learning as a "necessity".

To develop a sense of learnability, these beginning Mandarin teachers also try to provide meaningful connections between the meaning and the writing structure of characters to facilitate students' learning. As Miya illustrated her way to teach the character “水 (shuǐ)” and “果 (guǒ)” through connection with shapes of real objects, such visual pedagogy through pictures or real objects is another widely-applied method among these Mandarin teachers. Here is part of teacher-researcher's self-reflection of teaching the character "果 (guǒ)":

I tried to make it closer to the fruit tree as the picture I presented. When I drew "田" on the tree, I told students that they looked like fruits on the tree. However, students were all calling out when I finished the "田", "a window!" "Miss, it looks like a window!" Of course! Window! I found I just restricted myself with the fruits on the tree and didn't think about other possibility! I accepted this understanding immediately saying "Yes, the window! We are looking out of the window and there is a big apple tree! Let's go to pick apples!" Students all laughed. "I love apple!" "I picked orange with my dad!"...I asked students to show their writing fingers and draw in the air with me. I asked what the top part. "Window!" "A window!" Students answered loudly and quickly! I praised them "Very good! Draw a square with a cross in it! It's a window!" All the students were drawing so carefully and happily!

(Self-reflection Journal, 03/04/2012)

The original meaning of "果 (guǒ)" is the fruit on the tree. Its pictographic
characteristics encouraged the teacher-researcher to visualize the symbol as a fruit tree. However, the explanation of "田" as "fruits" was not fully accepted by the students. Instead, they were involved cognitively into imagination of the shape on their own. It could also be seen during the practice session that the students created the image of the character on their own, which was in accord to cognitive engagement. However, the meaningfulness attempted to achieve by the teacher is not the same "meaningfulness" for the learners. The stereotypic understanding of the character restricted the teacher's construction of content pedagogical knowledge. It facilitates the successful knowledge transfer through understandable content demonstration. Therefore, knowledge of the teaching content is a dynamic body with constant interaction with context and learners, rather than a steady knowledge base from L1 teachers' view alone. Australian students' voice and knowledge contribute to these beginning Mandarin teachers' knowledge development.

4.2.3 Teaching grammatical structures of Chinese words

The third part is about the Mandarin teachers' exploration of teaching grammatical structures of words. This includes word-building and syntax. Here the instruction provided by the teachers focuses on the meaning explanation rather than the pronunciation of words. It is found that the traditional translation approach does not lead to disengagement completely. On the contrary, the teachers' clarifications of individual components of each word engage students cognitively:

...next fruit was 草莓 (cǎo méi, strawberry), I asked students "where are strawberries growing on? Tree? " "No!" "Ground!" "So can you have a guess what does "草" means?" "Ground?" "Very close, it means the grass on the ground..." "Oh, that's grassberry!" "Yeah, grassberry! 莓 (méi, berry) means berry. So can you have a guess how to say blueberry in Mandarin? Do you remember how to say blue?" "蓝色莓 (lán sè méi)!" "蓝色莓 (lán sè méi)! They can construct the words by themselves! "Excellent! Just take the first word!" "莓! (méi, blueberry)" "莓 (méi, blueberry)!" "我爱莓 (I love blueberry)!" Students kept calling out repeatedly. "What about blackberry?" "黑莓 (hēi méi, blackberry)!" "黑莓 (hēi méi,
blackberry)! "They responded more quickly and correctly this time! "Miss, 绿莓 (lǜ méi, greenberry)!" "红莓 (hóng méi, redberry)!" They were so excited about it and kept making words with what they've learned on colors no matter whether such green berry exist or not...

(Self-reflection Journal, 26/03/2012)

It is shown that the students devoted themselves with high engagement into the word learning. The detailed explanation of what single word meant cast light on how the word built with a suffix "莓 (méi; berry)". This knowledge of word formation in Chinese language helped the students to line Chinese words with their English counterparts. It made a more deep impression in students' mind and assisted their memory with a meaningful interpretation instead of rote learning. More importantly, the teacher-researcher’s linguistic knowledge interplayed with the students' prior knowledge of Mandarin words and their knowledge of English language. Such linguistic knowledge the teacher had not only facilitated her students' learning cognitively, it considerably enhanced the students' confidence and sense of achievement in Mandarin learning. Therefore, explaining word is beyond the simple translation, but makes understandable meaningful illustration of the specific elements of each word and inner correlation between them. The "understandability" of the Chinese word here is achieved based on the students' knowledge of word construction in English and prior knowledge of Mandarin words.

However, when dealing with grammatical difference between Chinese and English, the students struggled at cognitive level. Lavender shared a story given by a member of a previous ROSETE group when talking about explaining Chinese word order:

...take the word order for an example, actually we could not tell them[students] how each sentence is ordered, they would ask you why you put it in this way...a teacher in previous group taught “祝你生日快乐 (zhù nǐ shēng rì kuài lè, Happy birthday!)” . She explained by translating word by word that 祝(zhù) means wish, 你(nǐ) means you, 生日(shēng rì) means birthday and 快乐(kuài lè) means happy. A student then asked her why you Chinese say it in this way, but not say "快乐(kuài lè, happy) 生日(shēng rì, birthday)" like English...Then she asked back why did you say "happy birthday" instead of other ways...If
I was in that situation, I had no idea how to answer it at all...

(Lavender, interview, 06/08/2012)

There is a Chinese saying "他山之石，可以攻玉 (tā shān zhī shí , kě yī gōng yù )" which could be literally translated as stones from other hills may serve to polish the jade. It is always used as a metaphor for advice from others which could assist in overcoming one's own shortcomings. Experiences and sources are shared between different ROSETE groups and passed down to the new beginning teachers. This assists these new beginning teachers to learn from others and develop more suitable knowledge for their teaching. The conceptual conflict was showed with the student's direct rejection to the "Chinese way". In the story, the teacher attempted to solve the tension by encouraging the student to think from an opposite standpoint. She didn't try to give an answer with grammatical knowledge as a native speaker or ignored the question, but provided the student an across-linguistic perspective as a bilingual teacher. She inspired the students to explore and construct their knowledge of Mandarin language through removing their reluctance to accept the difference and engaging their thinking. Learning from the previous teacher, Lavender taught the grammar through comparison and connection with students' prior knowledge:

For example “你是谁 (nǐ shì shuí , who are you)”, you can make a comparison with its English translation. I told students that many things in Mandarin and English were opposite. For sentence "who are you", I asked students who could tell me how to say it in Chinese word order if you were Chinese. Because they [students] already learned the word "你 (nǐ, you)", "是 (shì, is)", and only "谁 (shuí, who)" was the new word at that lesson. Many students answered correctly with the opposite word order...

(Lavender, interview, 06/08/2012)

Instead of providing the sentence straight away, the teacher provided a hint by addressing the differences between Mandarin and English expressions. The students were stimulated to utilize this difference as a key for problem solving. Although the teacher did not mention much about the students' response, the students' cognitive engagement could be seen according to their correct answers. This can be explained
that problems can be employed “to uncover the knowledge construction process involved in learning” (Yeigh, 2008, 3). Hence, exploratory teaching practice used by the Mandarin teachers engages students' recognition and understanding of linguistic difference effectively.

In conclusion, the impact of the beginning Mandarin teachers’ content pedagogical knowledge on their students’ learning is illustrated from three main aspects of content: teaching pronunciations, teaching characters and teaching linguistic structures of Mandarin. Although these beginning teachers are Mandarin native speakers, their content knowledge of teaching is still in a process of development and reconstruction through interaction between them and the local teachers, their students and their peers in Australian school context. This echoes the emphasis by Wang (2011) on MFL teachers' specific pedagogical knowledge in teaching Mandarin even for experienced native teachers. From the analysis of the observations, interviews and the teacher-researcher’s self-reflection journals, these teachers’ strategy of engaging students in learning can be summarized as "求同存异 (qiú tóng cún yì)" (求(qiú) means to seek; 同 (tóng) means similarities; 存 (cún) means to maintain; (异)means differences). This Chinese idiom contains two way dimensions. The first dimension is to put aside minor differences so as to highlight the common ground existing in these two languages. The teachers identify the similarities between the Mandarin elements and their English counterparts. Similarities such as the alphabetic Pinyin system, tonal pronunciations and similar grammatical structures are all employed in the Mandarin teaching practice. This proves to be useful tool to make Mandarin learnable. The second is to employ the common grounds to serve the differences between languages. This underlines the teachers' emphasis on the foreignness of "Mandarin". Illustrating the differences promoted the students' high order of thinking to "differentiate, critique, and judge the information" (Yeigh, 2008, 3). However this could only be achieved through the teachers’ using their prior content of Chinese and English language.
4.3 Conclusion

This chapter reports the first category generalized from data, the knowledge of subject matter. Within the case of the beginning Mandarin teachers in ROSETE program, it focuses on the teachers' knowledge of MFL as a subject matter. Two sections are included to illustrate the impact of the teachers' content knowledge on the students' engagement in Australian primary schools. The first section is on knowledge revealed through teachers' determination of teaching content and general understanding of MFL learning. The teachers' knowledge in terms of the content difficulty and connectivity within and across topics, the teachers' knowledge function of communicative competence and intercultural learning, promotes the teachers to provide more meaningful and engaging teaching content. The second section explores the teachers' content knowledge through their specific content pedagogy. The data show that the Mandarin teachers have gained good knowledge through teaching pronunciations, Chinese characters and grammatical structures in Mandarin class. It is found that the teachers' content knowledge is continuously developed and reconstructed through active interaction with their students, local teachers and their peers. A good knowledge of similarities and differences between English and Chinese language based on such interaction enables the teachers to illustrate the content in more understandable and learnable way. However, it is also noted that the overemphasis on "professional" content knowledge a Mandarin native speaker has may lead to student disengagement. The next chapter focuses on the knowledge the teachers had or gained of their Australian primary students.
CHAPTER FIVE

KNOWLEDGE OF AUSTRALIAN PRIMARY STUDENTS

5.0 Introduction

Since this case focuses on the beginning Mandarin teachers’ experience in primary schools, primary students compose the body of the learning groups. Great contrast between primary students’ learning in Australia and in China has been made by the teachers.

In China, teachers don't need to "beg" students to learn, but here we have to "beg" students to learn. Learning in China involves social motivations like "I want to enter into a certain school". But learning here put more emphasis on individual well-being, on personal happiness, on personal willingness. Because of this cultural difference, you have to concern their own culture...So now I think teachers like guider; you have to guide students to learn, or to stimulate them to learn...

(Lavender, interview, 06/08/2012)

Unlike Chinese students whose learning is more driven by external motivation, Australian primary students are more self-centered and interest-oriented. This distinction constitutes different classroom learning culture and requires more student-centered teaching approaches.

This chapter focuses on beginning Mandarin teachers' knowledge of Australian primary students as well as student-oriented pedagogical knowledge demonstrated through their practice. These two domains of knowledge intertwist and constitute these teachers' classroom practice. It is found students are more engaged when teachers make efforts to ease their anxiety in foreign language learning, to establish an entertaining learning environment, to cater to their diversity and to value their contribution to Mandarin learning. These four themes are discussed individually in
this chapter with evidence from the database.

5.1 Easing the L2 unsafety and foreignness

Students' emotional unsafety as L2 learners is frequently mentioned by the teachers. This unsafety is mainly due to the exoticism of the Mandarin language. Teachers demonstrate their consideration of students’ unsafety towards Mandarin. For example, when Frank explained his character teaching method through separating strokes, he reflected his knowledge of students’ standpoint:

Because when I see an Arabian character, I have no idea what I am looking at. It is same for them. When they see this Chinese character, they do not know what this messy thing is at all. But if I divide it into different parts, like parts of a complicated machine, then put them back together. So when they are looking at this character again, they would have some idea of how it is written part by part…

(Frank, post-observation interview 2, 30/10/2012)

Frank’s prior experience of reading foreign language characters poses his essential knowledge basis of Australian students as L2 learners. He puts himself into students’ shoes and thinks as a Mandarin learner. It enables him to have an appropriate understanding on how students feel when learning this exotic Chinese symbol. Moreover, this understanding encourages him to simplify the teaching content in order to ease their “foreignness” towards the learning content. It suggests positive interaction between the teacher’s knowledge of MFL as subject and that of Australian primary students.

Besides lowering the difficulty of the teaching content to remove the foreign language's exoticism, giving reward is found another common way to eliminate students’ sense of unsafety in Mandarin lessons due to its foreignness. For example, in one observed class, the teacher was noted offering stickers as material rewards to every student who answered the question properly.
The teacher told the students that if they were able to say the word with correct pinyin and tones, they could get two stickers. If they said it in correct pinyin, they could also get one sticker. After hearing this, many students handed up or were looking up in their notebook...most students just got one sticker because their tones were not that accurate. But they all were very pleased when they got the sticker. They quickly stuck it on their notebook happily and showed them to their partners.

(Lavender, observation1, 23/10/2012)

It could be seen that stickers provided an effective way to promote students' interest and initiatives. Students held high passion towards stickers. This reward in a general way encouraged their participation significantly. Students were making cognitive responses to the question with self-reviewing. The Mandarin teacher Lavender explained her reason of giving rewards with consideration of students' emotional needs:

...Because students here really need encouragement. When I am teaching, some students just don't want to answer my question even though some kids actually are really good. They feel threatened by what I am teaching, because they had no idea about it at all. Just like when I was in a foreign language classroom with nothing I was familiar, I would not say the answer without one hundred percentage. It is the feeling shared by most of the students here that they will not say without great sureness. So I need to let them know that they are good no matter what answers they give. No matter what they say, they could get the sticker anyway...

(Lavender, post-observation interview1, 23/10/2012)

The teacher put herself in students' situation and pictured L2 learning as "threatening" and "unfamiliar". This could be described as "将心比心 (jiāng xīn bǐ xīn)" in Chinese idiom which literally means feeling others' heart with one's own heart. As a speaker of EFL, Lavender herself has a good understanding of "L2 learners" who need strong demand for encouragement and sense of belonging. Therefore, the teacher tries to ease such unsafety with high appreciation and value for students' every effort in Mandarin learning. The foreignness in the learning is attached to high concern by the teacher. It is not triggered only by the language differences, but also the "foreignness" brought in by the foreign teachers. Therefore,
besides providing an effective way to make the Mandarin learnable and familiar, extinct rewards like stickers enable foreign teachers to access students' world and establish positive interaction.

Understanding L2 students' unsafety in learning assists teachers to explore L2 learners' nature of learning. This guides the teachers to offer more scaffolding and support so as to establish a safer learning environment to students. The following is how a teacher's activity design eased students' unsafety and enhanced their engagement:

...I asked if anyone would like to perform this song for us? Though smiling at me, all the students shook their heads and no one handed up...That was so embarrassed! I tried to calm myself and said you could sing in a group. Hearing this, some kids expressed their excitement immediately and started encouraging their friends to sing with them together...Seeing someone participate, more and more kids handed up. After picking about 10 students, I asked other to put hands down. These little singers were all a little bit shy at the beginning, but soon their voice became much louder. The rest of students who were sitting were singing and doing the gestures as well...Everyone seemed to be joyful. Some already had sung once kept asking me to allow them to sing again “We sang beautifully! Can we sing again?” “Miss, can I sing again in the next round?”...

(Self-reflection Journal, 13/03/2012)

A sharp change of students' behavior could be identified from the above description. At the beginning, all the students hesitated and were reluctant to participate. However, when the teacher-researcher informed the permission of group performance, desire and initiative among students were stimulated gradually through a chain reaction of peer encouragement. They demonstrated an impressive performance with increasing confidence and cognitively language output. Other students were not just sitting and watching but participating in another way inititively at the same time. This could be noted that in the earlier time students were not unable to do this, but unwilling to do that. Although in a favored musical form, students still could be guaranteed as feeling safe and comfortable.
While these negative affections were effectively eliminated through the group work. This situation occurred possibly because a close rapport had been built among students. As a result, practice in group enabled the students to feel more comfortable and confident in the foreign language learning through peer support and collective efforts. This proves that positive peer interaction could establish a more student-centered learning environment and weaken the role of teachers as a performance judge when the foreignness is brought in. Hence, making students feel safe and free from embarrassment through successful activity design could make a distinct influence on classroom atmosphere and students' learning engagement (Mullock, 2006).

But it is also believed that safety is not the only thing that matters. In one observed lesson, Kelly asked students to give instructions on their own after few repetitions. She recalled this practice with consideration about safety as well as challenge for L2 learners:

> In previous teaching I would not put this part at the beginning. There must be a review and a smart-board game, and then I would ask students to give instruction. But I thought it might be better for them to at least have a try...Actually the majority of students were able to do a good job. But it was true that I knew which students had a good grasp while who did not. I was quite clear about it. That Amy I picked, she was not a very quick learner. But she was very active, and I didn't want to disappoint her. So I gave her this opportunity and I had to assist her to say...So students can be challenged, we don't need to make them feel very safe...  

(Kelly, post-observation interview 2, 30/10/2012)

It is noted that the teacher is trying to challenge students in her teaching. She skipped usual practice session and came to the individual practice part directly. Nevertheless, she mentioned her interference at the same time. Intentional decisions were made on individual selection with good knowledge of students' learning ability. Most of the students picked were ensured that they were able to complete the learning task. The
teacher also mentioned about providing necessary scaffolding for students with relatively low learning ability. Hence, although the teacher claimed it was possible to challenge the learners by removing part of the safety, she still made every effort to make students feel capable and confident ultimately.

In summary, teachers' knowledge of Australian students as L2 learners promotes them to ease students' unsafety, scaffold their learning, and provide a more supportive L2 learning environment. This is consistent with one of the principles teachers shared in Chou's (2008) study to build supportive learning environment for students in TESOL. This principle is originated from teachers' knowledge of students. According to this principle, anxiety or frustration can be easily invited during foreign language learning without encouragement and a sense of achievement. The enhanced positive emotion stimulates students' behavioral and cognitive engagement and their Mandarin learning significantly.

5.2 Entertaining students' learning

When asked how to engage students in their Mandarin lessons, all the teacher participants mentioned words of *game* and *playful*. It is found that teachers' awareness of students as kids drives them to entertain students through classroom learning with knowledge of students' interest and nature.

