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TEACHER COGNITION ABOUT AND PRACTICE IN CLASSROOM LISTENING INSTRUCTION: CASE STUDIES OF FIVE ENGLISH-AS-AFOREIGN-LANGUAGE (EFL) TEACHERS IN A CHINESE UNIVERSITY

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A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATION (APPLIED LINGUISTICS)

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ABSTRACT

Listening for learners of English-as-a-foreign-language (EFL) is a complex cognitive process, success of which depends upon many factors, such as linguistic knowledge, conceptual awareness, cognitive processing, social factors and the like. It is not only a physical activity for EFL learners, it is also a process that requires learners' mental processing and understanding. Listening takes up a significant part of the EFL curriculum for Chinese university English learners, especially the English majors. However, it has long been a challenge for, and weakness of, students. Most teachers and students at the tertiary level in China have concerns, doubts and complaints about the learning outcomes of EFL listening in the classroom. Little research has been reported, however, on what Chinese EFL teachers think about EFL listening and how their beliefs about EFL listening and listening instruction relate to their pedagogical practice in the classroom. This study aimed to fill this research gap at a time that teachers take the centre stage of educational institutions in China.

Adopting a qualitative research design, this study included five cases over a 16-week academic semester from September 2015 to January 2016. Data collection consisted of two major phases and one supplementary stage. In Phase One (the first week of the semester) pre-observation interviews were conducted once with each participant, to provide a holistic overview of the participating teachers' cognitions about EFL listening. In Phase Two (the 2nd – 16th week of the semester) classroom observations and post-observation interviews were held. The purpose of Phase Two was to gain insights into teachers' EFL listening instruction in the classroom and to investigate their pedagogical decision-making and explanations for the inconsistency between their cognitions and

practice. The subsequent interviews held with participants were to supplement the data, after the two major phases.

The theoretical framework of this research is the combination of Borg's model of language teacher cognition (S. Borg, 2015) and the Vygotskian approach to human learning and development, namely, the notion of Zone of Proximal Development (ZPD) and mediation. Framed within Borg's model, teacher cognition was explored not only from the three major sources of previous language learning: Schooling, professional development, and classroom teaching practice, but also from contextual factors that mediated teacher cognition. Data analysis took into account ZPD and mediation as significant constructs in the dynamic development of teacher cognition.

The research findings revealed that teacher cognition about EFL listening fell into four main categories: (a) The nature of EFL listening; (b) an understanding of students and their learning; (c) the teaching and materials of EFL listening; and (d) reflection on the teaching of EFL listening. Teachers' classroom instruction in EFL listening was characterized by their instructional techniques, procedures in handling listening materials, dynamic decision-making, and after-class homework. The relationships between teachers' cognitions and their practices were found to be consistent generally, although there were inconsistencies. Subjective factors associated with both teachers and students, as well as various practical constraints, appeared to cause the inconsistencies between teachers' cognitions about, and their teaching practice in, EFL listening. The constraints on teachers included the influence of traditional Chinese philosophies about education on their teaching, and insufficient knowledge about EFL listening. The constraints on students were mainly their uneven English proficiency

levels, various learning needs, and low initiative in EFL listening. The practical constraints ranged from teaching materials to insufficient class time, large class sizes, pressure from tests, and technical problems in the language laboratory.

This study has contributed to the existing literature in the field of teacher cognition in confirming and extending three themes: The elements that influence teacher cognition (S. Borg, 2015), the relationship between teachers' cognitions and their instructional practices (Farrell & Ives, 2015), and the factors that mediate the consistency level between teachers' cognitions and their instructional practices (Barnard & Viet, 2010; Q. Sun, 2017). The findings have implications for teacher cognition research, teacher educators, teaching institutions, and front-line teachers. The limitations of the study and recommendations for future research are also discussed.

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To reach the end of this particular PhD journey would not have been possible without some precious people in my life to whom I owe sincere appreciation and gratitude. The accomplishment of this PhD degree is the result of joint efforts made by kind people around me with me as the overt recipient of the great honour. Here I would like to take this opportunity to express my thanks to all of them, including my supervisors, staff in the Faculty of Education and Social Work, The University of Auckland, the Dean and colleagues in Taiyuan University of Technology, the Dean who allowed me to collect data in his institution and teachers who participated in the research, my fellow PhD students and friends in Auckland, and my family.

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LIST OF ABBREVIATIONS AND ACRONYMS

APEC = Asia-Pacific Economic Cooperation

AQ = Answering Questions

BA = Bachelor of Arts

BBC = British Broadcasting Corporation

CA = Comprehension Approach

CALL = Computer Assisted Language Learning

CAQDAS = Computer-Aided Qualitative Data Analysis

CCP = Chinese Communist Party

C-E = Chinese-English

CET-4 = College English Test Band Four (for Non-English Majors)

CET-6 = College English Test Band Six (for Non-English Majors)

CF = Consent Form

CHC = Confucian Heritage Cultures

CLT = Communicative Language Teaching

DT = Dictation

EAP = English for Academic Purpose

E-C = English-Chinese

EFL = English as a Foreign Language

ELT = English Language Teaching

ESL = English as a Second Language

FCV = Five Constant Virtues

FL = Foreign Language

GF = Gap Filling

IELTS = International English Language Testing System

L1 = First Language

L2 = Second Language

LC = Listening Comprehension

MA = Master of Arts

MC = Multiple Choice

MoE = Ministry of Education

NACFLT = National Advisory Commission on Foreign Language Testing

NCEE = National College Entrance Examination

NNEST = Non-Native English Speaking Teachers

PIS = Participant Information Sheet

PPT = PowerPoint

SGEM = Speak Good English Movement

SLTE = Second Language Teacher Education

STG = Superior Temporal Gyrus

STS = Superior Temporal Sulcus

TCG = Three Cardinal Guides

TCM = Traditional Chinese Medicine

TCSOL = Teachers of Chinese to Speakers of Other Languages

TED = Technology, Entertainment, and Design

TEM-4 = Test for English Majors Band Four

TEM-8 = Test for English Majors Band Eight

TMA = Teachers' Metalinguistic Awareness

TOEFL = Test of English as a Foreign Language

UAHPEC = the University of Auckland Human Participation Ethics

Committee

VOA = Voice of America

WTO = World Trade Organization

ZPD = Zone of Proximal Development

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Appendix B Participant Information Sheet (Dean)

Appendix C Consent Form (Dean)

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CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION

High school students in China have been having a heavy workload since the *National College Entrance Examination* (NCEE) was reinstituted as the major talent selection method in 1977. As I received my education from primary school up to postgraduate in China, I would never forget the high-intensity life in my high school: Thirteen 45-minute-long classes every weekday with intervals of 10 minutes and only half a day off each week. Facing the fierce competition, students in most high schools, especially in the rural areas, receive scarce training in EFL listening and speaking because these skills are not examined in NECC. One of the unfavourable results from the scarcity is that some students can do English reading and writing well but lack proficiency in EFL listening and speaking. However, high schools in big cities whose educators emphasize quality-oriented and all-around education still provide students with chances to practice EFL listening. This situation leads to students' uneven levels in English and various learning needs in EFL listening classes after the students are admitted into universities.

Facing this situation about learners of EFL listening and their learning needs, the study explored Chinese university teachers' cognitions about English-as-a-foreign-language (EFL) listening and their classroom instructional practices. The relationships between their cognitions and practices and the factors that mediate the relationships were also investigated. Situated with the field of language teacher cognition (S. Borg, 2009; 2015), my study was conducted to deepen our understanding of teachers' mental lives that inform their decision-making during classroom instruction. The findings from the study

are intended to benefit EFL teachers' work and enhance their teaching and professional learning (S. Borg, 2015). Thus the research is of great significance to the field of teacher education, teacher professional learning and professional development; its ultimate aim is to promote students' language learning and to achieve higher levels of linguistic proficiency.

This chapter starts with an introduction to the context of the study, describing the status of EFL listening in the curriculum for English majors in Chinese universities. It then points out the tensions that arise from teachers' and students' differing expectations of classroom-based EFL listening, and the challenges faced by EFL teachers in classroom when teaching listening. It also discusses the nature and the process of EFL listening, major obstacles that affect listening comprehension, and the significance of EFL teachers' perceptions of EFL-listening-related issues. Finally, it presents explicitly the research questions that this study aims to answer and an overview of the structure of the thesis.

1.2 CONTEXT OF THE STUDY

It has long been acknowledged by scholars (for example, Darling-Hammond, 2010; Shulman, 1992; Sizer, 1966) that teaching takes centre stage in all educational institutions and that teachers are expected to have the competence and potential to make a difference to student learning (Darling-Hammond, Berry, & Thoreson, 2001; Fetler, 2001; Rivkin, Hanushek, & Kain, 2005). Therefore, research on teaching and teachers has been gaining momentum and becoming one of the most dominant fields of research in education. With the development of cognitive psychology, teachers have been regarded as thinking beings rather than technicians of teaching, and the research focus on teaching and teachers has switched from teachers' teaching behaviours to their

cognitions about teaching. Teaching is viewed as the realization of teachers' thought process; teachers' personal perceptions about teaching and learning are assumed to guide their decision making during classroom teaching and shape their teaching practice. Understanding what teachers think about various aspects related to teaching and learning has become the focus of teacher research. Teachers' attitudes, knowledge, beliefs, thinking, and decision-making are now, understandably, referred to as "teacher cognition", especially in the field of second/foreign language education (S. Borg, 2009; 2015; Calderhead, 1996; Pajares, 1992).

The term "teacher cognition" was proposed and systematically developed by Simon Borg and associates through their series of research studies in the field of language teacher education (S. Borg, 1999a; 1999b; 1999c; 2001b; 2005; 2006; 2008; 2009; 2011; 2015). It has led to an in-depth understanding of language teachers' cognitive processes, especially the cognitions of teachers of English about English language teaching in primary or secondary schools (Lee, 2008; L. Li, 2013; Nishino, 2012; Tian, 2014) or native English-speaking teachers in English-speaking countries. Few studies, however, have probed the relationships between university EFL listening teachers' cognitions and their practices in classroom settings in Chinese contexts. My study, therefore, intends to fill this research gap, focusing on the cognitions, practices of tertiary-level Chinese non-native English speaking teachers (NNEST) of listening, and the relationships between their cognitions and practices.

1.2.1 Traditional Chinese Philosophies about Education

Chinese philosophy, with three major components of Taoism, Confucianism, and Buddhism, interprets the whole world on at a macro level/ Guidelines, adapted for each

trade or business on the micro level, influence the lifestyles of people in China and most parts of Asia. At the macro level, Chinese philosophy interprets the whole universe through the framework of Tai Chi in which Infinity extends into two opposite phenomena Yin and Yang, as is shown in Figure 1.1. Yin and Yang, originally referring to the Moon and the Sun respectively, was extended to connote, in a metaphorical way, entities with opposing and complementary natures such as night and day, heaven and earth, women and men, cold and hot. The Yin-Yang theory includes not only the two opposing and complementary static entities but also the dynamic interaction of the two entities to achieve great harmony. The relationship between Yin and Yang is complex and can be summarized into four aspects: Opposition and restriction, interdependence, wane-wax and equilibrium, and inter-transformation (Liu & Lei, 2005; Maciocia, 2015). The interplay between Yin and Yang is regarded as the most basic principle of the entire universe. The Yin-Yang theory, the most powerful and pervasive way of thinking at the core of Chinese philosophy, exerts a robust impact on nearly all the important aspects of Chinese social life such as martial arts, medicine, science, literature, politics, and daily behaviour. (M. Chen, 2002; T. Fang, 2012).

Figure 1.1 Tai Chi and Yin-Yang



On the micro level, with the exception of the core theory of Yin-Yang, Chinese philosophy also includes a great amount of folk wisdom which constitute the operational principles of different trades in China. They are refined, concise, and effective extractions of the wisdom from the working people.

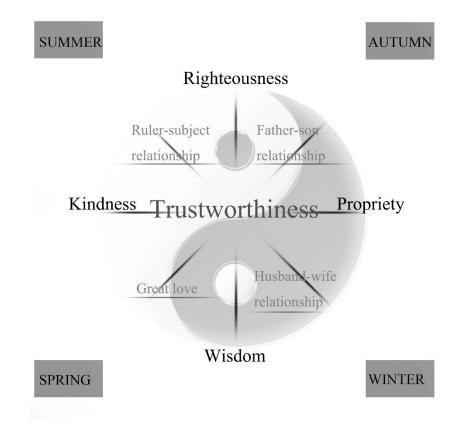
In the field of business, Fan Li of the Spring and Autumn Period (770-476 BC) was considered as the "Saint of Business" who proposed the principles for conducting business in five neatly condensed characters: Tiān (heaven), Dì (earth), Rén (human), Shén (godly spirit), and Guǐ (ghost). The five corresponding principles are that businessmen should (a) comply with the times, (b) take integrity as the basis of practice, (c) make proper choices for obtaining money, (d) be determined and aggressive at the critical time, and (e) be flexible and calculating. Most Chinese people, who consciously or subconsciously apply the five-character business principles fully into their business practice, are considered to create commercial miracles. These business principles have even been regarded as the theme of some literary works, such as a recent Chinese TV serial entitled *Nothing Gold Can Stay* in which a successful female merchant emphasizes these business principles to her adoptive son.

In the field of Traditional Chinese Medicine (TCM), practitioners adopt the four traditional diagnostic methods to gather information from the patients: Wang (looking/observing), Wen (listening), Wen (asking), Qiē (feeling the pulse). By practising Wang (looking/observing), the TCM practitioner gathers information about the patient's facial complexion to obtain a comprehensive initial judgment; through Wen (listening), the TCM practitioner listens to the patient's talk; through Wen (asking), the TCM practitioner asks the patient about symptoms of illness; and through Qiē (feeling

the pulse), the TCM practitioner feels the pulse of the patient for a closer understanding of the patient's health condition. The four traditional diagnostic methods in the field of TCM form a "holistic and contextualized approach in which TCM practitioners collect symptom-related information in order to make a pertinent diagnosis" (Tian, 2014, p. 66) of the patient.