5.2.1 Catering to students' interest

Great attention has been paid to students' interest by the beginning Mandarin teachers in the ROSETE Program. Knowing and applying elements that Australian primary students are interested in are found greatly engaging in MFL classes. These elements mainly include kid culture, technology and other visual and musical tasks relating to learning. The following is an example of how teacher-researcher utilized students' interest in cartoon characters in her practice:
...I showed some cartoon characters on the Power Point. Some were found on the internet, and some were given by previous volunteer Mandarin teachers. I was not quite sure about it, since I didn't know about these characters at all. But the students' reaction was so active...The first one was the sponge Bob. Apparently, they were very fond of this one. As soon as they saw it, they laughed and called out “Oh, sponge Bob! Sponge Bob!” ...

(Self-reflection journal, 06/05/2012)

Although the teacher-researcher didn't know what Australian young learners like exactly, the involvement of cartoon characters as part of "kid culture" into the Mandarin lesson boosted students' enthusiasm. This assisted students' behavioral and cognitive engagement in the later learning:

I asked students to listen to me how Sponge Bob introduced himself in Mandarin. I said the sentence twice "你好，我叫 Sponge Bob." They were looking at me and listened attentively. Then I changed to another character which was Thomas. Kids called out when they saw it again...I said the sentence again “你好，我叫 Thomas.” As for the third one, some kids already followed me by themselves when I was introducing Dora. More kids were following me to say the sentence with much louder voice when introducing the fourth character of Micky Mouse. When the last one Kongfu Panda was shown, students were very excited. Some boys tried to act in martial poses. I asked who could help Kongfu Panda introduce himself. Many students handed up and their answers were exactly correct!

(Self-reflection Journal, 06/05/2012)

The presentation with visual cartoon characters served a successful stimulus for students to be engaged in their learning. Based on highly emotional engagement, the students' attention was drawn to the language content provided immediately. With high concentration and enjoyment, the students were able to absorb the language heard cognitively.

Linking students' daily life interest to their Mandarin learning engaged students effectively. Firstly, teachers' sharing with students' interest removed the gap between
adult and young learners, which motivated teacher-student rapport. Secondly, the familiarity with the content eliminated students' anxiety and unsafety in the L2 classroom and established a more entertaining learning environment. More importantly, it provided self-related meaningfulness of learning significance to students, which stimulated students' cognitive engagement more directly. Therefore, teachers' knowledge of what students' interests plays an essential role in practice to engage students' learning.

Besides presentation material, students' interest is also applied through activity design. The following is an example of how teacher brought in technology-based game and successfully engaged students.

The teacher opened the software and there was a rabbit jumping among moon cakes. All the students were laughing when they saw the screen. They started asking “Are we going to play it?” "Can we play it?" When getting teachers' affirmative answer, they all cheered excitedly "Yeah! " "Yeah!" Only one kid said "This game is stupid!"...The teacher divided them into two groups and the group which won the highest score was the winner. Each player was asked to say the sentence learnt like "我想吃冰淇淋月饼 (wǒ xiǎng chī bīng qí lín yuè bǐng, I want to eat ice cream, moon cakes)". Many students volunteered to play it. Audience were focusing on the screen and cheered for their team players...The boy who said that the game was stupid handed up again after finishing his first play...

(Cameron, observation 3, 18/09/2012)

Extremely high engagement was stimulated during the game. Students demonstrated great excitement at the very beginning and took initiative to ask if they were allowed to play again. Although the target sentence was not simple structure, they were still willing to make efforts to say it actively and repeatedly. It could be seen that this game disguised the rote language practice as a more fun form. This not only took the advantage of students' interest, but also eliminated the boredom and hardness in L2 learning. This observation note was triangulated by the interview with Cameron:

It seems its effect is much better than other games, they all had fun
today...You know, kids in nowadays all love computer games, they all know things like iPhone and iPod...they are good at such things. Like today they all know how to play it by themselves...
(Cameron, post-observation interview 3, 18/09/2012)

Students' interest in high technology products was noticed by the teacher. His understanding of students' interest as internet generation in the current times drove him to combine this engaging element with mandarin teaching. He turned the Mandarin classroom into an entertaining and learning place for young learners. Students’ factors were contributed and emphasized which empowered students' learning with "discourse power" (Munns, 2007). Therefore, trying to enter students' world and know students' interest successfully engaged students in Mandarin classroom learning. In addition to understanding young learners as fans of cartoon and high technology, specific interests in Australian context were also catered by teachers:

...the teacher took a witch hat and a plastic stick. All the students became hilarious and were making all kinds of voice, Wow! Oh! All of them seemed to be excited about the coming activity. Some were asking what they were going to do...Teacher asked the students to give the instructions. The instructor was allowed to wear the hat and hold the stick. More than 2/3 students handed up and volunteered...students all laughed when the picked instructor put the hat on...All students except two were actively responding to the instructions given by touching their body parts...After repeating another two words, the teacher took up the stick again. Before saying anything, many students handed up immediately when they saw it...
(Kelly, observation 2, 30/10/2012)

Kelly recalled the reason for preparation of these Halloween materials:

...they are just for making relevance with the occasion. It is approaching Halloween now. You know, kids all love Halloween... (Laugh slightly)
(Kelly, post-observation interview 2, 30/10/2012)

Teachers’ application of Halloween materials provided an effective motivation for students' learning. Students' behavioral and emotional engagement was considerably enhanced through the application of attractive visual materials. They were highly
concentrated and more importantly, they held extreme positive attitude towards succeeding learning activity. Such high initiative and affective motivation were prerequisites for the cognitive language output of instructors. Moreover, attracting the interest of young learners within the Australian context compensated for the lack of knowledge the Mandarin teachers had of their students due to their limited time spent as volunteer teachers in schools. Such sharing of students' interest by teachers established an alike emotional and cultural base. In this situation, Mandarin class is not limited to Mandarin only, but is also connected to the outer world and the students themselves.

*Visualizing Mandarin learning*

As a language, whether language itself or the cultural elements underlying, it is abstract and vague for students to learn with merely oral narrative. What matters is the material that can destruct such abstractness and positively impact on students’ engagement in Mandarin lesson. It is found that among all the observation, teachers used flashcard, PowerPoint or Smart-board to bring a more colorful learning environment. Kelly described her idea about presenting materials during the interview:

> Then for the presentation, I usually would make a PowerPoint, (laugh), make a very beautiful PowerPoint (When she said "beautiful", she was drawing the word out long and put stress on it), with picture, character and pinyin. This is my way to present to the students...
> (Kelly, interview, 17/08/2012)

PowerPoint is the main presenting form in Kelly's teaching, including written language and the relating pictures of the words. It is noticed that she emphasized the word "好看 (hǎo kàn)" which could be translated as beautiful. This is the only adjective used describing her materials. Put it in another way, visual attraction is at least one of the prior criteria for her content presentation. The following is an extract demonstrating how vivid pictures are used to assist students’ understanding during the teacher-researchers’ lessons:
To review through PowerPoint, I selected many interesting pictures. Students were attached by these pictures and kept laughing. The picture for the word 嘴巴 (zuǐ bā, mouth) is one person pulling apart his mouths with hands. Many students also tried to do this with their own mouths. Suddenly I found if you want to pronounce the “ba” in the word “嘴巴 (zuǐ bā, mouth)” well, you do have to open the mouth widely like this! So I told them “open your mouths widely like him, it is exactly how to say mouth in Mandarin!” Students exerted themselves to open mouths as wide as possible like the man in the picture. The voice was quite loudly and the pronunciation of the word, especially “ba” was extremely authentic.

(Self-reflection Journal, 13/03/2012)

Pictures were initially introduced just for fun. However, when students tried to copy the action of the man in the picture, the previous linguistic knowledge held by the teacher-researcher as a native Mandarin-speaker led her to sense the connection between the sound and the action, or the shape of the mouth. Her practical knowledge was inspired by the students through the interaction in the class. So she enabled students to understand how to pronounce the word vividly and visually. In this case, pictures provided not only for fun in Mandarin class, but more importantly, they provided a learnable and efficient way to learn and memorize the word. Students were able to associate the pronunciation of the word with the action by themselves cognitively without difficulty. Although such link was discovered by chance, the practical knowledge brought about from this experience gave the teacher-researcher an awareness of the connection with linguistic difficulties in the preparation of teaching recourses and materials.

_Rhythmic Mandarin learning_

In addition to learning Mandarin through visual tools, rhythmic element is also found prevalent in Mandarin teaching. The volunteer Mandarin teachers understand young learners as music lovers.

Many kids today loving singing…there are a lot of kid loving music or music related stuff. I know many kids who went to opera house to perform, many kids went there…
With such knowledge, songs were applied by the teachers as hook to students’ interest in Mandarin lessons, especially whose melody was familiar to students. The following is an observational note of how the teacher used English song “twinkle twinkle little star” to engage students’ learning in Mandarin lesson:

…Then the teacher told students that “Today we will learn this song in Mandarin.” Some students were so excited and could not help themselves calling out “Yeah!” Students all started singing by themselves “Twinkle, twinkle, little star…” Then the teacher said “Before we learn the song, we will learn the words of the song, ok?” Again, many students yelled excitedly “oh, yeah!” “Yes!”…Although they were not that sure about pronunciation of some words, they all sang it with all their attention, including some who were “naughty” in previous learning sections. After singing, they laughed happily. Some students clapped for their own singing…

(Catherine, observation 3, 29/08/2012)

Students showed extreme excitement to the song learning as well as the Mandarin words included. Emotional engagement stimulated by the learning task of singing encouraged students to participate into the practice. Behavioral engagement could be identified through their full attention and involvement among all students. Moreover, new language knowledge was output during their practice which reinforced their memory in return. Successful completion with behavioral and cognitive contribution nurtured a sense of achievement and confidence in Mandarin learning, which retained their positive affection. Such cycle which began with emotional engagement to behavioral /cognitive engagement and again achieving emotional engagement brought into a virtuous cycle in Mandarin learning. Such virtuous impact was more profound than observed in the classroom. The following was part of field notes about meeting a student after the lesson:

We met three students waiting at the receptionist; one of them was Catherine’s student. She was singing the “twinkle twinkle little star” in Mandarin which was just taught! She sang so happily and added gestures by herself! Other two kids [later we knew they were her
brothers] all watched her singing happily and one tried to follow her. When she finished, they asked her to teach them how to sing it!

(Catherine, field note, 29/08/2012)

It could be seen that teacher’s application of music into the Mandarin learning not only enhanced students’ learning engagement in the classroom but also maintained it in a broader context.

In addition, teachers’ understanding of students as music lover is not restricted to melody. The employment of segmental rhythm is found engaging for students’ learning as well.

The teacher asked students to repeat the word “耳朵 (ěr duō, ear)” for three times in one set “耳朵耳朵耳朵 (ěr duō, ěr duō, ěr duō; ear, ear, ear)”. Students all repeated orderly and loudly, with bigger voice than previous. They were all smiling while repeating…many were murmuring the words for three times by themselves after the class repetition...

(Kelly, observation 2, 30/10/2012)

Unlike previous repetition, students found great fun in such form. They enjoyed the process and were willing to make effort into it. Autonomy of self-practicing was also shown among some students, which was one indicator for cognitive engagement (Rotgans & Schmidt, 2011). The thought underlying such transformation from traditional repetition was explained:

[Because] students loved rhythm…I once observed a lesson by local teachers in kindergarten. Actually they also added some rhythm when they were counting…For example, one, two, three, and four…they all had rhythms, with change of voice and speed…up and down...

(Kelly, post-observation interview 2, 30/10/2012)

Two elements were mentioned in the teacher’s narrative. One was her general knowledge about students’ fond of rhythm; another was her emphasis on applicability and validity of her teaching practice in local classrooms. The interacting with local field verified and consolidated her teaching strategy as well as her understanding of students.
5.2.2 Catering to students' learning characteristics

Paralleled by the attention paid to the students’ interest, teachers also demonstrated their attempts to cater to students' learning characteristics. Young learners are understood as more active and impatient. They tend to be bored and tired easily. Most of the teachers mentioned students' relatively short attention span during interviews. Such awareness leads them to diversify and vary their practice.

I will definitely think of a game to let students move, not just sitting there or listening to you. There is an absolute need for them to stand up and move around for a little while, so that their attention won't be distracted very much. Because the attention span for a person is limited. So you must need to allow them to move to attach their attention again, feeling it [learning activity] really fun. ...

(Kelly, Interview, 17/08/2012)

Unlike adult learners, the shortness of children’s learning attention could easily distract them from learning task and decrease their engagement. An awareness of such particular characteristic for primary students encouraged the teacher to avoid long-span learning period. But during the second observed lesson, such "absoluteness" was not realized. Except that some kids were asked to come to the front of the classroom to give instructions or conduct smart-board activity, most students were not given tasks to perform but sat on the floor for the entire lesson. This inconsistency suggests the gap between the beginning Mandarin teachers' practice and knowledge they claim.

In most observed lesson, such knowledge is demonstrated which motivated teachers to involve more diversity into their practice. The following is part of timetable in one observed lesson (see Table 5.1):

Table 5.1: Part of timetable in Frank's lesson

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:31-9:36</td>
<td>Activity 1: Image select (individual)</td>
</tr>
<tr>
<td>9:36-9:43</td>
<td>Activity 2: Which is missing game</td>
</tr>
<tr>
<td>9:43-9:47</td>
<td>Activity 3: Image select (in pair)</td>
</tr>
</tbody>
</table>

(Frank, observation 2, 30/10/2012)
It could be seen that the span for each activity is quite short for 5 minutes, 7 minutes and 4 minutes respectively. Frequent change of activities brings in high diversity and variety in Mandarin learning and reduces the possibility of student disengagement. In addition, the diversity within a single learning task is also pursued by these beginning Mandarin teachers to decrease potential passive learning and maintain high engagement. The following is a five minutes activity which demonstrates teachers' awareness of students' learning characteristics:

...when the teacher took out a softball and asked students to stand up. Students were excited and cheered slightly "Yes!" "Oh yes!" ...Students were asked to pass the ball to someone else in the classroom and say the phrase of "drink (v.)+ a drink" in either Mandarin or English for the one who get the ball to translate into another language...All the eyes of students followed the ball closely. Some were waving to their friends to pass the ball to them...After 1 minute, the teacher asked them to put one hand behind the back, so that they could pass the ball with only one hand...students were excited about the new rules, stretching one hand and ready for the catch...Most of them tried to give instruction in Mandarin...All students listened to the questions and answered carefully and happily...After 2 minutes, the teacher asked students to raise one foot, the remaining students were excited again. Some were saying "oh, this gonna be hard" but they all seemed to be very excited about it. All of them were stretching their arms and wanted to get the ball...

(Miya, observation1, 16/10/2012)

Evident engaging indicators were recorded among students. The usage of a softball immediately attracted students' attention and effectively retained their high passion throughout the activity. Most of them demonstrated strong willingness to participate in the activity and made efforts to get a chance to participate. This demonstrated their behavioral engagement. Furthermore, although there was no restrict requirement about the given instruction, it was found that most students chose the more challenging one in Mandarin rather than in English to save a trouble. They applied the newly learnt knowledge inititatively to demonstrate their learning outcomes. That was to say, students didn't enjoy it as a fun game only, but as a game in Mandarin lesson with behavioral, emotional and cognitive engagement. During the practice, the teacher changed the rules every one to two minutes to increase the challenge for
students. When these more interesting kinesthetic elements were involved, students' motivation was evidently boosted and maintained. In the post-observation interview, the teacher recalled her underlying thoughts as follows:

I don't know any kid who does not like to play. Even in the quietest class, kids all love to move around. Kids all like to play...and the Australian kids here don't like to repeat after you. In China, if you ask students to repeat and they would repeat after you again and again. But in here, it does not work like this...I saw kids playing such balls on the playground, passing or something. I thought they would like such form...the change could make the game more fun and challenging. Students would be bored if just throwing with each other all the time.

(Miya, post-observation interview 1, 16/10/2012)

She learnt from field experience about students’ interest on kinesthetic ball game and involved it into her teaching practice. This application of students’ interest effectively eased students’ reluctance towards rote learning and enhanced students’ engagement in language practice. What's more, she also demonstrated her high awareness about students' short attention span as well as the potential negative effect triggered by tedious repetition. Teachers' knowledge of students’ interest and characteristics inspired them to apply more entertaining learning activities to engage students.

She also realized that repetitive teaching practice were prone to disengage students. The following was an example of how the lack of diversity discouraged students:

I taught 11 colors altogether and asked exactly the same question during practice “Anyone in this class likes...?” Even I myself found it so boring! Just certain students handed up. Thanks for their cooperation! Or I would definitely be so embarrassed! Many students sitting in the back were lowering their hands and busy with their own things! I wanted to finish this class as soon as possible!

(Self-reflection Journal, 13/03/2012)

The exact same question pattern was asked for every time during the practice, which disengaged students. Such disengagement was prevalent among the students. They showed clearly task-off passivity with no willingness to practice the learning content.
Enervated emotion including tiredness and boredom was noted from the majority of the students. Even the teacher-researcher was tired of the monotonous replay and had no passion to continue. Failing to practice with diverse pedagogy triggered students' negative emotion and further learning disengagement.

To make a conclusion, teachers’ knowledge of students’ learning characteristics and interest interplay together and exert an essential significance on students through entertaining their Mandarin learning. Such knowledge is filtered from the general understanding of students as young learners and polished through teaching practice. Of course, entertaining students’ learning does not only make students feel happy and joyful, but also assists teachers’ understanding of Australian students in kid mode instead of from an adults’ perspective. This view enables the beginning Mandarin teachers to establish a more comfortable and suitable learning environment for students.

5.3 Varying students’ learning

Besides a general understanding of the students' interest and learning characteristics, these beginning Mandarin teachers' knowledge of the variation among learners also exerts dramatic impact on students' learning. The teachers’ understanding of group diversity as well as their concern of individual uniqueness is found evidently influential.

5.3.1 Negotiating with group diversity

Diversity among classes as well as within groups is mentioned by the teachers. It is found that different classes hold diverse characteristics. When Kelly was sharing one of her successful activities, she expressed her understanding of one class:

"...One of my stage 3 classes was not enthusiastic on Mandarin lesson before. But after playing this game, I found that they became happy to..."
learn Mandarin. I also found that students in this class loved playing games, (laugh), especially those allowing them to move. They were not quite interested in smart-board games, but were quite interested in "movable" game... [During the game] all the students [in this class] were able to answer my questions correctly and participated actively...

(Kelly, interview, 17/08/2012)

Teachers' awareness of diverse characteristics between groups is manifested in the above narrative. Within the interest-oriented pedagogy, group preferences to certain type of game are distinct. According to the above description, when the teacher designed more kinetic learning activities rather than "quiet" smart-board games, the students changed their usual attitude and were highly engaged. Their engagement was not only shown through their enthusiasm and active participation, but also through their accurate language output as well as creative acting with imagination.

Teaching is a process of trial and error. Practical experience assists teachers to accumulate knowledge of students’ group characteristics. This serves an indispensable base for more feasible and student-centered teaching practice for these Mandarin teachers in the future.

Such diversity on students' learning ability has become one most frequently mentioned element on students’ diversity by these volunteer teachers. Ability here is referred to whether students are able to master the learning content or complete the learning task. Different learning ability has different impact on students' engagement in their classroom activities.

...the teacher asked students to drag the pinyin and hanzi to the corresponding pictures...Students handed up quickly when they understood the instruction. The first student found the pinyin for coffee quickly and accurately. The second student was supposed to find the character for coffee. Compared with first round, only 3 students handed up. When the picked student went to the front of the board, she asked the teacher whether she could drag the pinyin for coke. Still not many students handed up in the third round. The teacher picked one student and said “you can choose what you know”. And then in the fourth round, more than 1/3 students handed up.

(Miya, observation 1, 16/10/2012)
Changes in the number of students who handed up were considered as an important indicator for different levels of students’ engagement. Students were less willing to participate especially during the second and third rounds and they showed lower initiative towards the task of finding the character for coffee than its pinyin. However the level of students' participation was regained after the third round. The only interference was teachers' on-spot change of her instruction to remove the requirement for certain task in order. Instant awareness of students’ reaction led to in-action reflection which assisted the teacher to fill in the gap between students’ need and her teaching practice. This provided students with more choices and suitable levels of content, which nurtured students’ higher confidence and higher initiatives. This was in line with Harmer’s (2007) suggestion that “teachers of young learners need to be especially alert and adaptive in their response to tasks and have to be able to adjust activities on the spot” (81).

This Mandarin teacher mentioned her change with consideration of different group needs in the interview:

… I find I change the rules of activities all the time. Actually I find that a designed rule works well in one class while not that well in another class. I have to consider the situation in different classes. Actually this is a better way.

(Miya, post-observation interview 1, 16/10/2012)

The changeability of teaching practice was addressed by the teacher. Learning differences among groups emerged during the teacher’s practice and serve as reference for teachers to make instantaneous adjustment for appropriate teaching. This suggests an attempt for a flexible pedagogy which puts students as priority and center of the learning. Its advantage has been recognized by the teacher during practice. Such understanding of pedagogy echoes a famous military words “兵无常势，水无常形 (bīng wú cháng shì, shuǐ wú cháng xíng)” by Sun Tzu in his “The art of war”. It literally means that “just as water retains no constant shape, so in
warfare there are no constant conditions”. Sun Tze believed that the flowing water shapes its course by the topography while the army wins the victory by their enemy. As for classroom teaching, teachers' successful practice relies on their understanding of the differences occurred in students' actual learning. Such practical reflection and adjustment not only fosters these teachers' student-centered pedagogical knowledge, but also accumulates their specific knowledge of students’ learning ability. This in turn provides the teachers with more appropriate understanding of content difficulty in certain context so as to constitute more practical content knowledge in their teaching.

It is found that the teachers with one and two years' teaching experience also concern the differences of learning ability within a group besides the variation among groups. For example, the one-year experience Lavender involved "dual standards" into her teaching practice based on her knowledge of students' different learning ability:

...The game should be easy so that students can understand it easily. Even for those who have not learnt it at all, they still could be involved and enjoy. Challenge is for some students who may otherwise find it too easy to play. So I will have different requests for them. For example a game could have many levels with different rewards...

(Lavender, interview, 06/08/2012)

An awareness of different competences among students was addressed in the above narrative. Teachers' pursuit for "easy but challenging" learning task was to accommodate students' learning ability. To avoid potential negative response because of inappropriate challenges, the volunteer Mandarin teacher diversified the task to cater to differences among students. She illustrated her thoughts by taking an activity as an example:

...At the beginning my task for students was to ask the price of the stuff in the picture using the question. But I found that not many students handed up. Many of them didn't dare to say. So I told them if you were not confident enough to say the sentence by yourself, you can just repeat after me. You also could get note [fake money]. But if you
wanted to challenge yourself to say the sentence by yourself, you would get more notes. This meant that those who wanted to challenge themselves could do a higher level, while those who didn't want could finish the task with low-level...

(Lavender, interview, 06/08/2012)

According to Lavender's narrative, there was a need to negotiate teacher's expectation with students' actual learning capacity. Most students' learning outcome did not reach prerequisite expectation, which led to their lack of confidence and initiative. This showed the gap within teachers' knowledge of students' learning ability which hindered most of students' involvement into the learning practice. Here the teacher made a simultaneous reflection on students' differences in learning. The prompt modification enabled the teachers to cater to different levels of students' learning ability rather than to decrease the difficulty of the content. In this way, the teacher was able to retain engagement with those who were competent to complete the task by themselves as well as to encourage those who were less competent. This provided a more adaptive learning environment for all the students. Compared with other two groups, the two-year experience teacher demonstrated a relatively developed knowledge of students' diverse learning ability in terms of teaching content while preparing his lessons:

...during the game, the teacher counted the time the students spent. He said "You have spent 四十四秒" with a mixture of English and Mandarin. About 5 to 6 students (Total class number: 16) were actively guessing the number "Thirty one?" "Oh, no, it's thirty two!" When their answers were confirmed, they were very happy.

(Frank, Observation2, 30/10/2012)

Active participation and interest towards the lesson were observed. About 1/3 of the students were more active that demonstrated high behavioral initiatives. This percentage fit one standard of "eager volunteering (>1/3 of the class) for “learners’ motivated behavior" in MOLT (Motivation Orientation of Language Teaching) classroom observation scheme by Guilloteaux and Dörnyei (2008,76). Such behavioral and emotional engagement was based on students' cognitively...
understanding of the language with recalling their prior Mandarin knowledge. Frank reflected on this practice as follows:

There are focal points and the difficult points in one lesson. In this lesson, “44 秒” should be regarded as a difficult point. [Because] not all the students could understand, just some students were able to understand. However, they still could have a thought about it...

(Frank, post-observation interview 2, 30/10/2012)

The teacher's evaluation of the content "44 秒" as a "difficult point" was generated from his consideration of his students' ability. However, when he found that it was beyond most of students' ability, he did not simply avoid this difficult content, but provided it as selective immersion without fixed requirements. This strategy offered students an opportunity to practice the content based on their learning level individually. For students with good grasp, recognizing their capacity to recall and understand the learnt Mandarin knowledge could enhance their confidence and sense of achievement towards Mandarin learning. This positive attitude may lead to further out-of-classroom engagement in Mandarin learning. While for those with lower ability, they could pick up the knowledge and fresh their memory without feeling nervous or embarrassed. Such alternative practice provided students more power to control their individual learning according to their ability. That encouraged students to explore and inquire the knowledge initiative (Taylor & Parsons, 2011).

5.3.2 Bringing in personal uniqueness

Apart from diversity mentioned above, the beginning Mandarin teachers pay great attention to differences among students as individuals. In their practice, they attempt to achieve general engagement in class by satisfying students' diverse needs. The following is an example of how a teacher's knowledge of students' diversity impact on her teaching practice and students' engagement:

...as for students who have grasped the knowledge, but they are too shy to express themselves. I usually encourage them. While for other students who are always disengaged, or with relatively lower learning
ability, I sometimes utilize stickers as extrinsic stimulus to engage them...Then mostly they all become willing to practice...

(Lavender, interview, 06/08/2012)

High awareness of students' individual diversity was expressed in the above narrative. Personal disposition or learning ability was taken into consideration when the students were reluctant to participate into learning tasks. These more individual and specific knowledge assisted the teacher to apply appropriate individual-oriented practice. This corresponds with a Chinese idiom "对症下药 (duì zhèng xià yào)", which literally means “suit the remedy to the case”. When students' fundamental needs are satisfied appropriately, it can be easier to ease their individual negative emotion and stimulate behavioral initiatives further. When focusing on students' general engagement, such awareness of individualism is expressed frequently by beginning Mandarin teachers through their individualized practice. The following is part of the teacher-researcher's self-reflection journal about an individual practice when she was teaching how to introduce oneself by saying “你好，我叫...（nǐ hǎo, wǒ jiào...; Hello, my name is...）”:

...I walked to one student stretching my hand. I introduced myself “你好，我叫Wenlu (nǐ hǎo, wǒ jiào Wenlu; Hello, my name is Wenlu)” to her and asked “Would you like to introduce your name to me? 你好，我叫...(nǐ hǎo, wǒ jiào...; Hello, my name is...)” The student got the idea quickly and responded to me “你好，我叫Amy”, shaking my hand. Other students got the idea as well although some of them were lack of assurance or hesitated to say the target language aloud. They found that it was quite funny about shaking hands with me. When I introduced my name, most of them were able to introduce their name on their own quickly. Other students were waiting quietly with some laughter but in high concentration. One student in a class was extremely shy. He buried his head in his knees and refused to say any single word. So I told him "I will come to you later." Then I moved on to the next group. When I finished all the students, that boy came to me initiatively saying "你好，我叫 Alex (Hello, my name is Alex)." After shaking hands, he said “Do it again, do it again” ...

(Self-reflection Journal, 25/07/2012)

It could be noted that the teacher-researcher demonstrated her concern on each
student by getting to know their names. The formal and adult way of shaking hands interested students greatly. Since students were aware that everyone would have a turn, their attention was dragged closely onto the activity flow which enhanced their behavioral engagement automatically. In terms of cognition, students were encouraged to understand the learning content and to provide response in target language with an interactive dialogue. In addition to the general response among the class, the teacher-researcher mentioned a student who demonstrated his increase of engagement. With different personality, he expressed his great reluctance to engage and a lack of initiative and efforts. However, his previous reluctance was replaced by great engagement with high initiative and enthusiasm, and correct language output. It implied that repetitive exposure to other students' performance and teachers' example reinforced his master of the content and enhanced his confidence. There was a sharp contrast between his previous and later performance. He may remain such reluctance and anxiety towards Mandarin learning if there were no such individualized practice and concern from the teacher. The teacher-researcher traced her practice to her prior experience in her high school education:

This inspiration was from my first lesson by a native English teacher from Australia. That lesson was so impressive! That teacher ran to the first student in the first row. He held out his hand saying "Hello, my name is Ben, what is your name?" Then he came to each of students one by one! Introduced himself to the students and asked all the students for their names one by one! I was so nervous and excited! After all this was my very first experience to speak English with an English-native speaker! Although there was only one sentence of self-introduction, I was still so nervous! Usually Chinese teachers would ask students to give self-introduction one by one, but it was more like a routine. This foreign teacher was unable to remember each name, but I felt so good.

(Self-reflection Journal, 25/07/2012)

The teacher-researcher's pedagogical knowledge of individualism was originated from her prior learning experience brought by her foreign language teacher. That was an entirely new teaching style which made profound influence on the teacher-researcher when she was a student in high school. The close personal
interaction between the foreign teacher and his students provided the teacher-researcher a personal experience with a native speaker in one of her English lessons. It is suggested that such individualized practice enabled the students to get personalized learning experience connecting the learning and the teacher with themselves personally and closely. Stronger student-teacher rapport was hence established and students were more easily to be engaged in such situation due to close interaction.

The prior experience as a L2 learner made the teacher-researcher realize that individualized learning on students was of significance. That stimulated her to apply this strategy into her own teaching practice as a L2 teacher. Therefore, the personal experience as a learner is beneficial for beginning Mandarin teachers to build their teaching knowledge. Kelly shared one of her relating experience when reasoning her practice. The reflected activity was observed and recorded as follows:

After reviewing the prior lesson with the whole class, the teacher said "OK, now it's individual practice time." She picked up students one by one and showed different cards. All the students were able to respond quickly. The students in the rear part were sitting straight and waiting carefully. But some of those who already had a turn started lowering their heads and scratching the carpet.

(Kelly, observation 3, 13/11/2012)

Individualized practice conducted to review the words engaged students at the beginning. They were paying attention and waiting for their turn. However when their personal task was finished, students' engagement was hard to maintain with lack of attention and persistence. The relationship between individualism and the reality of whole class teaching was tightened. Kelly revealed the reason and her understanding of the knowledge of student individualism:

When I review the content, usually I require the whole class to tell me how to say this in Chinese together. But when I observed Jasmine's [a local Mandarin teacher] lesson, I found that her teaching was more individualized. She always picked one student and asked, for example,
"Amy, tell me how to say this word." So I think maybe I need to get rid of my "whole class" conception which is more Chinese style. I'm now paying more attention to individual students...I think individualism is more addressed in Australian. If I focus on one student and he is required to say the word by himself instead of saying with the whole class, he will pay higher attention to the learning task. So I feel that individualism can really promote their learning...

(Kelly, post-observation interview3, 13/11/2012)

Based on the observation of the local teacher, the different educational culture between collectivism and individualism in two national contexts were noted. Consequently, the teacher's pedagogical thoughts were gradually altered to adapt to Australian educational context. It turned out that such individualized practice was efficient to focus students' attention and stimulate their cognitive process on learning content. In this way, students' individual learning were concentrated and assessed, and the teacher was able to gain more precise understanding of students.

However, the lack of knowledge of individual students still poses challenges for these beginning Mandarin teachers.

Recently, I always find that kids care a lot about who has had a turn and who has not. In this situation, I will tell them "If you have already got a turn, put down your hands and let others have a turn". Then those kids will start quarrel. For example one kid asked the other kid "You had a turn, why do you put your hand up again?" And the other kid said "I did not". Such dispute would be continuously going on. Then before the activity began, the class had become a mess already. They care this thing so much. But I could not remember who has had a turn either. Because I just go to the school once a week. I could not remember their names, and could not recognize their faces as well. Furthermore, I had many classes. This has a quite big effect for my teaching.

(Miya, interview, 09/11/2012)

During such selective individual practice, only limited students were picked. The individualism was not fully realized in every lesson. Though the teacher made great effort by asking students to take turns, she still could not solve their quarrel. This eliminated students' classroom engagement. Hence, the conflict between the
pedagogical knowledge of individualism and the beginning teachers' knowledge of individual students occurred. In order to resolve this conflict, the beginning teachers are supposed to improve her knowledge of individual students. Miya's experience was shared by other teachers. She was recommended by the teacher-researcher to apply smart-board software for name selection. It would help the teacher to select as well as record students' names. But she refused it due to her consideration on student diversity:

Here is another problem that some students would not like to participate in some activities but other activities. The selection of the computer may be too randomly...

(Miya, interview, 09/11/2012)

Miya showed her discontentment with the simple solution to her lack of knowledge on students' names. She demonstrated more concern on students' individual diversity of preference towards different activities.

Besides through individualized practice, providing personalized knowledge is also found helpful to engage students in Mandarin class. The following is one observation record on a lesson about zodiac animals:

She asked students to tell her when they were born and so she could tell them their zodiac. Students were so enthusiastic. All of them handed up and wanted to know their zodiac animals, including those who were not very active in previous practice sessions. Most of them were goat. A girl was very happy and cheered "yeah!" And when they were told that the person in the year of goat had the characteristics of being kind and friendly, they were even happier and couldn't stop sharing with the students next to them "I'm friendly!" "I am friendly!"

(Catherine, observation 1, 15/08/2012)

Students were highly initiated and excited about knowing their zodiac animals. The Chinese knowledge learned was personalized and provided close links with students themselves. As a result, what was learned in the Mandarin lesson was no longer meaningless but was attached great real-life significance. Such high self-related
significance triggered students' instinct eager for knowledge pursuit. This knowledge quickly became part of them, and they would like to share it with their peers. What's more, the personalized learning provided students more choice and autonomy. They were not pure knowledge receivers, but were allowed to get what they were really interested and wanted. Therefore, teachers need to give instructions based on students' need and create a more student-centered learning environment.

Such learning personalization is not restricted to cultural learning, but also is illustrated in linguistic teaching. For example, the teacher-researcher herself tried to bring in students' personal experience when teaching the words of food and drinks:

After teaching several kinds of food, I asked them to pick their favorite food in their mind and let other classmates guess. All the students handed up and would like to give it a go. Even a boy who was not willing to participate in the previous activities put up his hand!...The guessers were so active! "Oh, I definitely know what your favorite is!" "I know! 冰淇淋! Definitely is 冰淇淋!" When they forgot how to say the food in Mandarin, they asked in a hurry "Miss, I forgot how to say the chicken wing". Then they would keep repeating the word quietly until they were picked so that they would not forgot it. When all the students had a turn, I intended to move on to the next practice. To my great surprise, students said together "Miss, your turn! Your turn!" Then they tried to guess my favorite food!

(Self-reflection Journal, 12/06/2012)

Evident engaging indicators could be noticed during the teaching practice with high interest and participation. Students showed their great passion to share their personal likes among the class with active peer interaction. With close peer rapport, students were more willing to involve themselves into the learning task and to know more about their classmates. Such interest in their peers as well as desire to be known by their peers constituted intrinsic motive which stimulated their learning engagement. Students automatically applied learned Mandarin knowledge to drive the process of the task. They also showed high self-regulation and efforts to grasp and use the Mandarin words cognitively. That is to say, when the content is attached to students' real-life, language learned are no more single words, but useful carrier of message to
realize the peer interaction in a bilingual way. As a result, personalization of students' learning in classroom context with peer interaction balances the individualism and collectivity, and nurtures a comfortable and integrated classroom environment with personal uniqueness (Frisby & Martin, 2010). It is also worth noting that students took the initiative and expressed their interest in knowing more about their teacher. It is assumed that close rapport was established between the teachers and students. As a dual interaction, when the teacher made efforts to empower students' learning by valuing their personal voice, the gap between them gradually became narrower and students were more sincere to welcome the teacher as part in their discourse (Munns, 2007). Such harmonious interpersonal relationship with students enables the teacher to engage students more effectively.