Education has long been an important part of Chinese philosophy. Taoism and Confucianism, as two mainstream native Chinese philosophies, cultivate Chinese people's way of thinking in the opposing and complementary way, like Yin and Yang. Taoism, represented by Lao Zi and Zhuang Zi, advocates ecological ethical thoughts, harmony of man with nature, femininity, inactivity, organic state of living, and spiritual freedom, etc. In sharp contrast, Confucianism, represented by Confucius and his disciples, has been adopted as legitimate by the ruling class in China since Han Dynasty. Hence, it is the backbone of Chinese culture, emphasizing positive enterprise, masculinity, and progression, and has established norms for individuals and the society. The core ideas of Confucianism can be summarized as the framework of *Three Cardinal* Guides (TCG) and Five Constant Virtues (FCV). The Three Cardinal Guides are (a) the ruler guides the subject(s); (b) the father guides the son (s); and (c) the husband guides the wife/wives. The TCG has two connotations: On the one hand, the subject(s), the son(s), and the wife/wives must show absolute obedience to the ruler, father, and the husband; on the other hand, the ruler, the father, and the husband should know the right thing and demonstrate positive examples through their physical performance. The TCG are the basic operation principles for organizations from the country to families. The Five Constant Virtues are kindness, righteousness, propriety, wisdom, and trustworthiness. They are supposed to guide Chinese people's daily behaviour and practice. Figure 1.2 below shows the combination of TCG and FCV within the framework of Yin-Yang theory.

Figure 1.2 TCG and FCV within the Framework of Yin-Yang Theory



As it has been legitimized by the ruling class in China, Confucianism exerts a strong impact on every aspect of Chinese people's life including education. Confucius' teaching wisdom is mainly recorded in a collection of essays entitled *The Analects*. The fundamental educational thinking of Confucius includes (a) education without discrimination; (b) the combination of learning, reflection, and practice; (c) teaching students in accordance with their aptitude; and (d) teaching the principles of enlightening and inducement. Confucius' wisdom about education was developed and expanded in the long history of China (Q. Li, 2015). Han Yu in Tang Dynasty added his perception of teachers' status and role; Zhu Xi in Song Dynasty created the educational

doctrine of "investigating things to attain knowledge"; Wang Yangming in Ming Dynasty advocated the importance of rectifying the student's uprightness and morality before teaching him or her; Huang Zongxi in Qing Dynasty proposed the integrated learning method of extensive reading and intensive probing, deep reflection and raising doubts, as well as dealing with difficulties through discussion and debate. These great educators over time have established the traditional Chinese philosophy about education which has still strongly influences teachers and classroom teaching in China today. Some classic excerpts from these great minds, in exquisite Chinese calligraphy, are hung on the walls in the classroom and adopted by many students as their mottos during their schooling and even lifelong learning process. To describe the influence of Confucianheritage cultures (CHC) on education more clearly, some features of teaching and learning, influenced by CHCs, are summarized and compared with features of education in western cultures Cortazzi & Jin (1996) is listed in Table 1.1.

Table 1.1 Different Emphases in Culture of Learning: CHCs & Western (adapted from Cortazzi & Jin, 1996, p.74)

Categories	CHCs	Western cultures
Factors attributing to success	Diligence	Ability
Priority of learning	Knowledge/skills first	Exploration first
Learning mechanism	Repetition/memorization	Enlightenment
Student behaviour	Docility	Independence
disposition		
Role of student	Study hard	Exploration
Role of teacher	Expert, presenter	Motivator, organizer
Teaching approach	Teacher-centred	Student-centred
	Pace, presentation, and virtuosity	Activities, tasks
Teacher-student relationship	Hierarchical: agreement,	Horizontal:
	harmony, respect	discussion, argument
	Formal	Informal

The first feature emphasises the role of personal endeavour in achieving success. Students are supposed to exert great effort and diligence for their achievement in academic study. A popular Chinese proverb highlights the students' effort in learning: A master teaches the trade, but the apprentice's skill is self-made. The proverb vividly describes the relationship between the student's diligence and their learning outcome; diligence is considered to play a key role in the learning process. The second feature emphasises the role of content of knowledge and skills in the learning process. Teachers are expected to be experts and presenters of knowledge content and skills and teaching is viewed as a process of transmission of knowledge and skills from teachers to students. How a teacher implements their instructional practices in the classroom, for example, teaching pace, demonstration, and presentation, is valued higher than other elements in teaching performance. On the student's part, the content of knowledge and skills is expected to be mastered through repetition or memorization. Classroom instruction is therefore teacher-centred and teacher-dominated. The third feature is the hierarchical status of teachers and students in teacher-student relationship. The teacher-student relationship, shaped and mediated by teaching and learning performance under the influence of CHCs, tends to be formal and structured with teachers taking a leading role and the student bowing to follow with obedience.

1.2.2 A Socio-Historical Overview of English Education in Mainland China

As socio-historical and specific backgrounds can generate constraints or opportunities for language teachers' thoughts and practice, it is necessary to provide an overview of the situation, as well as context-specific information, for a thorough understanding of Chinese EFL listening teachers. This section starts with an introduction to English education in China from a socio-historical perspective, followed by context-specific

information about EFL listening teaching in Chinese universities: The status of EFL listening in the curriculum for English majors in Chinese universities; the tensions that have arisen from teachers' and students' different expectations of classroom-based EFL listening and the challenges faced by EFL listening teachers in classroom teaching; the nature of EFL listening process; the major obstacles that affect listening comprehension; and how EFL listening teachers perceive EFL-listening-related issues.

English as a global language has influenced countries and regions all around the world in terms of language policies, educational systems, and patterns of language use (Nunan, 2003). Many countries and their citizens promote the acquisition of English through making English an official and working language, and a compulsory object taught in schools and colleges. People in those countries try every means to enhance their English language proficiency by improving resources for English language teaching and learning, and allocating more time to English teaching in the curriculum.

The first English education in mainland China can be traced back to the late Qing Dynasty with western missionaries and Chinese reformers as two major groups of educators for differing objectives. The English-speaking missionaries planned to bring the souls of Chinese to God through the essential way of teaching English, with the first mission school, the Gutslaff School in Macao, founded in 1835 by Robert Morrison, a British missionary (Ford, 1989). In the coastal cities like Shanghai, Fuzhou, Guangzhou, and Nanjing, 40% of China's secondary students were trained in mission schools (Ross, 1993). Among students educated in mission schools were Chinese celebrities like Song Meiling, Qian Zhongshu, and Yang Jiang whose command of English language was very good.

The Chinese reformers, entrusted and authorized by the Qing Dynasty, were humiliated by the defeat of Opium Wars and forced to switch their perception of foreign cultures from rejection to acceptance. After the first Chinese-run English language school, Tong Wen Guan, was established by the Foreign Affairs Office in Beijing (Dzau, 1990), English began to be part of the national curriculum for secondary schools (Cleverley, 1985) and has stayed ever since.

The political agenda, the socio-economic climate in China, and China's relations with the outside world has shaped the shifts in foreign language educational policies. According to Yang (2000) and Hu (2005), English education in China after the Qing Dynasty was divided into four phases: The republican period (1919-1949), the socialist revolutionary period (1949-1978), the open door period (1978-2000), and the new century period (2001-present). These four phases of English education in China have their distinctive features.

In summary, language teachers' thoughts and practice cannot be separated from sociohistorical backgrounds and the specific contexts. The following sections will elaborate on the four phases of English education in China with their distinctive features.

1.2.2.1 English education in China during the republican period (1919-1949)

China during the republican period from 1919 to 1949, in particular, was a country without peace. Influenced by national hatred against Japanese invasion, a large number of Chinese students chose to learn advanced science and technology from the West that had helped Japan earn many victories in the war. In addition, many western scholars and

educators such as John Dewey, E. P. Cubberly, W. H. Kilpatrick, Bertrand Russell, and Rabindranath Tagore visited China upon invitation (Cleverley, 1985). The western scholars and educators brought in new ideas to China about English education. Dewey (1933) criticized the traditional perception of English teaching in China which treated English knowledge as something ready-made, and he introduced the student-centred curriculum emphasizing students' growth and potential for development over the subject matter (Keenan, 1977). Following the American example in 1922, a new education system with six years of primary education, six years of secondary education, and four years of higher education was set up (Gregg, 1946).

English has become increasingly important in China since the country opened its door to the Western ideal of democracy. In some big coastal cities, English became the working language for education and commerce. The quality of English language teaching was quite good, as many Chinese professors transmitted knowledge they pursued overseas during their academic training, and a number of foreign missionaries or teachers were invited to teach in China. Urban students were willing to spend time and money in learning English due to the benefits that English could bring them (Ross, 1993).

The secondary schools and colleges set objectives and requirements for English learning during the republican period. The objectives ranged from being able to use simple daily English for communication to elevating students' reading and translation competence for their study abroad or finding a job (Fu, 1986). The prevalent English teaching method during that period was the Grammar-Translation Method. Selected texts were studied in detail with an emphasis on word study and grammar in order to train students

to read literature or achieve mental discipline and intellectual development (Richards & Rodgers, 2014). English education in China during the republican period led to students of varied English levels. Students from mission schools, some excellent public schools and universities acquired high proficiency in English language skills.

To sum up, English education in China during the republican period featured new ideas introduced by western scholars and educators. English became increasingly important, with English established as a course in secondary schools and colleges, and resulted in students who had a range of English levels.

1.2.2.2 English education in China during the socialist revolutionary period (1949-1978)

English education in China waxed and waned with the political tides after the establishment of a new China with completely new social, political, and economic systems. As the Chinese Communist Party (CCP), since the early communist period, was maintaining intimacy with the Soviet Union for support and mentorship and resistance against the U.S., Russian became the most important foreign language in China's schools and universities; English was accused of serving "imperialist and colonialist ends" (Cleverley, 1985, p. 118) and lost its position it held in the republican period in schools, at all levels. The foreign-run schools and higher institutions were taken over by the communist government and reorganized, and teachers and scholars, especially western educators visiting and teaching in China were blamed with a "preoccupation with ideas of democracy and individualism" (T. H. Chen, 1981, p. 203). Teachers trained to teach English were asked to teach Russian instead.

The late 1950s and the early 1960s witnessed a split between China and the Soviet Union and the abrupt decline of the Russian language as a school subject as well as in society. China discarded the Soviet models and began to learn from "all the advanced experiences of the world" (Dzau, 1990, p. 19). Following the new trend, The *Seven-Year Guideline for Foreign Language Education* was promulgated in 1964, and foreign languages became a compulsory subject in the college entrance examinations in China. Among the foreign languages, English took the first place and experienced a revival in the early 1960s.

The revival of English did not last long because of the ten-year-long "Great Cultural Revolution" launched in 1966. The role and function of political ideology was emphasized and elevated to a high position; slogans such as "the correctness or incorrectness of the ideological and political line decides everything" and "ideology and politics" as "the commander and the soul" (Cleverley, 1985, p. 186) were dominant in Chinese people's life. Politically, the curriculum switched from an emphasis on learning of book knowledge at school to learning outside school such as the farm, the factory and the street through direct participation in labour and production (T. H. Chen, 1981), called *Kai Men Ban Xue* (Open Door Schooling). Such an ideology was meant to bring students closer to society (agriculture and industry in particular) and provide education with practical content (Cleverley, 1985). Under such social and political circumstances, English was banned from being taught as a subject in most schools, and western-trained teachers and educators, especially experts, were abused physically or mentally by the Red Guards, the revolutionary rebels at the time.

In the early 1970s, English was brought back to schools as China re-established relationships with the West. Two symbolic events in this period were that China regained her legal position in the United Nations in 1971, and Nixon, the President of the U.S, visited China in 1972. English at that time, however, was not viewed as a tool for individuals' development in intelligence and academy, instead it was used for the purpose of preaching political dogma. Because of *Zheng Zhi Zheng Que* (Political Correctness; or Politics in command), T. H. Chen (1981) claimed, "China's people under age 35 are left strikingly uninformed. They know nothing about anything outside their immediate jobs or beyond their own neighbourhoods. They ask no questions, have no curiosity and do not speculate" (T. H. Chen, 1981, p. 144).

The general goal of English education in the period of socialist revolution put weight on the use of colloquial English and a working knowledge of the language, e.g., the ability to read English professional publications. Foreign ideas were not the goal of acquisition, as Chen Yi, a high-level government official to the foreign language students during the period, stressed. The need to learn "the foreign way of expression" did not mean to learn the "way of thinking of the foreigner"; instead foreign languages were to be used "in our own way" (Price, 1979, p. 180). This is an interesting point as the current trend of learning and teaching English as an international language is, in fact, based on such an ideology (McKay, 2002; Selvi & Yazan, 2013).

In accordance with the curriculum which emphasized a working knowledge of English, the pedagogical emphasis in the teaching of English was on listening, speaking, reading, and writing. The Audiolingual Method was experimented with in many schools to improve students' oral skills through drilling sentence patterns and models of dialogues. Students were asked to memorize the dialogues or texts.

English education in the socialist revolutionary period led to little overall language proficiency in students due to the political and ideological pursuit that dominated the curriculum at all levels of schooling (Yang, 2000). The Foreign Ministry, at that time, complained about English majors who were assigned there; their reading speed, comprehension of the materials in publication, oral conversations with native speakers, and their written and spoken English were all inadequate to meet the needs of their positions. Their pronunciation was awkward, their choice of words was not idiomatic, and it was difficult for them to be understood by native speakers.

To summarize, English education in China during the socialist revolutionary period was closely connected to the political tides after the establishment of new China. English education lost its position at all levels in 1950s as China maintained intimacy with the Soviet Union, revived in the early 1960s but did not last long as political ideology became dominant in the Great Cultural Revolution; it was brought back to schools in the early 1970s as China re-established a relationship with the West. The goal of English education during this period was colloquial English and a working knowledge of English, but was not productive in terms of students' overall language proficiency.

1.2.2.3 English education in China during the open door period (1978-2000)

In 1976, the Great Cultural Revolution was terminated and China entered a new era of economic development. In 1978, after two years of adjustment and modification, the government led by the new leader, Deng Xiaoping, proposed to realize *Si Ge Xian Dai*

Hua (Four Modernizations) in Chinese agriculture, industry, national defence, and science and technology by the year of 2000. In the same year, the *Open Door Policy* was issued and enacted, justified by the assertion of the Chinese government that "The histories of various countries show that a closed-door policy harms national development. For socialist construction we need to absorb and utilize the rich knowledge accumulated by the capitalist countries, their advanced technologies and ways of management" (Cleverley, 1985, p. 264).