In summary, this session focuses on the impact of teachers' knowledge of students' diversity among groups and individuals. Based on their understanding of learners as a whole, more specific knowledge of students has been generated and illustrated through close interaction with students in classroom teaching. Group and individual oriented teaching practices are applied to cater to students' diverse needs and learning ability. In addition, these practices personalize students' learning experience and offer them more significance of Mandarin learning with personal relationship. Better student-teacher rapport is also able to be realized with intense interaction. Despite various successful practices observed, the insufficiency of knowledge of students among these beginning Mandarin teachers is also undeniable. Such lack in knowledge base makes the negotiation between the collectivity and the individuality more challenging and tricky for them.

5.4 Valuing students' contribution

Except for students’ personal uniqueness, students' contribution to learning is of value for teachers to engage students better. Teachers’ highlight on students’ contribution is basically demonstrated in teachers' knowledge of students' prior
knowledge/ experience and their ability through student-centered pedagogy.

5.4.1 Transforming learner to contributor

It is believed by these beginning Mandarin teachers that knowing what prior knowledge students have is essential for teachers' practice.

...Teachers need to use students' own knowledge...as a matter of fact, we don't know much about information of students or students' prior knowledge. This is an important aspect. Because students' understanding of the prior knowledge will help us make adjustment in our teaching.

(Lavender, interview, 06/08/2012)

The tension between the lack of knowledge of student and the belief of its significance is demonstrated through above interview segment. In those primary schools where these volunteer Mandarin teachers teach, they are only arranged for less than one hour teaching in each class every week. This external circumstance restrains teachers' access to knowing students both in and out of classroom. Such limitation invites negative influence on students' learning. The following is an extract from the teacher-researchers' self-reflection journals about a lesson taught in a kindergarten class:

...Next “六(liù, six)” was terrible! The clue word for 六 (six) was Leo. I thought it would be very effective since the pronunciations between 六(liù) and Leo were exactly same. However, students had no response at all. I pointed to the picture of Leo and asked "Do you know what is Leo?" A kid handed up and said "Tiger?" Other students were just ignoring me. I was so embarrassed! Finally one kid recognized that the animals on the PowerPoint were lions, and asked “Lion?” Thank Goodness! However, even so they still had no response to the word "Leo". I thought they would remember the word easily with this clue word, but it seemed that it did not work. How can I expect them to use the word Leo to memorize the Chinese word "六(liù, six)" while they have no idea what Leo is?

(Self-reflection Journal 22/05/2012)
The teacher-researcher assumed the word "Leo" was students' prior knowledge and tried to bridge it with the teaching content. Out of her expectation, these kindergarten students had no idea about this word at all. Although some students were trying to understand it through the pictures presented, more students kept silent showing no effort or interest. The teachers without knowing about students' prior knowledge were not able to make conceptual connections. Hence, inadequate knowledge about students' knowledge formed teachers' "suppositional" knowledge, which hindered students' engagement in learning.

However, such process of trial and error constitutes important means of gaining accurate knowledge of students' prior knowledge for these beginning Mandarin teachers. This assists the teachers to gradually gain and accumulate the knowledge of what students have already known.

...There was a word guessing game called "taboo game". Certain words were not allowed to say which were called as taboo words. I was told by the classroom teacher Jane the other day that they were just learning topic about "sense" now. I thought this game would be a good hook with their Human Society and Its Environment (HSIE) learning and the body parts I was teaching. I asked students "If I say words like look, see, watch, which body part will you think of?" They handed up immediately and answered "Eye!" Then I wrote down these words of look, see and watch as well as "eye" next to them. "So what words will you think of when you hear "nose"? "Smell!" "Excellent! What about mouth?" "Taste!" "Oh, and eat!" "And drink!" Students started adding one after another. I listed these words on the board and addressed that these words list were not allowed to say during the description. "If you say these words, others will guess the body parts immediately!" ...Students were quite motivated. They were trying to be picked to answer. They could basically answer in Mandarin. I asked the students who answered correctly to give the next instruction. But the problem was that they all described in "taboo words"! For example, "I can taste", "I can see", "I can walk"...Jane told me after the class that they just learned these sentences during the HSIE topic of sense...She suggested me that it be better if I just list the words and asked students to describe body parts in these words...

(Self-reflection Journal, 13/05/2012)
On the one hand, students showed ignorance to the teacher-researcher's instruction about "taboo words". That is to say, "taboo words" were not understood by the students cognitively. No efforts were made to exclude "taboo words" during the game either. However, on the other hand, such little understanding of the teachers' instruction didn't hinder students' high engagement. The students were able to instantly recall their prior knowledge about "sense" by following the teacher's guide. It indicated their high attention to teachers' questions and high cognitive involvement in the Mandarin class through using their prior knowledge. Furthermore, during the game, the students displayed their great initiative and enthusiasm to participate. They were not only giving and listening to the questions, but also thinking and answering in Mandarin knowledge just learnt. Intense cognitive engagement was nurtured in the process of application and transfer of their knowledge bilingually. It could be concluded that knowing and making use of students' prior knowledge can trigger high engagement in their learning.

As for teachers' practice, the beginning Mandarin teacher's incomplete knowledge of students' prior knowledge was reflected during her teaching practice. For the above game demanded a relatively large vocabulary and this was unachievable for students due to their limited prior knowledge. However, she didn't insist on "taboo" rules when she found students were unable to follow the instruction. She shared her power and allowed the students to lead the process of the game in a more proper way. Such nonintervention repaired her inappropriate practice and encouraged students' motivation. Students were given priority to be the center of the learning. Her knowledge of students was enriched through students' response and her reflection with the help of the classroom teacher. Hence, compared with concrete specific knowledge of what students has known, it is more vital for these beginning Mandarin teachers to know how these knowledge functions in students' learning. It facilitates students' learning through connecting the learning content with their prior knowledge. More importantly, it empowers students with controlling and contributing to their own learning.
Although the teachers' incomplete knowledge of their students is more prone to result in inappropriate teaching practice, there is no absolute conclusion that teachers' fully knowing their students would engage them better. The following is a teachers' reflection on her application of the knowledge she had of students. At the beginning of her teaching, it didn't work well:

...Because these methods were taught by Jasmine [a local Mandarin teacher], I thought by myself that they were definitely suitable for students here. So I memorized her explanations and just repeated it in front of the class...For example, when I was teaching number "二 (èr, two)" during first lessons, I told students that "This is the character in the movie <Star War>, R2D2." Then I just drew it on the screen and asked them to repeat it. Although they could remember the word in the next class, it was not that good as expected....

(Kelly, interview, 17/08/2012)

From a local teacher, Kelly learned prior students' knowledge about the character called R2D2 and its connection with the Chinese word "二 (èr, two)". When applying this knowledge, she adopted a way which could be described as “依样画葫芦 (yī yàng huà hú lú)” in Chinese which means copy mechanically in her early teaching. Although she didn't make much description on students' response, her reflection of previous thought as "definitely suitable" suggested an unexpected situation which was not that satisfying. Her comment on students' learning outcome didn't imply positive impact on her employment of students' knowledge either. However such dissatisfaction changed in her later stage:

But now I would ask students "Do you remember there is a character called R2D2 in the <Star War>?" I also made some movements. Many students recalled it from their memory. Then I told them that I could turn the Chinese character number two into R2D2...Students understood that immediately with my drawing. Then I said “the number two in Chinese is very similar to the pronunciation of letter R. Once you forget how to say number 2, you just need to remember this funny character R2D2." If they could learn it after twice repetition previously, they could remember it after repeating it just once now.

(Kelly, interview, 17/08/2012)
Having the knowledge that students are fond of <Star War> and "R2D2", she applied it in a different way in her second round of trying. Instead of presenting the new knowledge directly, the teacher guided the students to approach their knowledge step by step. She didn't establish the connection with the Mandarin words until she made sure that most of the students were familiar with old knowledge. The transitional word "but" used between two parts indicated a difference on students' learning. Her brief narrative on students as being able to recall the knowledge and understand the links suggested a better cognitive understanding among students. Therefore, even knowing students well could not guarantee its positive influence on students' engagement. The process of cognitive connection with students' prior knowledge facilitates student' knowledge construction instead of students' prior knowledge itself. Internalizing the knowledge of "what" prior knowledge students have into that of "how" students utilize the prior knowledge to constitute new knowledge really matters for these beginning Mandarin teachers.

Besides learning from local teachers, another source for teachers to gain knowledge of students' knowledge is the shared knowledge of English language.

...Cameron asked students "Can you teach me some Australian English? How do you guys say this word when you have some questions or..." At the same time he was writing "huh?" on the whiteboard...Before he finished his question, many students had already said " huh?" "huh?" repeatedly. Cameron kept guiding them by saying "Try to exaggerate it! I really want to learn some Australian English!" Students were highly motivated. They repeated it and exaggerated it as they were asked with more enthusiasm and louder voice. He asked students to say it one by one. Many students handed up to say it as exaggerated as possible. Then Cameron told students that "Huh?" and 马 (mǎ; horse) were very exactly the same thing. When hearing this, students all started to practice 马 (mǎ; horse) 马 (mǎ; horse) "repetitively before were asked...

(Cameron, observation 1, 21/08/2012)

The students demonstrated high initiative and passion to set an example for their
Chinese teacher with repetitive pronunciation. They were promoted further with greater effort and higher passion when the teacher asked student to exaggerate and underscored his extreme eagerness to learn English from them. Later after the teacher's illustration of the sound similarity between the Mandarin word and the English, students practiced the new Mandarin word automatically. It could be seen that high engagement especially in terms of behavior and emotion was triggered and retained during the teacher's series of practice. The cognitive connection between their mother language and the target language was built efficiently.

Similar to the above evidence, the teacher didn't straightly illustrate the connection with teaching content but emphasized the value of bringing into students' knowledge. He encouraged students to be a knowledge contributor rather than a learner. Such exchange of the role shared the teacher's power and provided students a great sense of capacity, which corresponded to the engaging message of discourse of power (Munns, 2007). Thus, the influence of teachers' knowledge on students' prior knowledge is not only facilitating students' knowledge construction, but more importantly, empowering students as a capable learner and knowledge contributor. The lack of full knowledge of their students could be made up by the teachers encouraging students to contribute their prior knowledge to the Mandarin learning as knowledge holders.

5.4.2 Nurturing responsible learners

The students' contribution to Mandarin learning is not limited to their prior knowledge, but in a broader aspect. Providing inclusive pedagogy through valuing students' contribution to learning is observed among the beginning Mandarin teachers and found of great significance in students' learning. Here is an example of how a teacher's pedagogical knowledge would make a difference in students' learning:
The last activity was a survey of four classmates on their favorite colors and gave a presentation. The whole process went well. Many students volunteered to be the presenter. But the audiences didn't pay much attention. When I finished the class, the classroom teacher asked "what's A's favorite color?" (A was one of the presenters) Then she picked a student to answer. There were many more students handing up! My requirement during the presentation was for presenters only, and didn't think about the audience at all. I just thought I couldn't force them if they didn't want to. Although classroom teacher was more powerful than me, I had to admit that it was a better way to involve students into learning.

(Self-reflection Journal, 28/02/2012)

When designing the task, the teacher-researcher did not take inclusiveness into consideration due to her weakness of pedagogical knowledge. When students were not fully engaged during listening, the teacher-researcher didn't know how to get the passive audience involved. However, the classroom teacher presented a successful mode to support by asking students reflective questions. This practice became whole-class oriented instead of presenter-centered as conducted previously. More significantly, it effectively removed off-task passivity among the learners. Students were cognitively engaged in recalling and understanding the presenter's presentation and tried to give feedback based on their linguistic knowledge of Mandarin. Thus, asking questions or feedback from students is not only a way of assessment, but also offers students the opportunity to engage in knowledge practice and production successfully. Beginning teachers may easily blame students' passive participation into learning to their weak teacher authority. However, authority is unable to make students think and learn, but a teacher's value of student's power and control of the classroom learning can empower them as independent learners and contributors, thus engaging them into the Mandarin class effectively.

Despite unsuccessful lessons, these volunteer teachers are still found making efforts to encourage students' involvement by giving them certain responsibility in learning. The most common form of responsibility given is to provide students with certain roles during the selective individualized practice. Here is an example:
The teacher asked other students to judge and identify which participants was faster. Students seemed to be excited and straightened their back when hearing this. Some were making jokes with the selected participants. "A, I'm watching you!" "B, come on!" They were all looking at the participants carefully...After the first round, the teacher asked these judges who was quicker. These judges responded quickly!  
(Miya, observation1, 16/10/2012)

Evident behavioral and emotional engaging indicators were noticed. Although the rest of students did not take part in the activity, they still paid high attention to the activity and showed great interest in it. The intensive interactions between peers were also observed. When asking the teacher's intention of her emphasis on the role of "judge", she recalled:

I thought that asking them to be judges could allow students to participate in the activity. In some games, it was really too hard to involve the whole class. So I at least gave them a job to do as part of the activity. I emphasized it because I wanted them to feel that they were involved in the game from the bottom of their heart. They had an idea that they had their own job to do and they were responsible for something, not just looking and being mind-absented.  
(Miya, post-observation interview1, 16/10/2012)

The teacher illustrated high awareness of inclusiveness in her activity design. She tried to enhance such sense by sharing her authority in the classroom with other students. Such granted power to students did not only occupy students with responsibilities behaviorally, but more importantly it gave students an opportunity to control the learning process as a powerful and responsible agent in this discourse. The enhanced autonomy encouraged students to regard themselves as "participants" rather than as spectators. This avoided students' alienated emotion like sense of exclusiveness. What's more when more students "participated" in the learning activity, the peer interactions were increased as well. This assisted the teacher to establish a more integrated and harmonious learning environment.

It is noted that teachers' value of students' contribution to learning is demonstrated
more frequently and deeply in the two-year experience teacher's practice. Besides the
sessions of language practice, Frank, the two year experience volunteer teacher, also
tried to nurture students to take responsibility during content presentation in two
observed lessons. The following is part of his one lesson:

The teacher showed three pictures of hamburger, sandwich and fried
rice. There were also Chinese pinyin and characters for these three
foods but not in correct order. He pointed the Chinese words of
hamburger and repeated them for three times. Then he asked students to
point out the right picture. Before he finished, there were already seven
students [Note: Total number:16] handed up. The student selected
pointed to the right picture. Then Frank pointed to the Chinese
characters for sandwich and repeated it for three times as well. Some
students were repeating after him "三明治 (sān míng zhì, sandwich)"
"三明治(sān mǐng zhì, sandwich)". Then it seemed that many of them
saw the light and called out happily "sandwich! 三明治(sān mǐng zh
ì)! " Six students handed up in this round.

(Frank, observation 2, 30/10/2012)

Instead of presenting the teaching content directly, the teacher asked the students to
discover the answers by themselves. According to the observation data, about half of
the class demonstrated behavioral initiatives and volunteered themselves. They were
also repeating the words following the teacher as a learning strategy to facilitate their
cognitive understanding. Without being provided the linguistic similarities of the
Chinese word and its English counterpart by the teacher, the students were able to
recognize it by themselves. Corresponding with literature, such exploratory learning
stimulates students to make efforts to learn automatically and engage themselves
(Taylor & Parson, 2011). The teacher elaborated his underlying thoughts as follows:

Because if I told them this was hamburger, their learning attention or
something would be relatively decreased. So I wanted to transform their
learning onto themselves. When I gave them the pronunciation only,
they had to think about which was "汉堡包". In this way relatively
more efforts were made than I told them which the hamburger was.

(Frank, post-observation interview 2, 30/10/2012)

In addition to trying to involve students into learning by making them feel included,
he expected students' higher attention to the learning content cognitively. It is assumed that his focus had altered from students' behavioral/ emotional engagement to cognitive engagement. Finding the traditional teacher-centered instruction unsatisfactory, he faded away his authority as a knowledge provider, but turned himself into a facilitator. The students had to take responsibility for their own learning with initiative thinking. In this instance, the students are independent learners rather than pure knowledge acceptors. This transformation demonstrated the teacher's high value of students' ability and knowledge, which was developed through his classroom practice.

Overall, student-centered pedagogy knowledge is found effective to engage students with high value of students' prior knowledge and their learning ability. Such knowledge is gained through teachers' interaction with the local teachers and students' response to learning in their teaching practice. Its impact is not exerted from the knowledge itself, but the empowerment of students' learning through their contribution to the Mandarin class.

### 5.5 Conclusion

This chapter reports the second focus of teachers' knowledge on Australian primary students as well as student-oriented pedagogy. It can be concluded that students are engaged when they are empowered in their learning. In this study such empowerment is found in four main ways. Firstly, teachers' understanding of Australian students as L2 learners stimulates teachers to establish a safe and supportive environment as well as enhance student engagement through external motivation and teacher scaffolding. Secondly, teachers' knowledge on Australian young students' nature and interest enables teachers to apply "playful" teaching strategy in order to build an entertaining classroom for young learners to learn the language. Thirdly, teachers' awareness of students’ diversity across and within classes assists teachers to cater to students' different needs with individual and group-oriented interactions. Last but not the least, teachers' value and efforts to transform students into knowledge contributors and
share more responsibility in learning engage students learning effectively.

It is found that all these beginning Mandarin teachers contribute and highlight students' factors. It caters to students' need and bring students self-related significance, which results in intrinsic motivation. Such motivation is an essential prerequisite base for student engagement emotionally, behaviorally and cognitively. What's more, the application of students' factors to teaching shares more power and responsibility with students in the learning process.

However it is not easy for these beginning teachers. These teachers are found more concern about their own authority and control over students. Such highly relying on control of students may lead to ignorance of students' factors in their teaching, which may hinder students' engagement. In the next chapter, the teachers' knowledge is discussed by focusing on their knowledge of EFL as classroom language.
CHAPTER SIX
KNOWLEDGE OF EFL AS CLASSROOM LANGUAGE

6.0 Introduction

This chapter focuses on the beginning Mandarin teachers' knowledge of EFL as classroom language reflected in their teaching. It is defined as "a coherent, dynamic, and evolving body of knowledge about the English language and how it works" in the Mandarin as a second language lesson (ACARA, 2009, cited in Derewianka, 2012, 127-128). This knowledge domain includes beginning Mandarin teachers' knowledge of English as a foreign language and its practical application to instruction and classroom management.