Quality education was called for by the government to build China an economically strong nation. Class, class struggle, and other categorical and violent materials were removed from all textbooks. Western educational theories were re-evaluated positively. Teachers, scholars, and educators with western background and training received more respect and trust, and English was revived as a core course in secondary schools and colleges. The language was taught from Grade Three onwards in primary schools in some areas.

In 1977, the *National College Entrance Examination* (NCEE) was reinstituted after its discontinuity during the Cultural Revolution (1966-1976) (Feng, 1999) and has been functioning as the main system in elite selection in China since then. The NCEE has been regarded as fundamental and instrumental in political, economic, and educational development (Feng, 1999) by the government and the people. Motivated by self-betterment and the desire to be admitted into universities, the high school students work very hard preparing for the NCEE. The teachers and parents of students in the high school also treat the NECC as the biggest event in their life and exert most of their energy to help and push students because of the low admission rate. A Chinese proverb

vividly describes the fierce competition of students in the NECC: 千军万马过独木桥 (Qian Jun Wan Ma Guo Du Mu Qiao), thousands of soldiers and tens of thousands of horses cross a single log bridge, which means too many candidates compete for too few admissions into universities.

English native speakers were hired as language teachers; Chinese scholars and students were sent abroad for research and study; and foreign businesses rushed into China with high-paying jobs created. In addition to its role as a tool for China's modernization, English also became "a ticket for an individual's social mobility and academic advancement" (Yang, 2000, p. 15).

The 1982 Secondary School English Syllabus, and its revised versions in the following 10 years, stipulated the objectives of language teaching calling for diversity in teaching practices to promote students' communicative competence. A switch from reading to speaking, with language performance for communicative purposes was emphasized. To meet the teaching objectives and students' needs, there was a call for the study of foreign language teaching theories and the synthesis of Western and Chinese educational philosophy. The Communicative Approach became accepted and prevalent among the English teaching circles in China; completion of tasks, or task-like activities such as discussion, debate, and role play, characterized English lessons and was considered to be the right way for language acquisition (Richards & Rodgers, 1986). Meanwhile, Chinese traditional teaching and learning styles like three centeredness (teacher-centeredness, textbook-centeredness, and grammar centeredness) began to draw increasing criticism (Yen, 1987).

However, in reality in English classroom teaching in colleges, Intensive Reading/Integrated English was a core course. It involved a thorough line-by-line learning of the text with teachers explaining "yu yan dian" (language points) concerning vocabulary, syntax, style and content. This teaching approach favoured "grammatical and lexical accuracy, attention to form rather than meaning, explanation and memorization of words and their usages" (Yang, 2000, p. 16). Language was taught through pattern drills instead of communicative activities (Dzau, 1990).

Two major factors contributed to the discrepancy between acceptance of the Communicative Approach and its application in English classroom teaching: Not many teachers of English possessed native-like English proficiency and knowledge of culture about English-speaking countries, although a high-level of proficiency is not regarded as essential by the approach (L. J. Zhang, 2015), and students were used to playing a passive role in the classroom learning process. Teachers had an inadequate understanding of communicative language teaching (CLT) with the majority assuming a high level of proficiency was a prerequisite for using CLT. This is particularly true for those teachers who can be regarded as the followers of the "strong version" of CLT (Richards & Rodgers, 2014). Understandably, not many English teachers received adequate training as some teachers were teaching Russian during the Socialist Revolution period with the dominance of Russian language in the national curriculum, and switched to become teachers of English. Students, influenced by teaching and learning traditions in China, preferred to learn English through listening to teachers talk in the classroom. Even when the Communicative Approach was applied by some teachers, students tended to lose confidence in it because they found they could not get good grades on traditional tests of accuracy.

The Open Door Policy contributed significantly to the rise of English education. Teachers and students were exposed to an increasing amount of audio-visual language materials such as English movies, news broadcasts, TV programmes, etc. Students' understanding of foreign cultures deepened and their listening and reading abilities were greatly enhanced. CLT, with the aim of developing language learners' communicative competence (Littlewood, 2011), is prevalent in Western education (L. J. Zhang, 2010b) but is met with challenges (Said & Zhang, 2014; Whong, 2013) in countries where traditional teaching methods are deeply ingrained, such as China. The main problem is students' lack of competence in oral communication. As commented by Porter (1990), a foreign teacher, "Many Chinese students have an excellent command of, or more accurately, knowledge of, the language, but it's a command largely from books, and it's largely through the eyes rather than the ears" (Porter, 1990, p. 49).

In short, English education in China revived as a result of the Open Door Policy. The western educational theories were re-evaluated positively and English became vital for individual success in society and for academics. Foreign language teaching and learning theories became a focus of studies and CA was accepted and became prevalent.

1.2.2.4 English education in China during the new century period (2001-present)

In the new millennium, English has been one of most widely taught foreign languages in China. The status of English has reached its new highs in China with an astounding 330 million English learners and users (Bolton, 2008; Cheng & Wang, 2012). The English language, in addition to its consistent role in modernization, provides "English for international stature" (Lam, 2002, pp. 246-247), as China's increasing participation

and engagement in international affairs calls for high proficiency in foreign languages. The conferences and activities held in China such as the Asia-Pacific Economic Cooperation (APEC) meeting in Shanghai in 2001, Beijing Olympic Games in 2008, the World Expo in 2010 as well as China's entry into the World Trade Organization (WTO), has increased enthusiasm for learning English among ordinary Chinese people who want to communicate with foreign visitors.

During the international events held in China, the government sponsored short courses of basic English skills, including some TV and radio programmes, to meet these intense learning needs. Shanghai even recruited voluntary English teachers to help improve language proficiency before the World Expo. English is currently enjoying a status that has not been surpassed in the Chinese context, and English Language Teaching (ELT) is reaching its increasing prominence at all levels of the education system in China.

In the 21st century, foreign language education in China is adopting a top-down approach from policy-making by the Ministry of Education (MoE) to policy implementation at all levels of the education system. In 2001, the MoE stipulated that English classes start in the third grade of primary schools. In some big cities, children have the chance to start to learn English through songs, games and toys in the kindergartens. In secondary schools, 30% of the teaching time is allocated for language learning: Chinese and one foreign language (English in most cases) (Gil & Adamson, 2011). The syllabus emphasizes students' development of international perspectives and strengthens patriotism through foreign language learning with selected materials (Wang, 2007). In colleges and universities, both non-English majors and English majors have to learn English for at least two years. The non-English majors have to pass *College English Test*

Band Four (CET-4) to qualify for their Bachelor's Degrees, whereas College English Test Band Six (CET-6) requires a higher level of language proficiency, and college students who can pass it can expect higher-paying jobs upon graduation. The English majors must pass Test for English Majors Band Four (TEM-4) to graduate with a Bachelor of Arts. They are encouraged to pass Test for English Majors Band Eight (TEM-8) to improve their future employment prospect (L. Cheng, 2008).

In brief, English education has reached new highs as China increases her participation and engagement in international affairs. The international events held in China especially encouraged learning of English by ordinary people. The Chinese government has sponsored short courses for people and MoE has stipulated that foreign languages with English as the dominant language be taught from the third grade of primary school and onward. The status of English as a foreign language has reached its highest level ever in China.

1.2.3 EFL Listening Teaching in Chinese Universities

Listening is considered a very, if not the most, difficult language skill among Chinese university EFL learners. Although Chinese students have been required to start learning English from the third grade in the elementary school, since the open door period (1978-2000), as stipulated in the curriculum of the Ministry of Education of China (G. Hu, 2005; Y. Liu, 1993), EFL listening has been both a challenge for, and weakness of, Chinese university students for a long time.

1.2.3.1 Status of EFL listening in the curriculum for English majors

The EFL listening course plays a pivotal role in Chinese university curriculum for English majors. English majors are the university students trained to develop complex and practical with solid base of fundamental English language skills of listening, speaking, reading, writing, and translation. They are also expected to achieve a profound interdisciplinary knowledge of the liberal arts, science and technology, and economics and trade, etc. English majors upon graduation receive a Bachelor of Arts Degree with qualifications for such positions as English-Chinese (E-C) or Chinese-English (C-E) translators or interpreters, English teachers in primary schools, secondary schools, or colleges, international communication personnel, business management in Chinese branches of foreign companies, marketing in foreign countries, and etc.

Courses for English majors include integrated English, English reading, English listening, English speaking, English grammar, English writing, translation theory and practice, English for science and technology (in modules such as coalmining, chemical engineering, machinery, architecture, etc.), economic and trade English, British and American culture, selected British and American newspaper readings, intercultural communications, statistics, second foreign languages (Japanese, Russian, German, and French), modern Chinese (for university students), etc. Among these courses for English majors, the EFL listening course is provided in their first and second year with an average of 4 hours per week in each 16-week semester (each semester lasts 20 weeks or so, during which classroom teaching is conducted in about 16 weeks). The EFL listening course consists of two academic credits in the first and fourth semesters and four academic credits in the second and third semesters. In the first two academic years the

course provides 12 academic credits in total, which makes up a considerable proportion of their programme design and curriculum for their Bachelor's degree in Arts.

1.2.3.2 Current challenges faced by EFL listening classroom teachers

In spite of the high status EFL listening has in the curriculum for English majors in Chinese universities, there are doubts, dissatisfaction and complaints among both EFL listening teachers and learners about the disproportionate amount of time and effort invested in the course, and the outcomes in the end-of-semester tests. These dissatisfactions, expressed by both teachers and students, are current challenges for EFL listening classroom teaching. Teachers complain that, even after careful preparation of the teaching materials and diligent classroom teaching and guidance, students still do not perform well enough in listening classroom activities and examinations as expected. Students complain that they make little progress after spending time on practice following teachers' advice, and report they feel frustrated that their hard work does not bring satisfactory outcomes.

The challenges faced by EFL listening classroom teaching, in brief, are both teachers' and students' dissatisfaction about the low outcome of classroom teaching of EFL listening. Both parties complain that students do not improve listening proficiency effectively as expected.

1.2.3.3 Major obstacles in EFL listening comprehension

EFL listening, on the surface, seems to be a receptive and passive process, as the listener tries to get an adequate understanding of what the speaker says and to what the speaker refers. Psychologically, listening is a complex cognitive process and includes not only

physical activity on the part of the listener but also mental processing and understanding. Listeners cannot choose freely the language material, the difficulty level, speed, pronunciation and intonation of the speech content with which they engage. Therefore, they make sense of the sounds of the language they are listening to by using their and knowledge of the context, the language and of the world; this makes the listening process an active process that is better understood in psycho linguistic terms.

The factors that make EFL listening difficult can be summarized in three main categories: Listeners, passages, and testing conditions (Bloomfield *et al.*, 2010). The factors related to listeners include the working memory capacity (the listeners' ability to attend to, temporarily store, and process incoming information); the use of metacognitive strategies; L2 proficiency and experience; and anxiety. The factors related to the passages are length (e.g., overall length, information density, and redundancy); complexity (e.g., syntactic features, directness and concreteness, pragmatic information); organization (e.g., orality, coherence, discourse markers); and auditory features (e.g., speaker accent, hesitation and pauses, speech rates) of the passages. The factors related to testing conditions include time limits, multiple hearings, and note-taking, etc. These are major obstacles which make EFL listening a difficult task for Chinese learners.

1.2.3.4 The benefit of investigating EFL listening teachers' cognitions

How EFL listening teachers view the nature of the EFL listening process and the abovementioned factors affecting students' listening proficiency is pivotal to listening in the classroom. Concepts such as how teachers understand listening materials, what they believe to be effective and helpful teaching methods, and how they perform instructional activities are included in the term "teacher cognition". A study of teacher cognition will be of benefit not only for EFL teachers and learners, but also for researchers in related fields and have implications for policy-making for pre-service and in-service teacher training programmes.

In the field of language teacher education, it is believed that decisions teachers make and how they implement these decisions in classroom instructions are affected by their conception of teaching and learning (for example, Burns, 1992; Kubanyiova & Feryok, 2015; Lampert, 1985; Longberger, 1992; E. W. Mitchell, 2005). Consequently, attention is paid currently to thinking behind teachers' decision-making process in their practice and to observing and describing what teachers do in actual classroom instruction. This research might be valuable to teacher educators in their promoting the development of teachers at both pre-service and in-service levels.

1.3 AIMS AND SIGNIFICANCE OF THE STUDY

The present research addressed the problems generated from EFL listening classroom instructions by investigating the cognitions five EFL teachers of listening in a Chinese university. Taking a case study approach, the study *probed* the teachers' cognitions about the teaching of listening and the *investigated* their EFL listening instructional practices in the classroom. It also *examined* the relationships between Chinese EFL listening teachers' cognitions and instructional practices based on the analysis of the qualitative data collected from interviews and classroom observation. The factors that mediate the relationships between teacher cognition and classroom instructional practices were also *investigated*.

Understanding Chinese university teachers' cognitions about EFL listening, their instructional practices and the factors contributing to the development of their cognitions has implications for EFL listening instruction, teacher education and for implementing innovative teacher education programmes. In other words, the EFL listening teachers can benefit from an awareness of their cognitions and from enhanced knowledge about EFL listening to shape and guide their instruction. The findings of the study may also help teacher educators and decision-makers develop effective professional development and teacher education programmes for pre-service and inservice teachers. Policy makers can also develop support systems for teachers in general. Borg (1999b) highlights the implications of insights from teacher cognition development for teachers, teacher educators, and policy makers which is summarized as follows:

- (a) It helps deepen our understanding of the gap between the theoretical research recommendations and teachers' actual practice in classroom, hence leads to more research on examining the lack of influence of research recommendations (e.g., educational innovation) on teachers' practice (Clark & Peterson, 1986).
- (b) It helps record and analyse abstract teaching process in all its complexity (Clark & Lampert, 1986).
- (c) It provides the policy makers in education and teacher education with insights into the effective implementation of educational innovation and promotion of teacher change (Butt *et al.*, 1992).
- (d) It helps teachers acquire reflective teaching and makes them understand their teaching practice from a new perspective, which is initiated by teachers themselves instead of being dictated (Clark & Lampert, 1986).

- (e) It helps researchers understand how teachers' development occurs in a natural process (Tobin & LaMaster, 1995).
- (f) It helps teachers deepen their understanding of effective instructions and hence gives rises to innovation in classroom teaching (Calderhead, 1987).
- (g) It helps provide theoretical references for teachers' preservice and in-service training programmes (Goodman, 1988).
- (h) Pertinently, this research helps inform the steps involved in teacher education. That is, it has both theoretical and practical value for effective teaching instructions.