Classroom language and classroom management are claimed as the hardest parts in these beginning Mandarin teachers' teaching, which is the most important content in teacher education in this case study. Such concern is obviously evident when they were asked to make self-assessment and the most wanted content for teacher education during interviews. The following is a table of key points of interviewees' answers:

Table 6.1 Key points of interviewees answer to two interview questions

<table>
<thead>
<tr>
<th>Interview Questions</th>
<th>What do you think as the hardest thing in your teaching?</th>
<th>What do you most want to learn if there was another training for beginning teachers?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameron</td>
<td>Content</td>
<td>Australian language</td>
</tr>
<tr>
<td>Miya</td>
<td>Classroom management; English</td>
<td>Classroom language</td>
</tr>
<tr>
<td>Catherine</td>
<td>Nothing</td>
<td>Students' characteristic</td>
</tr>
<tr>
<td>Kelly</td>
<td>Language instruction; classroom management</td>
<td>Classroom language</td>
</tr>
<tr>
<td>Lavender</td>
<td>Classroom management</td>
<td>Classroom management</td>
</tr>
<tr>
<td>Frank</td>
<td>Language, discussion</td>
<td>Classroom language</td>
</tr>
</tbody>
</table>
It could be seen that out of six interviewees, three of them labeled "language", "English", “language instruction" as the most troubling part in their teaching practice while three of them mentioned classroom management. As for another question, teachers shared higher resemblance among the answers. Three of teacher participants all coincidently mentioned the words "课堂语言 (kè táng yǔ yán)" which could be translated as "classroom language". Cameron used "Australian language" to address the Australian context while Lavender addressed "classroom management" which was the same answer to the hardest thing in her teaching. The general consistency between teachers' self-assessment of insufficiency and their expectation for the teacher education implies the great significance of understanding teachers' lack in knowledge for beginning teachers' training. Moreover, besides these two interview questions, such narratives of teachers' worry and anxiety in their language knowledge was also repeatedly expressed. For example, Miya described the difficulty she found in language when asked about her general feeling of teaching MFL in Australian schools:

I don't think it hard to teach here. But the language is still a big problem for me during the teaching. Sometimes I don’t know how to say something and sometimes what I say is not what I mean. Language is very important after all…

(Miya, interview, 09/11/2012)

Similarly, even for two-year experience teacher Frank, language is still regarded as an obstacle to his teaching:

T(Teacher-researcher): Are there other ways you applied to engage students besides games?
F(Frank): The reason I use games because I am not a native teacher. If I were a native teacher, I could have engaged them directly. What I am saying is that we do not have the ability in this aspect, so there are no other ways.
T: Are you referring to the language?
F: Yes, but not only language itself. The language I am talking about includes all of what we are saying. So in the school, students can play many games, but could not understand many funny stories I tell them.

(Frank, interview, 20/10/2012)
Frank found that being a foreign teacher constituted great limitation for him to engage students in Mandarin lessons. The non-nativeness of his English prevented him from conducting various engaging practices like telling funny stories in Australian primary classrooms. It can be seen that the lack of language knowledge exerted negative impact on student engagement in Mandarin learning.

Of course, not all teachers found language as an obstacle. One teacher demonstrated his high proficiency in English in the teaching and it has made a direct impression on students. The following are two excerpts of field-notes on the teacher participant Cameron:

After the lesson, one student asked him if he had been in USA for his American English accent...

(Cameron, field note 1, 31/08/2012)

During the lesson, a girl sitting in front of me turned around and said "His English is very good"...

(Cameron, field note 2, 04/09/2012)

High recognition of the teacher's English proficiency can be seen through the students' questions and comments. Students were surprised and appreciated about the authentic English by this Chinese teacher. That is to say, students concern and evaluate teachers' English ability unconsciously. Such recognition might reduce students' unfamiliarity towards their teacher and encourage them to accept the teacher as a knowledge provider with more trust.

Although the code choice of L1 or L2 in the second language classroom is always under heat debate, all the teacher participants give classroom instruction in English in this case study mixing with few Mandarin instruction. Since this study focuses on the impact of teachers' knowledge on student engagement, advantages and disadvantages of L1 or L2 as classroom language are not investigated. Based on multi-source database, teachers' language knowledge of EFL as classroom language is found functioned evidently on their students learning when they try to make themselves
understood or to solve the classroom disorder.

6.1 Providing understandable instruction

Language is not "simply a collection of rules and labels for grammatical categories" but "a source for making meaning' through which we interactively shape and interpret our world and ourselves" (Derewianka, 2012, 129). However, despite of years of English learning experience, all the beginning Mandarin teachers in this study except Cameron expressed their frustration that their students sometimes had no idea of what they were talking about. This failure to be understood by students was triggered mainly in cases when a teacher's language was inaccurate or when their instruction was in detail.

6.1.1 Accurate Expression

Since English is a L2 for all these beginning Mandarin teachers, they struggle to provide instructions in accurate English. Sometimes they only make a slight mistake, however it may lead to unsatisfying effect on students' learning. For example, in one observed lesson:

[The teacher was teaching the word "马 (mǎ, horse)"].] The teacher asked students "What do you usually call your mom?" Many students responded quickly. Some said mom, mummy and some said ma ma. She continued "Yes, mom in Mandarin is mā mā, right? But if you in China and call your 妈妈 (mā mā, mom) 马马 (mǎ mǎ, horse horse), that will be a problem. Because you are calling her a house [Catherine pronounced horse as house]. Students did not get this joke and kept repeating 马马 (mǎ mǎ). Many students started discussing about their same saying as the Chinese way. One student asked "Do you call your mom mama at home?" Another student answered happily "Yes, in my house I call mama." Other kid added "In my house, I call mom." The classroom became quite noisy. In the meanwhile, the teacher was talking about the differences between mō and mā again, but students were basically not listening at all. They were busy chatting with each other happily...

(Catherine, observation 2, 22/08/2012)
The teacher tried to assist students to distinguish two similar words 妈 (mā, mom) and 马 (mǎ, horse) which shared same syllables but different tones. It is noted that the leading question of reviewing the word 妈妈 (mom) enhanced students behavioral engagement greatly. Its close connection with students' personal life stimulated them to take initiatives to answer the question. But this effective review of prior knowledge 妈妈 (mom) did not lead to the following comparison successfully. It is assumed that the basic reason for this is students' failure to understand the difference between 妈 (mā) and 马 (mǎ). Although without evident confusion and questions from students, they neglected this instruction completely. Students put more focus on the first part of "Chinese way" and the word 马马 (mǎ mǎ; horse). They started a heated discussion on the similarity between their ways calling mom and the Chinese way. However, as for the later part of "calling mom as a horse", the teacher pronounced horse as house mistakenly. None of students had made any response to this part which was supposed to be the more important and interesting part. One possible reason for its less power is that the teacher did not compare the tone difference explicitly and thus it was unable to engage students cognitively by connecting their prior experience and new knowledge. Such powerless instruction faded teachers' power at the same time. She was unable to draw students' attention to what she was talking about. Her students were not led by her instruction but continued their spontaneous discussion, which triggered off-task initiatives. Therefore, teachers' engaging practice could only be conducted successfully with accurate and clear language expression.

Besides such confusion of the two words with similar pronunciations, it is more common for beginning Mandarin teachers to misuse English without accurate knowledge of authentic expression. As EFL learners, these Mandarin teachers often could not realize their inappropriate and inaccurate application of English. The following is an example of how Lavender realized her lack of accurate language to students' response:
The teacher asked "What do you do in your PE class?" Students had no response. Some asked "what?" The teacher repeated her question for twice and explained PE was short for physical education. A few of students seemed to understand and asked "sports class?" The teacher didn't get it at first time and asked students to say it again. Some students began talking with each other. Two students stood up to drink water. After clarifying the question, Lavender asked again "what instruction will teacher ask you to do in sports class?" Only two students handed up.

(Lavender, observation 1, 23/10/2012)

Although the teacher tried to connect Mandarin learning with students' other class experience, and such practice was found engaging as discussed in the previous chapter by valuing students' knowledge and contribution [5.4.1], the inaccurate expression of the question may hinder a negative impact on student engagement. It could be seen that students found it hard to understand the word "PE class". No initiatives were taken by the students to the teacher's question due to their confusion. However, they still made efforts to figure out the meaning by searching for something familiar in their mind. Although limited, some students were still engaged cognitively to elaborate the question. Nevertheless, for most of the students, the longer it took the teacher to clarify the question, the lower attention they paid to it. The students did not automatically make efforts to understand teacher's question and became disengaged behaviorally. The teacher reflected this incident after the class:

I thought that it should be the same as what I learnt, because "体育课(tì yù kè, PE class)" is always the PE class, I never know that it could be also called as sports class, maybe it is a more native way. I don't know whether it is a particular way in Australia or what, I don't know...

(Lavender, post-observation 1, 23/10/2012)

The teacher expressed her confusion to the appropriateness of the word as well. She found an unexpected gap between the prior knowledge from her English learning and the actual English speaking world. This gap due to the lack of knowledge on accurate language use interrupted the designed instruction flow and triggered an interruption which invited students' engagement problem. This implies that inaccurate English application may occur when these bilingual beginning Mandarin teachers failed to
apply their prior language knowledge in practical context effectively. It causes challenge for them to carry out instruction smoothly and successfully. So the accuracy of English expression not only refers to the Standard English in broad way, but also to contextualized authentic English specifically.

Besides response from students, the local teachers are also an important source that these Mandarin teachers could rely on to clarify their English expressions. These local classroom teachers always sit in the classroom while the beginning Mandarin teachers are teaching. The following is an example from the observation data:

Before playing the game of Whisper, the teacher said “Stand up. Make two lines. Find a pair. Each one finds one pair.” Many kids stand up and held hands with a partner happily without standing in lines. The teacher emphasized "Make two lines". But it seemed that they had no idea of how to do it with their partners. The teacher had to adjust their position one by one. Then the classroom teacher came and said "Find one pair in another line. Very sensible." Other kids quickly found a spot for themselves in the lines as required.

(Miya, observation3, 13/11/2012)

Language usage has shown great power in classroom activities. Although with slight difference, students immediately got the meaning from the classroom teacher while it took them long time to try but were still unable to understand the Mandarin teacher's request. With a clear idea of what they were asked to do, the students were able to involve themselves into instant behavior reaction, which provided opportunity for students to engage into learning. However, when the students were confused at the teacher's instruction, it was impossible for them to enjoy the learning process with full engagement. Hence, providing understandable instruction with accurate language usage is prerequisite for student engagement in Mandarin classes. Through learning from local classroom teachers, these Mandarin teachers are able to compensate for their English insufficiency and become more adaptable in Australian primary classrooms. For example, Kelly highlighted local teachers' role in her development of practical knowledge:
Most of my currently using instructions are learned from the classroom teachers. Their ways of giving instruction are definitely more native than mine. When I learned one in this class, I would apply it in the next class to replace my old way of expression. So I could avoid some incidents happened in advance and develop my independent ability to teach..

(Kelly, interview, 17/08/2012)

The dual role as a Mandarin teacher as well as an English learner is shown in the above narrative. The beginning Mandarin teacher's strong awareness of her self-shortness in language knowledge encourages her to keep open to learn authentic expression from the local teachers. Her strategy is "现学现卖 (xiàn xué xiàn mài)" which means teaching through on-spot learning. It is common among all the teacher participants in this study. It is found efficient for these Mandarin teachers to improve their English instruction through classroom practice. In Kelly's case, such improvement of English knowledge made her get along well with her further instruction. Moreover, it empowered herself as a more independent teacher to instruct and manage by herself in "native" English to English-speaking students.

6.1.2 Detailed instruction

Besides teachers' accurate language knowledge, the second theme is to "provide detailed instruction language". It is found beginning Mandarin teachers are not skillful enough to provide detailed instruction during either activity organization or classroom management. The ambiguous language provided easily confuses students, which hinders teachers' practice and leads to student disengagement. Except Cameron and Frank, the negative impact of failure to provide detailed instruction is mentioned by all other teacher participants, including the teacher-researcher herself. The following is an example from her self-reflection journal:

To review numbers, I asked “Do you remember how to say numbers in Mandarin?” But the kids seemed to be very confused, keeping looking around and then staring at me without saying anything. Since there were no responses, I decided to do ask each student say a number one by one.
I asked one student how to say 1. I guided them one by one: what the number next 2? What's the number next to 3? But they were still confused. With my guide, they gave their answers hesitantly with really low voice. The whole process went really slowly and strenuously. The classroom teacher suggested me to let them count together, so that they could have an idea about what they were doing. I followed this advice and said "OK, let's count from one to ten together!" After counting together, I said" Now, I would like you to count these numbers one by one. Each of you says a number." Magic thing happened. They counted so smoothly and loudly that I even forgot how struggling it was just few minutes ago! I thought they couldn't answer just because they forgot, but it was actually my problem!

(Self-reflection journal, 14/02/2012)

The teacher-researcher intended to ask the students to count numbers. She used “say” instead of the more direct instructional word “count”. The vagueness of the word led to the students’ misunderstanding and silence. The students tried to figure out the instruction by looking around to seek help from their peers. Later instead of providing clarification, the teacher-researcher chose another form by asking students to count numbers one by one. Still she didn't offer a specific idea of counting from 1 to 10. She failed to explain the confusing instruction and make students understand what they were supposed to do. Hesitance and low voice showed that the students lacked confidence and were losing engagement in learning.

With the help of an experienced classroom teacher, the teacher-researcher gave a more detailed instruction of “counting together from one to ten”. The revision of the expression set a clear picture of what this learning activity looked like for all the students. Then she told the students exactly what and how they were going to do. Knowledge of clear and detailed instruction could be highly context-bounded due to various teaching content, purpose and pedagogy. Although "say" can be understood in most circumstances, the detailed instruction of “count” fit the purpose well in this case. This can be noticed from students' later-on increasing self-confidence with louder voice and smooth process.
The significance of providing detailed instruction is also addressed by other teacher participants including Miya, Catherine, Lavender and Kelly. However, although they have recognized their failure in providing detailed instruction, they find it hard to solve this problem for its interplay with knowledge of students. For example, the following data from Miya demonstrates how the lack of knowledge of student impacts teachers' practice of providing understandable instruction:

Miya said "I will tell the first person the first sentence. And you need to take the message one by one." But in the first round, some students were still found had no idea of how to play the game. When the students were told the word, they were still sitting there instead of passing it to the next students. The teacher repeated the instruction and told students "When you hear the word, take the message one by one". But the second round still had to be paused. A boy still had no idea what to do when he heard the word. Then the classroom teacher said "John, tell the word to Lily, then Lily tell the message to Helen". In the second round, all the students were able to pass the word quickly as soon as they got it. (Miya, observation 3, 13/11/2012)

Evident differences could be seen between the instructions given by the Mandarin teacher and the classroom teacher. With Miya's instruction, the activity could not continue due to the confusion it caused to most of the students. The interruption triggered by the confusion hindered the students to maintain their involvement in the learning. The students' interest and initiative in the activity was considerably impeded due to the ineffective nurturing and maintaining of student engagement. In addition of saying generally "one by one", the classroom teacher provided more concrete instruction with students' individual names. This provided the students more detailed and vivid guide of how they were asked to play the game. This detailed instruction also enabled the activity to be conducted smoothly. The teacher reflected this lesson after class with deep feelings:

She said it so specifically, with every detail, asking students to pass the word one by one. But my instruction was more general. It was really different! I know I need to give instruction specifically, but sometimes I just don't know how to say it. I don't know students' names, but she knows every student. This would be easier if I know all the names of
students. I don't know. It is still a challenge for me.

(Miya, post-observation 3, 13/11/2012)

The gap of the knowledge of providing instructional language has been addressed by the Mandarin teacher herself. She expressed her great emphasis on the high level of detail within the classroom teacher's instructions. This reveals the difference of the definition of "detailedness" in her mind. That is to say, although the Mandarin teachers hold the theoretical knowledge on the necessity of providing detailed instruction, they are unlikely to transform this idea into their practical teaching in certain classroom contexts.

Such impact of individualized instruction is more evident on teachers' classroom management. Teachers' failure in providing detailed instruction holds them back to manage the classroom effectively. Students' off-task initiatives are unable to be stopped immediately, which always turns into student disengagement in the whole class. The following is one relating piece of data:

...Students were keeping talking and not listening at all. Catherine said loudly "Those who talk will not be allowed to take part in the following singing..." The students ignored her and kept talking. She raised her voice and said "Quiet! Listen to me!" Her voice was soon drowned in students' noise. The classroom teacher came up to students. She called out two student names "Alex, Billy, you are not listening! Show your respect!" The classroom calmed down right away.

(Catherine, observation 3, 29/08/2012)

Again the students showed evidently different response to different instructions. They showed extreme disengaging off-task initiatives during the Mandarin lesson. Catherine tried to draw students' attention back through disciplining them. However her classroom management was totally powerless. Comparatively the classroom teacher didn't try to manage the whole class. Instead, she only called two students' names and asked them to behave themselves. Such specific instruction was quickly understood by the students of what they were supposed to do and what they were not allowed to do. It was like an old Chinese idiom "杀鸡儆猴 (shā jī jǐng hóu). This
idiom literally means scaring the monkey by killing a naughty rooster which refers to a strategy of warning the whole group by punishing one particular individual. Such classroom management from individual to the whole class attracted students' attention quickly and enabled the teacher to engage students in the following teaching practice.

6.1.3 Instructing through modeling

Besides learning from the local students and teachers, modeling through both verbal and non-verbal means is found to be an efficient way. That not only compensates for their lack of knowledge, but also provides understandable instruction in Australian primary schools.

Applications of modeling observed among all teacher participants are found helpful to enhance students' learning engagement with a better understanding of teachers' instruction. One of the most common ways is teachers’ participating into the learning tasks to set modeling examples for students. Many teachers were observed to explain the learning activities step by step with modeling along with English instruction. The following is an example recorded in the teacher-researcher’s self-reflection journal:

In the Year 1 class, I reviewed the numbers and asked students to do the movement according to the numbers. The class was a little bit in disorder. The first movement was to hop, and I said four, which meant to hop for four times. They all totally ignored the number 4 and started hopping randomly. They kept hopping regardless of the times. Some even were playing with other students while hopping. I had to stop them and asked them to follow my movement. They were much better when there was an example. I asked them to skip, jump, clap etc., all the students were doing the actions and almost all of them were counting with me at the same time. When I was thinking about the movement, the students were all staring at me and expecting the next action with great excitement. The whole atmosphere was very cheerful.

(Self-reflection Journal, 28/02/2012)

It could be seen how the teacher's modeling made a difference from the above
excerpt. When the teacher-researcher gave the instruction and let the students do the practice, students participated in the practice and turned the language practice into an entirely physical game. They did not try to understand the number in Mandarin cognitively so that this led to classroom disorder. Then the teacher-researcher set the examples by doing the movements with students. Because these examples illustrated the previous oral instructions vividly, students could participate in the learning activity with cognitive review of the previous knowledge. The modeling offered by the teacher provided students with a more detailed picture of the following learning activity and efficiently eliminated students' confusion towards the oral instruction given. As a result, a good understanding of teachers' instruction kept students in order. Therefore, instructing through modeling assists teachers in compensating for their shortness of English knowledge.

Moreover, trying to make use of English words that their students are familiar with during modeling is highly constructive to enhance students’ engagement in class. For example, in one observed lesson, two-year experience teacher Frank organized a game to reinforce students’ learning of words about food.

After introducing the rules, six students handed up. The teacher asked three of them to come to the front. He said “We will try English version to get familiar with.” He asked the participated students to walk around four chairs which were put in circles. Then Frank asked students the question in English which was also the sentence learnt today “Alex, do you like cake or not?”... Alex answered “I like cake.” in English as well. Other students were looking carefully. Students all laughed when the participants struggled to sit on the chair with the flashcard of cake on it. After the first round, ten students handed up when asked.

(Frank, observation 3, 13/11/2012)

Instead of starting the game in Mandarin straight away, the teacher conducted it in English as an example. The students were found engaged into the learning activity with high attention. An increasing number of students handing up suggested that the students found it interesting due to a good understanding of the whole process. Frank underlined his application of English in modeling as effective practice to make
student understand his instruction:

I think this English version is very good. It [English] just likes a bridge and makes a better sense for them [students]. They [Students] could understand what I said immediately. It could also be an automatic check. I know sometimes they actually don’t understand what I am saying [laugh slightly], so it is good for them to check the rules by themselves.

(Frank, post-observation interview 3, 13/11/2012)

Frank compared the English to a bridge in Mandarin learning. Although it is a great obstacle for the beginning Mandarin teachers to provide understandable instruction to English-speaking primary students, English also has its positive side. With a clear notice of the self-shortness in English, Frank utilized it as a supplemental tool to solve the students' misunderstanding. It enabled the students to check the rules individually, which enhanced their control and power in their own learning process.

In terms of classroom management, beginning Mandarin teachers, including Catherine, Miya, Kelly, and Lavender, found that students’ classroom behavior could be managed by applying simple and effective gestures, including clapping, putting finger on the lips, and putting hands on different body parts. These gestures attract students’ attention quickly by modeling their behaviors. For example, Catherine used clapping in the third observed lesson. The following is part of the record of the lesson:

Catherine was searching the audio file on the computer. Students started chatting with each other. The classroom became quite noisy. Catherine turned around and clapped for four times × × ×. Hearing this, all the students who were talking raised their heads, looking at Catherine and clapped following the rhythm. The classroom became quiet immediately.

(Catherine, observation 3, 29/08/2012)

The teacher applied clapping rather than oral instruction in the above excerpt and the effect was satisfying. Because of the time gap due to the material preparation, the students turned to be disengaged with disruptive behaviors of chatting. But these
off-task behaviors were stopped instantly when the teachers clapped. The sound of clapping drew students’ attention back to the teacher from their private talking. The copy of the behaviors engaged students physically in further. Although such gesture has no direct impact on student engagement, it proves itself a successful practice for classroom management and establishes essential base for the effectiveness of the following teaching practice. Catherine expressed her surprise on the effect of clapping during the interview after the lesson:

Actually this was my first time to use this method. When I was a kid in primary school, my teacher did such clapping too. In the last week, I observed one teacher here also clapped like this to manage the students. Students followed the teacher's modeling. The effective was good. So I was thinking I could use it today. And it was really effective! They [students] were all basically calm down. Usually no one would listen to me when I asked them to be quiet!

(Catherine, post-observation 3, 29/08/2012)

The teacher recalled the previous learning experience in China as well as the observation of local teachers in Australia. The successful application of clapping by the local teacher encouraged Catherine to have an attempt. She was amazed by the outcome, especially when compared to her previous failed experience in classroom management. For students, the clapping is more than a simple gesture. It is a conventional classroom code, which actually provides the students with a model of what they are expected by the teachers. Such expectation and requirement is clapping in direct way, but in further it means being on-task. Students understand the meaning of this code clearly because of the frequent application by their classroom teachers. This shared base successfully avoids confusion triggered by the beginning Mandarin teachers’ oral instruction in EFL. Hence, knowledge of such Australian classroom non-verbal codes is of great use for beginning Mandarin teachers to manage classroom efficiently by fully understood by students. It serves as successful supplement for teachers' insufficient knowledge of EFL as classroom language. Similarly, the teacher-researcher also recorded her successful classroom management using these classroom codes:
The classroom was a total mess. The most annoying thing was that no one noticed me! How could they ignore the teacher in this classroom! It pissed me off! I shouted loudly "Stop! Quiet!" Some girls calmed down. But most of students just looked at me for seconds and then continued what they were busy with! I was going to be mad! I thought of the method used by the classroom teacher just now. So I said "Enough, put hands on your head!" Those students who were wandering and pushing stopped gradually. They finally listened to my words! Although some reacted slowly, all of students were putting their hands on heads as I did. Then I continued "On your shoulders", "On your knees"... They were all doing quietly, following my instruction. I felt so good at that time. I could feel the power as a teacher, not as a student or a volunteer teacher, but a real teacher.

(Self-reflection Journal, 06/03/2012)

In the above biographical narrative, the gesture instruction dragged the attention of those disengaging students back visually, audibly and physically. When students had a clear idea of what they were expected to do, like in this instance of putting hands on their head, it was easier for students to be engaged. The teacher-researcher addressed her realization of teacher power through this successful practice. When the students were able to understand and follow her instruction, she found herself feeling "good" and "powerful" as a real teacher. A dual process of empowerment was noted. On the one hand, with understandable instructions, students were in a meaningful discourse which constituted an essential component for engaging environment (Munns, 2007). On the other hand, the beginning teacher was empowered as well with students' positive reaction. The positive impact of the instructional practice with empowerment of teacher identity was assumed to stimulate the teacher-researcher to reinforce her knowledge of applying understandable instruction.

It can be seen that despite the evident lack in knowledge of EFL, these beginning Mandarin teachers are still able to provide understandable instruction through modeling with teachers' step-by-step example, in English version or through non-verbal classroom codes well known by Australian students.
To sum up, accuracy of their English expressions and detailed and vivid instruction are the two main factors that could avoid teachers' failure in their teaching and promote student engagement. The deficiencies of these Mandarin teachers in classroom language are mainly due to their role as EFL learners. Some Mandarin teachers in this study also apply modeling to facilitate their instruction and classroom management. This strategy is found effective and enables them to provide understandable instruction along with their oral expressions.

6.2 Timing of providing instructional language

The second subcategory is the teachers’ knowledge of the timing to provide instruction. Five teacher participants including fresh new teacher Miya and Catherine, all three one-year experience teachers and two-year experience teachers mentioned this item. Teachers' awareness is found weak on the appropriate time for providing instruction. This lack of knowledge of instruction providing hinders student engagement due to the break in students' learning flow. Here is a narrative described by the teacher-researcher about one of her lessons:

After watching the video, I handed out two pieces of worksheet to let students copy the pinyin. One had pinyin and characters on it while the other only had pictures and blanks to fill in. I thought that students would have a more direct understanding of my instruction when they looked at the two pieces of worksheet. When I just gave them to several students, they began to ask me "Miss, I have two"; "Miss, they are the same." One student even gave one of the worksheet to his partner. I explained to each of them that everyone had two and told them to keep both of them. After handing out, I stood in the front of the classroom and tried to tell them what to do. "OK, now you may find these two sheets are similar..." However, they were all focusing on the paper, keeping talking and totally ignoring me. I raised my voice to catch their attention. I almost yelled "Pay attention, everyone! Pay attention, boys and girls! Now you have two sheets..." But all my efforts were in vain. Only one to two students raised their heads. Most of them still ignored me, some were coloring them. So I went to their desks. Seeing I was coming, they started asking “What are we going to do now Miss?” “Can we color in now?” I had to give instructions group by group and the whole class ended in such chaos.

(Self-reflection Journal, 04/04/2012)
The above description reveals the great influence of teachers’ knowledge of instructional language provision on students’ learning. The teacher-researcher did not provide sufficient instruction before she distributed the worksheets to the students. She made a decision to avoid the potential confusion by postponing all the instructions about what these worksheets were for. However, the whole process of handing out the worksheets became messy. The students had to idle away their time in their own way without any purpose and were engaged into other tasks of talking or coloring in. When the "perfect time" came, she failed to attract these students' attention. Providing clear instruction at the right time, in this case the time should be at the beginning of the activity, would have helped students to be involved in the learning tasks with clear goals. The learning flow would be continuous without opportunity for them to be distracted which would avoid disengaging “lost time” effectively.

As for other teachers, the knowledge of instruction providing is also subtle. They also address the importance of stating teachers’ expectations before the start of the activity so that students can hold a clear idea of how to behave and what are unexpected. Although realizing the importance to provide instruction ahead, it is still found hard to apply it appropriately. For example, the following is an instance from Lavender's lesson:

When Lavender was giving the instruction, she was only facing the selected participants who were standing in front of the classroom. Other students sitting on their seats were lowering down their heads one by one, and soon none of them were looking at the front. Most of them were quiet, busy writing something on their notebook, only some were talking with partners softly. But no one was paying attention to what was going on in the front of the classroom.

(Lavender, observation 1, 23/10/ 2012)

Disengaging behaviors were observed during the teacher’s practice. Instead of providing the instruction to the whole class, the teacher made "private" instructions to selected students only. The teacher’s ignorance of other students made contributed to their disengagement. Those who were not selected started to do their own business
because there was no expectation from their teacher. Putting it in another way, these students' learning was hindered by the teacher's neglect. When asked why she chose to give instruction in such way, it was found that "timing" played an essential role in her practice:

L (Lavender): Actually I already gave instruction at the very beginning. I don’t know whether you noticed that or not. I told them that we would do some movements, and after doing movements I would select some students. I had already told them at the very beginning.

T (Teacher-researcher): So why did you give the instruction at the very beginning but not right before the activity?

L: Of course it should be given at the beginning. This instruction was to ask them to do movements with a goal, not to follow what I was doing without a clear idea. But maybe they also forgot it after doing the movement. [With a pause] I do need to remind them again and check again right before the activity, not after they [participants] had already stood in front of the class. Those students who were not selected would think that there was nothing to do with them...Now I will give instructions in advance before the game, because I suffered so much failure of not doing so. So now I've learned to give it ahead. But I am still not good in some details, like today; if I were them I would forget the instruction as well after doing all the movements, because they were so excited when doing the movements.

(Lavender, post-observation interview, 23/10/2012)

The teacher frequently addressed to provide the instruction before the conduction of the learning activity. She held high awareness of the importance of instruction timing. Such awareness, as mentioned in the interview excerpt, was gained through her failed experience in teaching. However, the situation was still not very satisfying. Although it was good to provide students with a general idea of the activity flow, the teacher forgot to re-provide the instruction right before the activity to the whole class. The repeated instruction would reinforce students' learning goals and prevent students' from being distracted. That is to say, it is not the fixed rule that instruction should be provided ahead matters, but the understanding of what role this instruction plays in the students’ learning. As a beginning teacher, though she gained a better understanding of the timing for instruction from the practice, teachers' knowledge was still unevenly wavy. Practical knowledge is not the absolute status of knowing or unknowing, but a developing progress of self-polish through more practice.
Knowing how to apply this knowledge to the dynamic and flexible instructional practice is more challenging than simply "knowing", and this enriches the relating knowledge in turn.

In addition, teachers’ knowledge of timing of instruction is also found essential for students’ learning in terms of classroom management. Here is another observed lesson:

...Students seemed to be very tired. Some already stopped touching their body parts when words were given. The teacher stopped making instruction, and said "I don't think some people participant in this activity at all". Then she stared at one student. Then she restarted. Students who were not moving in previous rounds were touching called body parts again.

(Kelly, observation 2, 30/10/2012)

The students' engagement was decreased during the process and off-task behaviors were witnessed among some students. When noticing this, the teacher disciplined the class immediately. Her management was efficient to drag students' attention back. She stimulated them to participate again behaviorally and to make responses according to the requirements cognitively. The teacher recalled her underlying thoughts after the lesson:

In that situation, I thought it is the high time to warn these students. They will "e" [mimetic word] and straight their back when hearing my warning. If I did not warn them then, they will be totally distracted and it will be impossible to attach their attention again.

(Kelly, post-observation interview 2, 30/10/2012)

The teacher used words like "high time" and "then" to make an assumption of the potential outcomes if the practice were conducted in different time point. She addressed the difficulty in classroom management when the "best time" was missed. This revealed her subtle knowledge of "when" to make instruction. This assisted her to effectively maintain students' attention and avoid the unexpected loss of control.

Besides the sensitivity of appropriate instructional timing, teachers' unskillful ability
in English is also found posing great obstacle among the beginning Mandarin teachers to provide prompt instruction in this case study. Take one of Miya's lessons as an example:

One boy seemed to be unsatisfied with teachers' arrangement. He said that there were more boys than girls in the class, so it should be more opportunity for boys. The teacher didn't response to his proposal. She just stood without saying anything for seconds. The students, mostly were boys, became quite impatient and started repeating in agreement. The whole class was quite noisy and it seemed all the students were talking...

(Miya, observation 3, 13/11/2012)

This instance was discussed during the interview and Miya explained the reason for her no response:

Sometimes I find it is not that smooth when communicating with them (students). Sometimes I just don't know how to express myself in English, while the kids keep saying together. Like today usually I would ask boys and girls to answer in turn like this...I didn't want to be guided by the student. I need to show teachers' authority after all. I want them to know I'm the teacher. But I did not know how to say it appropriately at that time. I could not find the suitable words. Then the boy was keeping saying and other boys began talking together. The following part of the lesson was a little bit in chaos. Just because of language, my reaction is relatively slow. This makes me unable to manage the classroom immediately.

(Miya, post-observation interview 3, 13/11/2012)

Miya's narrative is basically consistent with the teacher-researchers' observation record. Miya's failure to response to students' argument is considered as an important point during the lesson. According to her illustration, the reason for her postponing was that she could not express herself accurately and instantly due to her low EFL proficiency. This hindered her greatly to settle students' disagreement and to continue her teaching immediately. Her inability to provide prompt instruction posed a break in the instructional flow where students were easily distracted with interruptive behaviors. In further, her lack of proficiency to apply EFL as classroom language failed her to provide response immediately which triggered classroom disorder and
student disengagement. Similar instances were found rather common among beginning Mandarin teachers in this case study. The importance of instructional timing was addressed by all the teacher participants except Cameron and Catherine. For example, in one lesson, Frank provided extreme detailed instruction when organizing the learning activity. When asked to recall his underlying thoughts for this practice, the teacher mentioned his great worry for his incapacity to provide prompt instruction during the lesson:

Because it happened before that you could not decide who the winner was. Another reason is we are unable to manage the class during the teaching because of the English language and cultural diversity. So we have to give clear rules in advance. Other local teachers can just give instructions on spot to judge whom the ball belonging to if there is some dispute among students. They can react quickly as nature like we say in Mandarin. But I cannot do that, so I have to think more when preparing my instructions.

(Frank, post-observation interview 2, 30/10/2012)

The teacher expressed frankly his shortness in providing prompt instruction compared with local teachers. Frank addressed great importance of timing in instruction repeatedly with words like "in advance", "on spot" and "react quickly". Such importance was explained with the relationship with classroom management. Problems in classroom management were worried about due to his limitation in language knowledge. This worry was rooted in his prior teaching experience, which not only assisted the teacher to predict the potential issue during the instruction, but also led him to aware his language shortness in the face of unexpected issue.

6.4 Conclusion

This chapter reports the third category generalized from the database: the beginning Mandarin teachers' knowledge of EFL as classroom language. It is found that these beginning Mandarin teachers struggle in providing classroom language in EFL. They are mainly found lack of capacity in providing understandable and prompt instruction. This hinders the teachers keeping the flow of their teaching and to maintain students'
learning process. This deficiency leads to students' distraction and loss of interest and thus disengaged off-task behaviors. In contrast, sufficient knowledge of language expression and instructions will assist these beginning teachers to enhance their teaching flow and protect students' engagement in learning. Besides, the absent of such knowledge from beginning Mandarin teachers' training also is worth noting especially for second language teacher education.
CHAPTER SEVEN
DISCUSSION, IMPLICATION AND LIMITATION

7.0 Introduction

This thesis investigates the impact of beginning Mandarin teachers’ knowledge on students’ engagement through the case study within the context of ROSETE program. Data was collected from the authentic classroom teaching of seven beginning Mandarin teachers from the program. Three main knowledge domains, namely knowledge of MFL as subject matter, knowledge of Australian students and knowledge of EFL as classroom language, were categorized through thematic analysis and were illustrated one by one through the chapter four to chapter six.

Based on the data analysis, conclusion and discussion of the key findings concerning the research questions, the limitations and the implication of this study are presented in this chapter.

7.1 Conclusion and discussion of findings

This research project investigated the impact of beginning Mandarin teachers’ knowledge on students’ MFL learning engagement in Australian primary classes. Based on the data analysis with engagement of previous literature, key findings are crystallized focusing on three questions in the research project: 1) how do students engage in Mandarin learning? 2) What is beginning Mandarin teachers' practical knowledge underlying their teaching? 3) How does teachers' practical knowledge engage students?
7.1.1 Transfer among different types of engagements

The multi-dimension of student engagement was highly demonstrated in their MFL learning in this research project. It is slightly different from Munns and Woodward (2006)’s conceptualization. These three dimensions were not realized exactly at the same time as claimed as “simultaneously” (Munns & Woodward, 2006, 194). A process of development from the one or two dimensions into other aspects was found through teacher-researcher’s classroom observation.