As well as the contribution of this study to the field of second language teacher education identified above, it is anticipated that participating teachers will become aware of the psycho-social sources of their cognitions and instructional practices, which, in return, will help them teach more effectively by monitoring the effectiveness of their practice for students' learning. In other words, as a result of their participation, they will become reflective teachers (Schön, 1983), who appraise their cognitions in light of their students' academic improvement and be open to learning and change.

1.4 RESEARCH QUESTIONS

Based on the analysis of the qualitative data collected from interviews and classroom observation, this research aims to: (a) Investigate the Chinese university teachers' cognitions about EFL listening and their instructional practices in the classroom; (b) examine the relationships between EFL listening teachers' cognitions and their pedagogical practices, the congruity and incongruity of individual cases, and the influence of teacher cognition on their pedagogical activities for teaching listening; and

(c) identify factors affecting teacher cognition and elements that mediate the relationship between teacher cognition and practice.

Specifically, this research seeks to address the following research questions:

- 1) What are Chinese university teachers' cognitions about EFL listening?
- 2) What are teachers' instructional practices of EFL listening in the classroom?
- 3) What are the relationships between teachers' cognitions about EFL listening and their instructional practices?
- 4) What factors influence the congruence, or incongruence, between teachers' cognitions about EFL listening and their instructional practices?

1.5 ORGANIZATION OF THE THESIS

The thesis consists of nine chapters. The nine chapters can be categorized into three main parts. Part One (Chapters One -- Three) includes the introduction to the contextual information of the study, review of relevant literature in the field of teacher cognition and EFL listening instructional practices, research design, theoretical framework, methodology, and methodology. Part Two (Chapter Four -- Seven) presents the data and research findings. Part Three (Chapter Eight -- Nine) discusses the findings, highlights the implications of the study, and provides suggestions for future research. The overall organization of the thesis is as follows.

Chapter One describes the context of the study, the aims and significance of the present study, highlights the research gaps, and presents the research questions which guide the thesis. Chapter Two presents the theoretical frameworks and a review of the literature on teacher cognition and second language listening and its teaching. In this chapter,

firstly, the theoretical frameworks of the research are critically appraised in accordance with its usefulness in this thesis. Secondly, some interrelated key terms such as teacher cognition, teacher beliefs, and teacher knowledge, among others, are defined and followed by a review of the relevant literature on L2 teacher cognition in general, and L2 listening teacher cognition in particular. Thirdly, literature on the nature of second language listening and related research is reviewed. Chapter Three, composed of five major sections, provides detailed information on the research design and methodology. The overall research paradigm is discussed, which includes constructivism as the philosophical worldview, qualitative research approach, and the role of case studies in applied linguistics as a research method. The rationale for the sampling of Chinese university EFL listening teacher participants and their participation in my study is also explained. The two methods of data collection, interview and classroom observation, are described in detail, followed by a discussion of the ethical issues for my study.

Chapter Four presents data analysis procedures and findings related to the personal profiles of five participating teachers in terms of their experience in learning EFL listening and in-service professional development. Chapter Five presents the data from interviews on the first two of the four major categories of teachers' cognitions about EFL listening: The nature of EFL listening, and students of EFL listening and their learning. Chapter Six reports the data on the third and fourth category of teacher cognition in the present study: The teaching and materials of EFL listening, and reflection on the teaching of EFL listening. Chapter Seven reports the data obtained mainly from classroom observation of classroom teaching practices of five EFL listening teachers.

Chapter Eight discusses research findings in relation to the theoretical frameworks and relevant literature. In this chapter, findings regarding EFL listening teachers' cognitions and instructional practices are synthesized to examine the relationships between cognition and practice. Factors that mediate the relationships between teacher cognition about and practice in EFL listening are explored in full length. Chapter Nine interrogates the data from my study in relation to existing theory and research in the field of language teacher cognition, and identifies implications of my study for EFL listening teachers' professional development, EFL listening teaching at the tertiary level, and teacher education/training programmes. The chapter also addresses limitations of the study and provides suggestions to future research in relevant fields.

CHAPTER 2 THEORETICAL FRAMEWORKS

AND LITERATURE REVIEW

2.1 INTRODUCTION

This chapter introduces the theoretical frameworks of my study and reviews literature relevant to teacher cognition and EFL listening instruction. The chapter starts with the introduction, followed by a discussion of the theoretical frameworks that inform the present investigation. Of the four influential theories in the field of human learning and development, Vygotsky's theories of Zone of Proximal Development (ZPD) and mediation, which put human learning and development in a cultural-historical context, was adopted in my research as the most appropriate to inform both the research design and subsequent analyses.

Following the introduction of theoretical framework is a thorough review of the literature related to two key concepts: Teacher cognition, and EFL listening instruction. Before reviewing the literature on teacher cognition, an operational definition of teacher cognition within the context of my study is provided. This is followed by a review of teacher cognition research concerning second language teaching, especially teaching EFL listening. The literature review on teaching EFL listening covers the definition of listening, listening models, the nature and process of EFL listening instruction, factors affecting EFL listening success, three approaches to EFL listening, and some key issues in EFL listening pedagogical models. Finally a brief summary of the chapter is provided.

2.2 THEORETICAL FRAMEWORK

As noted by the notable social scientist and founder of modern social psychology, Kurt Lewin (1952), there is nothing more practical than a good theory. His view reveals the importance of theory in research. As "the quality and nature of our ideas and the knowledge they create makes a positive difference in guiding what we do" (Lundberg, 2004, p. 7), every piece of research, even everything we do, happens within and under the guidance of a theoretical framework. A better and more apposite theory will bring about more efficient and successful research and practice.

In the field of human learning and development in education, there are four basic and influential theories (Karpov, 2014): The Nativist (Maturational) Approach, the Behaviourist (Environmental) Approach, the Constructivist (Interactional) Approach (with Piaget as the representative, i.e., cognitive constructivism), and the Vygotskian Approach (social constructivism). The following paragraphs will introduce these four approaches with an emphasis on the Vygotskian Approach.

The Nativist (Maturational) Approach, formulated at the end of 19th century and influenced by the evolutionary theory of Charles Darwin, views heredity as the main determinant. To nativists, humans' concepts, mental capacities, and mental structures are innate rather than acquired by learning. Early and contemporary nativists advocate the idea of inherited intelligence. Their view of human development as a process predetermined by heredity leads to undermining opportunities to help promote the developmental process through parenting and teaching. A quotation can help illustrate clearly the Nativists' view on human learning and development:

Ordinary differences between families have little effect on children's development... Children's outcomes do not depend on whether parents take children to the ball game or to a museum so much as they depend on genetic transmission, on plentiful opportunities, and on having a good enough environment that supports children's development to become themselves ... Feeding a below-average intellect more and more information will not make her brilliant. (Scarr, 1992, p. 15)

Nativism, advocating that every human is born with certain intelligence and is destined to be "somebody" or "nobody" in his life, may relieve some parents by giving them "more freedom from guilt when they deviate ... from culturally prescribed norms about parenting" (Scarr, 1992, p. 15) and some teachers as well when the outcomes of their teaching do not meet what they expect in the first place. Careful educators and researchers on human learning and development, however, will be aware that Nativism is incorrect as some higher level abilities can only be acquired with the help of parents, teachers and other educators even though some basic qualities are actually inherited.