The most common transfer began with students’ emotional engagement to cognitive engagement through students’ active participation in class. In order to get students actively participated in class, knowledge reinforcement, teachers' encouragement and good management of the activity were combined to motivate students' participation. On the one hand, when teachers provided an entertaining learning environment with exotic content or interesting learning activities, students’ emotional engagement was significantly enhanced. This removed students’ sense of “foreignness” to MFL learning. On the other hand, via scaffolding or appreciation, students’ positive attitude was stimulated so as to be more willing to involve into the learning activity. As a result, students’ behavioral engagement was promoted.

However, this transfer from emotional to behavioral engagement is fragile. The maintenance of students’ interest or their high initiative is not guaranteed via external stimulus. Students easily lose interest or are distracted when learning flow is interrupted or they find it difficult to understand the learning content. That is to say, the cognitive engagement is not guaranteed based on emotional/behavioral engagement (See figure 7.1).
Another approach for high engagement starts from stimulating students' cognitive engagement. It was found that under the influence of teacher’s encouragement and appreciation, students were more easily to be engaged to understand the learning content when they were asked to explore the answer by themselves and to practice the knowledge by connecting with their prior knowledge. Their learning was empowered with teachers' appreciation of students’ voice and knowledge. The sense of achievement and valuation gained enhanced their positive emotion towards MFL learning and promoted their participation. The ultimately integrated engagement achieved in this way boosted higher emotional and behavioral engagement, hence a virtuous cycle of learning engagement is generated (see Figure 7.2).
7.1.2 Integrated conceptualization vs. segregated indicators

With regard to the student engagement, the segregated indicators also need to be rethought so as to identify engagement fitting into its integrated conceptualization.

Engaging indicators are not in line with the behavioral and emotional signals such as “concentration, attention” but actually absent-minded (see Table 3.3). It is frequently noted that students may represent “negative” emotion or behaviors when they are actually engaged cognitively. One common situation was that when the beginning Mandarin teachers were unable to provide understandable instructions. Students were always observed as "confusion, frown, hesitation, doubt" without initiatives. But it was found later this less positive emotion did not represent students' rejection or negativity towards teachers' failure in English expression. In fact, in most times they paid attention to the teachers' instruction and tried to figure out the teachers' "strange" expression. Their confusion and doubt were external demonstration of their thinking, or the difficulty they found in their thinking. According to the indicators concluded (see Table 3.3), the students were actually involved themselves cognitively in elaborating the learning content or the activity and making themselves understood using their prior knowledge. Thus, a confliction between low emotion/behavior and positive cognitive reaction occurred.

Hence, as good reference to the classroom observation, engaging indicators are never the fixed rules for identifying student engagement. Since those engaging indicators were concluded through the empirical studies on identifying teachers' engaging practice, it is more necessary to study engagement as an integrated construction. No single strategy is able to guarantee students' learning engagement without consideration of the complexity of the learning and teaching.

The teacher-researcher's understanding on the conceptualization of the engagement has been progressively modified through the interaction with field practice. When
prior knowledge established is applied to the academic learning, it is found conflicting with the real situation. That encourages teacher-researchers to rethink this term. This also implies the necessary to place the research into the practical context for a more applicable and accurate theory.

7.1.3 Absence of knowledge of classroom language

Three main domains of beginning Mandarin teachers’ practical knowledge were categorized from the database: 1) knowledge of MFL as subject matter; 2) knowledge of Australian students; 3) knowledge of EFL as classroom language. Compared with components of teachers’ practical knowledge, knowledge concerning teachers’ classroom language is absent from the previous literature. Such absence from research on teachers’ knowledge is mainly assumed due to two reasons.

Firstly, the majority of previous explorations of teachers’ practical knowledge were from teachers’ narrative alone rather than authentic classroom interaction with student learning. The practical knowledge is implicit and hard to be identified by teachers themselves, especially for non-native beginning teachers. Hence, classroom observation as the main data collection method in this case study provides a more authentic and comprehensive understanding of MFL teachers' practical knowledge.

Secondly, bilingual pedagogical circumstance constitutes a dual challenging for these beginning Mandarin teachers. In this bilingual educational environment, English as the first language for the students was applied as the instructional language by the Mandarin teachers. So, like other non-native teachers, they struggled to participate in the Anglophone school and classroom discourse as well as to empower themselves with teacher authority (Shin, 2008). Moreover, unlike the local-based L2 teachers, there is no alternative way for them to explicit themselves better if they are not understood by students. As observed in their teaching practice, teachers' deficit in
language competency exerted negative impact on students’ learning engagement. Thus, this also suggests the great importance of investigation within certain subjects like MFL in this case.

7.1.4 Integrated practical knowledge base

Three domains categorized from this study were found closely interactive and connected with each other. The relationships are illustrated as follows:

First, teachers’ knowledge of Australian students, especially Australian students’ interests and learning ability are closely related. This knowledge assists teachers to adapt their subject matter knowledge of Mandarin into a learnable foreign language. If teachers lack the knowledge of students, they will be isolated from the knowledge of subject matter so as not to address students' difficulties and scaffold their learning.

Secondly, students’ prior knowledge relating to both L1 and target language is highly connected with learnability of the target language. As the observation showed, the combination between target language and students' prior knowledge decreased the difficulty and removed L2 learners' sense of "foreignness", so students' cognitive engagement was stimulated. Thus, it is essential to take students’ prior knowledge into account when teachers develop their native language knowledge into second language knowledge. By doing that, teaching content of the target language will be more suitable and learnable for L2 learners and their engagement in the class will be further enhanced.

Thirdly, teachers' knowledge of students promotes the beginning Mandarin teachers' knowledge of classroom language in EFL. In the L2 classroom, target language as teaching content and English as classroom language which is students' mother tongue in this case compose the dual language input. This input can only function effective when they are accepted by the students. As analyzed in chapter six, teachers'
knowledge of EFL is not only the English language understood by English native speakers, but more specifically, by Australian primary students. A better knowledge of students' prior English language knowledge and cognitive ability provides the teachers with more concrete knowledge of appropriate language. As for the relationship between teachers' knowledge of subject matter and that of classroom language, it was found that lack of EFL knowledge hindered positive impact of teachers' knowledge of subject matter on students' learning. Despite of prior preparation, teachers found it tricky to make clear and specific explanation when long paragraph of English expression was needed either in illustrating the difficult point during content presentation or giving rules for the learning activities.

Therefore, knowledge of students, teachers' prior knowledge of Mandarin as native language and EFL are selected and reconstructed based on consideration of students in L2 acquisition. In this way, more appropriate practical knowledge of subject matter and classroom language is able to be developed. The more knowledge of L2 student the beginning teachers have, the stronger impact it will make on the reconstruction and development of practical knowledge in terms of content and classroom language.

Through these interrelationships among three knowledge domains, an integrated frame of the teachers' knowledge base has been constructed (see Figure 7.3). The knowledge of Australian students exerts strong influence on the development and application of other two kinds of knowledge. The knowledge of classroom language impacts the presentation and practice of the teaching content while teachers’ knowledge of the subject matter is constructed with the consideration of both students and classroom language.
7.1.5 Field experience as the main source for practical knowledge

It was found that these beginning Mandarin teachers' practical knowledge was mainly developed through practical interaction with the local context especially with local teachers and students. They designed the teaching flows including determination of teaching goals and content, material, learning activity and other aspects in teaching. Moreover, reflective bases as well direct information were provided within the field to construct teachers' appropriate practical knowledge progressively through continuous trial and error. Despite the fact that the well-prepared practice did not lead to expected satisfactory effect, field experience provides reliable source for practical knowledge.

This can be attributed to several factors, among which reflective base obtained from field practice is the main reason. For one thing, the different national context between China and Australia poses distinguished educational community of practice, where students’ learning, teachers’ teaching, classroom cultures and other educational aspects vary. These variations prevent the beginning Mandarin teachers from providing proactive instructions and transferring their prior knowledge into
practical knowledge for MFL in Australian primary schools. Thus, field experiences become a reliable source for the data collection. For another, this reflective base scaffolds them to evaluate the effectiveness of their practice, to identify their practical insufficiency problems, or to reinforce new learnt strategies. Apart from offering reflective base, specific information about contexts supplied by teachers' field experience plays a very crucial role. In these contexts, teachers' knowledge is continuously negated or confirmed with the judgment from students and their learning. Consequently, their knowledge base is reconstructed to adapt to contextualized practice.

The teachers’ field experiences bring about great benefits to Mandarin teaching. First, the local teachers' practices provide assistances to explicit activity rules and to manage the classroom, set beneficial models for beginning Mandarin teachers. Their classroom language usages are greatly valued as examples to follow. The memorization and practice of these native expressions is regarded as the major way to supplement their knowledge of EFL as classroom language. Second, the observational opportunities the Mandarin teachers obtained in local schools set a more comprehensive teaching model for them to understand the teaching and learning in Australian primary schools. The teaching practices by local teachers are relatively well-developed and confirmed as suitable for local students through repetitive practice and adjustment. Many engaging practices observed in the Mandarin classes are claimed as learnt from local teachers in this study. Based on a vivid model, the beginning Mandarin teachers are able to equip themselves with capacities and to adapt themselves to the context more smoothly. Last but not least, teachers' field work practice offers direct information about students and their learning through informal communicative interaction with students in or out of classroom. The information learnt in the field interaction is claimed to inspire the teachers' teaching ideas, even their practice on spot, particularly in terms of decisions on teaching content and learning activity design. The practical application integrates the scattered and personal information into more stable and general-oriented
knowledge that can be employed repetitively. Similar as those from local teachers' example, specific information learnt directly needs to integrate itself into the prior knowledge base through trial and error.

In summary, it is the essential for beginning teachers to enhance their practice and develop their knowledge base. In terms of the beginning Mandarin teachers, their prior knowledge including their prior understanding on teaching and learning, beliefs as a teachers and pedagogical strategies are decomposed into practical and applicable segments. In this case, contextualized classroom practices scaffold them in the process of construction of their practical knowledge. When those elements are inappropriate, they are identified, adjusted or filtered through the field practice with reflection-on-action based on students' response. Therefore, for beginning teachers, field work experience is precious and informative means to enhance their practice and develop their knowledge base and its impact on students’ engagement cannot be neglected.

The impact of teachers' practical knowledge on engaging students is noted mainly in three ways. They are crystallized into three Chinese idioms: 先入为主 (xiān rù wéi zhǔ), 入乡随俗 (rù xiāng suí sú ) and 教学相长 (jiāo xué xiàng zhǎng) which are illustrated individually as follows.

7.1.6 先入为主 (xiān rù wéi zhǔ): First match wins

The Chinese idiom 先入为主 (xiān rù wéi zhǔ) used here means teachers as knowledge providers need to make initiatives to establish the power in the classroom. In Mandarin teaching, teachers’ knowledge empowers them to establish MFL classes in the Anglophone context and engages students into Mandarin learning. Thus, teachers’ capacity to lead students in learning Mandarin can produce effective education outcome.
The beginning teachers’ “Chinese” knowledge is advantageous and empowers them to be the experts in the MFL classrooms. In the first place, the beginning Mandarin teachers as foreigners bring abundant appealing exotic “Chinese” knowledge to the Australian primary students. This significantly decreases students’ potential resistance to the foreign teachers and the MFL learning and increases the opportunity of student engagement. Through the data analysis, it is found that students are highly engaged in interesting topics relating Chinese cultures and life like Chinese money. In the second place, such empowerment through exotic “Chinese” knowledge significantly makes up for the lack of experience as beginning teachers and enhances their power in classroom management.

In addition, the vital role of teachers’ knowledge of subject matter playing in the process of teaching planning is also acknowledged. Their knowledge on the daily life language in modern Chinese society and the Chinese culture drives teachers to demonstrate a culturally based communicative oriented Mandarin classroom, which enhances students’ engagement to varying degrees. More importantly, the indispensable relationship between teaching content and individual teachers’ knowledge base has a far-reaching significance for future study to examine the teaching content and its impact on teachers’ teaching.

7.1.7 入乡随俗 (rù xiāng suí sú): Do as the Romans do

There is a Chinese idiom called 入乡随俗 (rù xiāng suí sú), whose meaning equals to an English saying that when in Rome, do as the Romans do. Through this research, it is found that besides teachers’ self evaluation and demonstration of their "Chinese" knowledge, the contextualization of their knowledge is also of great significance for students’ learning.

To begin with, the educational context between China and Australia are distinguished, thus the beginning Mandarin teachers have to adjust themselves to the Australian
teaching and learning context. In this study, it is found that the traditional teaching approach with sheer teacher centeredness they experienced in China is not applicable in Australian primary classrooms. Due to their failure in engaging students in the class, these beginning Mandarin teachers rethink their ways of teaching and their understanding of Australian students. Consequently, transformations are made to adjust teaching methods and teaching contents based on the practical knowledge so that these changes facilitate their teaching significantly.

Moreover, the contextualization of the teachers’ knowledge is of great value for the generation of new knowledge in Mandarin teaching. On the one hand, the better understanding of the broad educational context supports teachers to reflect their prior knowledge base. That helps teachers to select and modify their prior knowledge to fit into the new context. For example, their knowledge of English is polished to be appropriately understood by the Australian students. On the other hand, their contextual knowledge also stimulates them to collect relating information to be organized into developing practical knowledge base. For example, the beginning Mandarin teachers observed students’ ball game on the playground out-of-class and brought this context into their Mandarin teaching. It is found that the application of this contextualized new practical knowledge is quite engaging, which greatly enriches teachers’ knowledge of Australian students and the new culture.

Therefore, it is of great importance for teachers to take initiative to enter into students’ world by applying contextualized knowledge. Contextualizing teachers’ knowledge is a negotiation between teacher as a personal knowledge agent and the broad practical context. More specifically, it is the negotiation between teachers and students. Teachers' application of contextual-based knowledge combined the MFL classroom with the students’ personal life closely.
7.1.8 教学相长(jiāo xué xiàng zhǎng): learning while teaching

Last but not the least, teachers' practical knowledge also impacts on students' engagement through learning knowledge and experience from the students while teaching Mandarin. This can be crystallized as "教学相长(jiāo xué xiàng zhǎng)" in Chinese, which literally means to learn from students while teaching. Of course, it never indicates the abandon of roles as a teacher, but refers that teachers should weaken their authority consciously and regard students as equal knowledge contributors. Based on classroom observations and the teacher-researcher's self-reflection journals, when students’ voice, knowledge or experience was valued and brought into their Mandarin learning, they were highly engaged in all terms.

The reasons for these beginning Mandarin teachers to conduct the method of “learning while teaching” can be put as follows. To start with, their less knowledge on Australian students and their learning or daily life makes it more necessary to learn more about their students in the process of Mandarin teaching. Their very beginning knowledge of students was based on and modified from their "assumption" generating from teachers' prior experience and knowledge in China. However, their failure in applying these self assumptions as practical knowledge was mostly found through teachers' presentation of content. What is worse, their understanding of the MFL as subject matter from the perspective of first language speakers always overlooks the need and the knowledge base of Australian primary students as second language learners. Moreover, lack of the knowledge of students’ role in the process of learning Mandarin is critical driving force. In terms of students’ role in the Mandarin class, they were not simply knowledge receivers, but independent knowledge constructors. Therefore, it is thorny for students to concentrate on and comprehend actively what they are learning. Lastly, the transformation of the teachers’ role is a significant contributor. Beginning Mandarin teachers need to forget their role as a native language teacher and put themselves into
the situation of L2 learners, although it is an essential though task for them. As a result, these factors promote the beginning Mandarin teachings to take the method of “learning while teaching” and to great extent assist them to conquer the difficulties in teaching Mandarin in Australia.

It is worth noting that this approach brought about considerable benefits to the beginning Mandarin teachers and the students as well. In the first place, “learning while teaching” made the beginning Mandarin teachers fully realize their strength. Although they were lack of knowledge of students and classroom language, their sufficient knowledge of subject matter became an advantage for them to improve themselves. Under such circumstances, self insufficiency among teachers encouraged them to learn from their field experience and their students. Thus, the increasing knowledge of students and classroom language through learning from students promoted teachers’ professional development and thus renewing authority and power. In the second place, learning while teaching provided a more flexible learning approach. Instead of making predetermination, the teachers left space during their teaching practice for students to express their own thoughts, knowledge, and experience. By doing this, they retreated from the leading role in the knowledge construction so that students were empowered as knowledge contributors.

In summary, it is extremely informative for teachers to “learn while teaching”. It not only makes up the insufficiency of the beginning teachers’ knowledge, but also enables them to make self-improvement on teaching concepts. What’s more, it provides more flexibility for students so that they can exert the role of knowledge contributors instead of language learners. Therefore, more importantly, this enabled the teachers to access the students’ world so as to bridge the knowledge gap between Chinese and Australian learning context.
7.2 Implications

There are several implications of this study for teacher education and classroom practice in the field of foreign language teaching. This study not only provides a number of engaging teaching practices, but also investigates the impact of underlying knowledge.

First, it is of great significance for development of beginning teachers. Due to teachers’ practical knowledge is implicit and tactic, the reveal of its essential content will facilitate other beginning teachers, especially L2 teachers to understand what knowledge is needed for their appropriate practice. Although clarifying practical knowledge's content does not necessarily lead to successful teaching practice, they can make effective reflection with clear target.

Secondly, it will promote the development of the teachers’ practical knowledge in Mandarin teaching. Knowledge of MFL as to all aspects such as pronunciation, character, grammatical structure and culture may provide some insightful suggestions to offer beginning teacher more applicable and specific knowledge concerning the subject and the students. Furthermore, the importance of the teachers’ knowledge of classroom language also suggests that the teacher educators put more attention on relating training.

Thirdly, teachers’ reflection on their Mandarin teaching experiences can inspire other teachers to cultivate their own ideas in teaching. The reflection on teaching provides effective ways for future Mandarin teacher to understand of the impact of teachers’ knowledge, its impact on students’ learning and teachers’ deficiency. That deepens the reorganization of their teaching, which will enhance teachers' development in practical knowledge more quickly.
Lastly, the context in the development and application of teachers’ practical knowledge is of great significance for future Mandarin teaching. On the one hand, the unfamiliarity towards the context and the lack of relating knowledge was noted among the teacher participants in this study. That provides precious experience for the future teachers to be well-prepared for the new teaching context. On the other hand, this enables future teachers to involve into the context of teaching. And more importantly, these teachers’ prior knowledge provides valuable reference for future teachers to generate new knowledge so as to enrich their practical knowledge.

7.3 Limitation and recommendation

Apart from the implications mentioned above, this study has its limitations. The first one is the difficulty of promoting the research outcome in a general scale. This case study was conducted to the teacher participants within the ROSETE program. Their teacher education and teaching are different from other beginning MFL teachers. The development and the application of the practical knowledge for these beginning Mandarin teachers were more personal-related due to the relatively limited teacher education received. Furthermore, as a non-intervened study of observation of intact classes, the great variability exists. The characteristics and personalities of Australian students can distinguish among different schools and classes. Students’ responses may vary because of their experience, classroom behaviors required by the classroom teachers or interest. In result, the effect of certain teacher practice in engaging students may differ with different group of students. The second limitation is that the number of the participants in this study is limited. All the participants in this study are beginning Mandarin teacher group in ROSETE Program, who cannot represent the whole group of the Mandarin teachers in Australia and the world around. Thus, more Mandarin teachers should be taken into account to be participants for the research.

In view of the limitations, there are several recommendations for the future research.
Firstly, a larger size of participants can be involved to enhance the generality of the research outcome. Secondly, the variability of the background of the participants should be considered so as to make the findings more reliable. At last, the study can be expanded to high schools for a better understanding of the impact of teachers’ knowledge.
REFERENCES


Connelly, F.M., Clandinin, D.J., & He, M.F. (1997). Teachers’ personal practical


APPENDIX 1: UWS Ethics Approval

UWS HUMAN RESEARCH ETHICS COMMITTEE

23 April 2012

Doctor Jinghe Han,
School of Education

Dear Jinghe,

I wish to formally advise you that the Human Research Ethics Committee has approved your research proposal H9512 “The impact of beginning Mandarin teachers’ knowledge on primary students’ classroom engagement in Western Sydney Schools“, until 31 December 2012 with the provision of a progress report annually and a final report on completion.

Please quote the project number and title as indicated above on all correspondence related to this project.

This protocol covers the following researchers:
Jinghe Han, Michael Singh, Wenlu Qiu.

Yours sincerely

Dr Anne Abraham
Chair, UWS Human Research Ethics Committee

j.han@uws.edu.au
APPENDIX 2: SERAP APPROVAL

Ms Wenlu Qiu
Kingswood Campus
School of Education,
Locked Bag 1797
University Western Sydney
PENRITH NSW 2751

Dear Ms Qiu,

I refer to your application to conduct in NSW government schools (Western Sydney Region) a research project entitled The impact of beginning Mandarin teacher's knowledge on primary students' classroom engagement in Western Sydney schools.

I am pleased to inform you that your application has been approved and that you may now contact the Principals of the nominated schools to seek their participation.

Your approval will remain valid until 3 June 2013.

You should include a copy of this letter with the documents you send to the schools.

I draw your attention to the following requirements for all researchers in NSW government schools:

- School Principals have the right to withdraw the school from the study at any time.
- The approval of the Principal for the specific method of gathering data must also be sought.
- The privacy of the school and the students is to be protected.
- The participation of teachers and students must be voluntary and must be at the school's convenience.
- Any proposal to publish the outcomes of the study should be discussed with the research Approvals Officer before publication proceeds.

Yours sincerely,

Janet Chan
RSchool Education Director, Western Sydney
Western Sydney Region Education Research Manager
3 June 2012

NSW Department of Education & Communities – Western Sydney Region
Norma Education Precinct, Building 75C, Eastern Road, QUakers Hill, NSW 2763 T 9208 7611 F 9208 7636
www.det.nsw.edu.au
APPENDIX 3: Letter to the Principals

Dear Principal,

As part of a research study for the Master of Education (Hons), researcher Wenlu QIU who is also a volunteer Mandarin teacher would like to conduct classroom observations in Mandarin classes of your school to observe the teaching practices of the volunteer Mandarin teacher and corresponding response of students.

This research project aims to investigate the impact of beginning Mandarin teachers’ knowledge on primary students’ learning engagement to enhance pre-service Mandarin teacher education and improve Australian primary students’ engagement in foreign language learning. Should you agree, the researcher will schedule observations in Mandarin classes of your school. The Mandarin teacher and the students in the class to be observed will be invited to be participants. One Mandarin class will be selected under discussion with Mandarin teacher. The selected class will be observed 3-4 times in term 2 and 3 2012. No disruptions will be made to the class or the school during the observations. Participation in this research will be totally voluntary. Participants may withdraw from this project at any stage. Should any do so, unprocessed data can also be withdrawn at that stage. If you wish to know more about the research, please contact Wenlu QIU by email: 17320388@student.uws.edu.au

Thank you in anticipation of your valuable contribution to this research project.

Yours sincerely,

Wenlu QIU

Centre for Educational Research, UWS

This study has been approved by the University of Western Sydney Human Research Ethics Committee. The Approval number is H9512. If you have any complaints or reservation about the ethical conduct of this research, you may contact the Ethics Committee through the Office of Research Services on Tel 02-4736 0083 Fax 02-4736 0013 or email humanethics@uws.edu.au. Any issue you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
APPENDIX 4: General Information Sheet

Project Title: The impact of beginning Mandarin teachers' knowledge on primary students' classroom engagement in Western Sydney Schools

You are invited to participate in a study conducted by Wenlu QIU. It is part of the degree of Master of Education (Hons) in Centre for Educational Research, University of Western Sydney. This study is supervised by Dr Jinghe Han and Professor Michael Singh. We are asking you to take part in this project.

The purpose of this study is to investigate the impact of beginning Mandarin teachers' knowledge on the learning engagement or disengagement of primary students in Australian schools.

This study will involve classroom observations of your teaching practice and interviews on your understanding about the impact of teachers' knowledge on students' learning engagement. The interview will be recorded by a recording pen. Interview transcripts and observation records will be used as data in the study based on your permission. Observation will be conducted 3 to 4 times in term 3 and 4 of 2012; Interviews will be conducted once for 45 minutes to 1 hour.

You will be informed of main content of this research and can withdraw if you are not willing to continue. Your name will be anonymous. The time of interview and observations will be fit into your schedule. No harsh or private questions will be asked during the interview. No disruption will be made during the observations. This study will help you to reflect on your teaching to improve your teaching practice and knowledge base as a beginning Mandarin teacher.

The results will be disseminated in the form of thesis which will be given to the University of Western Sydney. And a short report of the thesis will also be given to the ethical committee and NSWDEC.
Participation is voluntary. If you do decide not to take part, it will not affect your relationship with the researcher. If you change your mind about taking part, even after the study has started, just let the researcher know and any information already collected from you will be destroyed.

Interviews will be on audio-tape. Observation records will be on computer files. All computer files containing audio-taped interviews will require a password for access. These raw data will be stored for 5 years, after which they will be shredded. Only my supervisors and I will have the right to access this information in accordance with ethical guidance. If you would like to check information from you that will be used in the study, you need to contact me or my supervisor as below.

When you have read this information, Wenlu QIU will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact:

Wenlu QIU by calling 0426717436 or via e-mail 17320388@student.uws.edu.au
Dr Jinghe Han by calling 0422652972 or via e-mail j.han@uws.edu.au
UWS Ethics committee by calling 0247360883, fax 0247360013 or via e-mail humanethics@uws.edu.au

This information sheet is for you to keep.
Any issue you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
If you agree to participate in this study, you may be asked to sign the Participant Consent Form.
APPENDIX 5: Parent/Caregiver Information Sheet

Participant Information Sheet (Parent/Caregiver)

Project Title: The impact of beginning Mandarin teachers' knowledge on primary students' classroom engagement in Western Sydney Schools

Your child is invited to participate in a study conducted by Wenlu QIU at the centre of Educational Research, University of Western Sydney. This study will form the basis for the degree of Master of Education (Honours) at the University of Western Sydney under the supervision of Dr Jinghe Han and Professor Michael Singh. We are asking permission for your child to take part in this project.

The purpose of this study is to investigate the impact of beginning Mandarin teachers' knowledge on the learning engagement or disengagement of primary students in Australian schools.

This study will involve classroom observation of beginning Mandarin teachers' teaching practice and the corresponding response from students. The observation will be conducted three to four times in the term 3 and 4 2012 for half an hour to an hour each time according the length of Mandarin class. The focus of observations will be Mandarin teachers' teaching practice and and no child will be observed as individual. No-one will be able to identify you or your child from the results of the study.

The results will be disseminated in the form of thesis which will be given to the University of Western Sydney. And a short report of the thesis will also be given to the ethical committee and NSWDEC.

Your child's participation in the study is entirely voluntary: you are not obliged to consent. Your child may withdraw from the study at any time - or you may withdraw your child from the study at which point all records of your child's participation will be destroyed. Children not participating in the study will be sent to other classes during the time the research is being carried out.

The observation records will be stored in computer files which will require a password to assess for 5 years, after which they will be destroyed. These files can only be accessed by the researcher Wenlu QIU and her supervisors. The observation records will be used to identify
what teaching practices will engage or disengage students. If you have concerns about what has been recorded, you may access recordings of your child within the period of storage. These recordings can be accessed by calling the researcher on 0426717436 or sending an e-mail to her (17320388@student.uws.edu.au).

When you have read this information, Wenlu QIU will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Wenlu QIU by calling 0426717436 or via e-mail 17320388@student.uws.edu.au.

If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Office of Research Services on Tel +61 2 4736 0229 Fax +61 2 4736 0013 or email humanethics@uws.edu.au. This information sheet is for you to keep. Your child has also been given information about this project. Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome. If you agree to participate in this study, you may be asked to sign the Participant Consent Form.
APPENDIX 6: Student information sheet

Participant Information Sheet (Student)

Project Title: The impact of beginning Mandarin teachers’ knowledge on primary students’ classroom engagement in Western Sydney Schools

You are invited to participate in a study conducted by Wenlu QIU. It is part of the degree of Master of Education (Hons) in Centre for Educational Research, University of Western Sydney. This study is supervised by Dr Jinghe Han and Professor Michael Singh. We are asking you to take part in this project.

The purpose of this study is to investigate the impact of beginning Mandarin teachers' knowledge on the learning engagement or disengagement of primary students in Australian schools.

The study will involve classroom observation of your Mandarin teachers' teaching practice and the response of students in your class. The observation will be conducted three to four times in the term 3 and 4 2012 for half an hour to an hour each time according the length of Mandarin class. The focus of observations will be Mandarin teachers' teaching practice and you will not be observed as individual. No-one will be able to identify you from the results of the study.

The results will be disseminated in the form of thesis which will be given to the University of Western Sydney. And a short report of the thesis will also be given to the ethical committee and NSWDEC. Your participation in the study is entirely voluntary: you are not obliged to consent. You may withdraw from the study at any time - or you may withdraw from the study at which point all records of your participation will be destroyed.

The observation records will be stored in computer files which will require a password to assess for 5 years, after which they will be destroyed. These files can only be accessed by the researcher Wenlu QIU and her supervisors. The observation records will be used to identify what teaching practices will engage or disengage students. If you have concerns about what has been recorded, you may access recordings within the period of storage. These recordings can be accessed by calling the researcher on 0426717436 or sending an e-mail to her (17320388@student.uws.edu.au).
When you have read this information, Wenlu QIU will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact Wenlu QIU by calling 0426717436 or via e-mail 17320388@student.uws.edu.au.

If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Office of Research Services on Tel +61 2 4736 0229 Fax +61 2 4736 0013 or email humanethics@uws.edu.au.

This information sheet is for you to keep.

Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

If you agree to participate in this study, you may be asked to sign the Participant Consent Form.
APPENDIX 7: General Consent Form

GENERAL CONSENT FORM

Project Title: The impact of beginning Mandarin teachers' knowledge on primary students' classroom engagement in Western Sydney Schools

I, ........................................, consent to participate in the research project titled The impact of beginning Mandarin teachers' knowledge on primary students' classroom engagement in Western Sydney Schools.

I acknowledge that:

I have read the participant information sheet [or where appropriate, ‘have had read to me’] and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

I consent to the audio taping of interviews and classroom observations.

I understand that my involvement is confidential and that the information gained during the study may be published but no information about me will be used in any way that reveals my identity.

I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher/s now or in the future.

Signed: ........................................................................................................
Name: .........................................................................................................
Date: ...........................................................................................................

If you have any complaints or reservations about the ethical conduct of this research, you
may contact the Ethics Committee through the Office of Research Services on Tel 02-4736 0883 Fax 02-4736 0013 or email humanethics@uws.edu.au. Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
APPENDIX 8: Parents/Caregivers Consent Form

Participant Consent Form for Parents/Caregivers

Project Title: The impact of beginning Mandarin teachers' knowledge on primary students' classroom engagement in Western Sydney Schools

I,…………………………, give consent for my child …………………………… to participate in the research project titled The impact of beginning Mandarin teachers' knowledge on primary students' classroom engagement in Western Sydney Schools.

I acknowledge that:

I have read the participant information sheet [or where appropriate, ‘have had read to me’ ] and have been given the opportunity to discuss the information and my child’s involvement in the project with the researcher/s.

The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

I have discussed participation in the project with my child and my child agrees to their participation in the project.

I understand that my child’s involvement is confidential and that the information gained during the study may be published but no information about my child will be used in any way that reveals my child’s identity.

I understand that my child’s participation in this project is voluntary. I can withdraw my child from the study at any time, without affecting their academic standing or relationship with the school and they are free to withdraw their participation at any time.

I consent to the classroom observation. Please cross out any activity that you do not wish your child to participate in.

Signed (Parent/caregiver): ……………………………
Signed (child):…………………………
If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Office of Research Services on Tel 02-4736 0883 Fax 02-4736 0013 or email humanethics@uws.edu.au. Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
APPENDIX 9: General information of classroom observation

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Observed lesson 1</th>
<th>Observed lesson 2</th>
<th>Observed lesson 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frank</td>
<td><strong>Topic:</strong> Food</td>
<td><strong>Topic:</strong> Food</td>
<td><strong>Topic:</strong> Food</td>
</tr>
<tr>
<td></td>
<td><strong>Culture:</strong> Video of &quot;an overseas friend in China&quot;</td>
<td><strong>Words:</strong> 汉堡包，炒饭，三明治 (hamburger, fried rice, sandwich)</td>
<td><strong>Culture:</strong> Introduction of Mid-autumn festival</td>
</tr>
<tr>
<td></td>
<td><strong>Words:</strong> 可乐，果汁，咖啡 (coke, juice, coffee)</td>
<td><strong>Sentences:</strong> 我喜欢吃 (I like to drink...)</td>
<td><strong>Words:</strong> 甜月饼，咸月饼，冰淇淋月饼，巧克力月饼 (sweet mooncake, salty mooncake, icecream mooncake, chocolate mooncake)</td>
</tr>
<tr>
<td></td>
<td><strong>Character:</strong> 可乐，咖啡 (coke, coffee)</td>
<td><strong>I want... (I want...)</strong></td>
<td><strong>Characters:</strong> 牛，羊 (cow, sheep)</td>
</tr>
<tr>
<td>Kelly</td>
<td><strong>Topic:</strong> Greetings</td>
<td><strong>Topic:</strong> Body part</td>
<td><strong>Topic:</strong> Body part</td>
</tr>
<tr>
<td></td>
<td><strong>Sentences:</strong> 你好！ (Hello!)</td>
<td><strong>Words:</strong> 头，头发，眼睛，耳朵，鼻子，嘴巴 (head, hair, eye, ear, nose, mouth)</td>
<td><strong>Words:</strong> 手，脚 (hand, foot)</td>
</tr>
<tr>
<td></td>
<td><strong>再见！ (Goodbye!)</strong></td>
<td></td>
<td><strong>Review all the words of body parts</strong></td>
</tr>
<tr>
<td>Lavender</td>
<td><strong>Topic:</strong> Direction</td>
<td><strong>Topic:</strong> Places</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td><strong>Words:</strong> 左，右，前，后 (left, right, forward, back)</td>
<td><strong>Words:</strong> 学校，医院，邮局，超市 (school, hospital, post office, supermarket)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Phrase:</strong> 向+direction+action (towards...)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Character:</strong> 左 (left)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miya</td>
<td><strong>Topic:</strong> Drinking</td>
<td><strong>Topic:</strong> Drinking</td>
<td><strong>Topic:</strong> Food and drink</td>
</tr>
<tr>
<td></td>
<td><strong>Words:</strong> 水，茶 (water, tea)</td>
<td><strong>Review all the words of drinking</strong></td>
<td><strong>New words:</strong> 薯条 (chip)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Review all the words of food and drink</strong></td>
</tr>
<tr>
<td>Cameron</td>
<td><strong>Topic:</strong> African animals</td>
<td><strong>Topic:</strong> African animals</td>
<td><strong>Topic:</strong> Mid-autumn festival</td>
</tr>
<tr>
<td></td>
<td><strong>Words:</strong> 大象，鳄鱼，狮子，犀牛，羚羊，猫鼬，蛇，河马 (elephant, alligator, lion, rhino, antelope, meercat, snake, hippo)</td>
<td><strong>Sentences:</strong> 你喜欢什么动物？ (What animal do you like...?)</td>
<td><strong>Culture:</strong> Introduction of Mid-autumn festival</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>你想养什么动物？ (What animal do you want to keep?)</strong></td>
<td><strong>Words:</strong> 甜月饼，咸月饼，冰淇淋月饼，巧克力月饼 (sweet mooncake, salty mooncake, icecream mooncake, chocolate mooncake)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Characters:</strong> 牛，羊 (cow, sheep)</td>
<td></td>
</tr>
<tr>
<td>Catherine</td>
<td><strong>Topic:</strong> Zodiac animals</td>
<td><strong>Topic:</strong> Zodiac animals</td>
<td><strong>Topic:</strong> Father's day</td>
</tr>
<tr>
<td></td>
<td><strong>Words:</strong> 鼠，牛，虎，兔，龙，蛇 (rat, ox, tiger, rabbit, dragon, snake)</td>
<td><strong>Words:</strong> 马，羊，猴，狗，猪 (horse, sheep, monkey, cock, dog, pig)</td>
<td><strong>Sentences:</strong> 爸爸我爱你。 (Dad, I love you.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>我有好爸爸。 (I have a good father.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Character:</strong> 爸 (father)</td>
</tr>
</tbody>
</table>

Table: Appendix 9