The Behaviourist (Environmental) Approach came into being at the beginning of the 20th century and was strongly influenced by studies of animal learning carried out by Ivan Pavlov and Edward Thorndike (Morse & Skinner, 1958). These researchers argued that new associations can be created between stimuli and responses in animals through conditioning, that is, repeated practice and reinforcement. The behaviourists applied findings from animal studies to humans, advocating that conditioning is the major mechanism of human learning and development. Behaviourists propose that humans are born blank slates and conditioning determines outcomes of human learning

and development activities. In contrast to Nativism, Behaviorism holds that humans, when born, do not inherit any traits or abilities and will develop however parents and educators nurture them. Behaviourists believe that humans are to be shaped by the hands of the craftsmen, like a piece of clay. As John Watson, a renowned behaviorist, once wrote, "Give me a dozen healthy infants, well-informed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select" (J. B. Watson, 1925, p. 82) (as cited in Karpov, 2014).

Behaviourism later failed to explain learning in animals and so lost popularity in the psychology field. However, Behaviourism has been widely applied in education:

Behaviourist learning theory emphasized arranging the student environment so that stimuli occurred in a way that would instil the desired stimulus-response chains. Teachers would present lessons in small, manageable pieces (stimuli), ask students to give answers (responses), and then dispense reinforcement... until their students became conditioned to give the right answers" (Bruer, 1993, p. 8).

There is no denying that behavioural modification, such as giving a reward to children when they do what they are told, can bring about expected results in the human learning and development process, but more important are the drawbacks of behaviourism. First, if the reward is withdrawn, humans may return to the former inappropriate behaviour pattern. Secondly, and more pertinently, to win a behavioural reward, humans may behave properly as is expected even when they do not want to (Karpov, 2014).

The Constructivist (Interactional) Approach differs from nativist and behaviourist approaches to human learning and development in that it views humans as "research scientists" driven by innate curiosity, that is, humans develop rather than being developed (Karpov, 2014). According to the Swiss psychologist, Jean Piaget, the major representative of constructivism, humans from childhood construct actively their cognitions about the external world. During their development, humans continuously meet new environmental phenomena and try to internalize them into their present schemas (ways of thinking). While these new phenomena may not fit into their schemas to the ideal extent, humans will adapt their schemas to account for the new phenomena. In this way human schemas are continuously developed and enhanced.

Piaget divided human learning and development process into four typical stages (Karpov, 2014). The first stage, from birth to the age of two years, is called the *sensorimotor stage*, during which children solve their problems with a practical trial-and-error method. The second stage, from the age of two to six or seven, is called the *preoperational stage*, during which children exercise their problem-solving ability with mental instead of practical trials. The third stage, from the ages of six or seven to eleven or twelve, is called the concrete operational stage, during which they still do not have the ability to solve theoretical problems; these will develop when children are at around eleven or twelve. After that, children will enter the fourth stage, the *formal operational stage*.

According to Piaget, these four stages of human learning and development process are formed in a set sequence around a strict timetable, which is the same across all countries and cultures. This makes Constructivism similar to Nativism in terms of their

application in education in that it argues humans' exploration of the external world should not be interfered with; children should neither be promoted nor accelerated but provided with the opportunities to learn and develop by themselves. However, it has been proposed that children's development to the concrete operational stage can be promoted with just 15 hours of intervention (Burmenskaya, 1976) (as cited in Karpov, 2014). Piaget also eventually acknowledge that school education can directly help with the transaction to the formal operational stage.

The Vygotskian Approach (also called social constructivism) to human learning and development is named after a Russian-Jewish psychologist and educator Lev Vygotsky. In the 1980s, more than 50 years after his death, the English translations of Vygotsky's major works were published, and Vygotsky was recognized as "the Mozart of Psychology" and the founder of the cultural-historical approach to human development (Prawat, 2000; Toulmin, 1978). Vygotsky's notion about human learning and development differs from Nativists, Behaviourists and Constructivists in that it advocates neither heredity nor conditioning, nor independent exploration, as the determinant of humans' development, but that humans learn and develop through mediation with others. A typical example is that children, with adults' mediation in some age-appropriate activities, can develop new schemas, problem solving and selfregulation and gradually acquire the qualities necessary for school learning. Recent studies (for example, Doolittle, 1997; Kozulin, Gindis, Ageyev, & Miller, 2003) strongly support Vygotsky's innovative view of human learning and development. His Russian followers, having applied Vygotsky's theoretical ideas to educational practice for 50 years, also have confirmed their validity and efficiency in instructional practices for human learning and development (Karpov, 2014).

Zone of Proximal Development (ZPD)

The two prominent notions in Vygotskian framework about human learning and development are "Zone of Proximal Development (ZPD)" and "mediation", which are closely related to one another. ZPD is defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky & Cole, 1978, p. 86). ZPD exists only when the interlocutors are unequal: One person (the adult or the expert) must know how to perform an act (about the subject of interaction) and the other (the child or novice) does not. The ZPD theory distinguishes the actual and potential levels of human learning and development: The former denotes the novice's ability to perform certain tasks without help, which reflects certain related stable mental processes and functions the person has established and internalized in himself or herself; the latter relates to those functions that the novice can carry out with others' assistance. Vygotsky (1978) stressed further that interaction and cooperation are essential features of ZPD. The application of Vygotsky's ZPD theory to instructional practices gives rise to the mechanism of scaffolding in the field of language instructional practices: A knowledgeable teacher can create, through verbal interactions, supportive conditions in which students can participate and improve current mastery of skills and knowledge to a higher level (Donato, 1994). The ZPD theory has practical implications for second language teaching because teachers can boost the outcome of students' learning to a higher level by providing supportive assistance.

Mediation

Mediation is a complex psychological and educational concept. Vygotsky defines mediation the process of equipping children/students with new psychological/cognitive tools. Mediation is achieved in practice through ageappropriate activities for the learners as teachers stand in the middle and bridge learners and the knowledge. And mediation involves teachers' providing scaffolding to students aiming at enhancing students' understanding and mastery of knowledge at a higher level (Mason, 2000). Teaching knowledge to students is a form of mediation; therefore, it is also important for teachers to be acquainted with the following four types of knowledge and the way in which knowledge is processed. There are four types of knowledge: Factual knowledge, conceptual knowledge, procedural knowledge, and metacognitive knowledge (Anderson & Krathwohl, 2001; Karpov, 2014). Factual knowledge refers to "the knowledge of concrete facts, names, dates, and so forth" (Karpov, 2014, p. 129). Eric Hirsch, the founder of the Core Knowledge Foundation and professor emeritus of education and humanities at the University of Virginia, argues that factual knowledge should be the major content of school learning, by claiming that, "Words refer to things; knowing a lot of words means knowing a lot of things" (Hirsch, 1988, p. 24). Conceptual knowledge is "the knowledge of concepts, principles, theories, and the like" (Karpov, 2014, p. 131). Conceptual knowledge helps clarify objects and is thus a psychological tool for solving problems. Procedural knowledge is "the knowledge of skills, strategies, and techniques; in other words, it is knowledge of how to do something" (Karpov, 2014, p. 132). Everyday procedural knowledge is widely applied like driving a car, repairing a broken chair, etc. In school learning, students may use procedural knowledge to solve problems they encounter in all subjects provided teachers have demonstrated how the procedure works. Metacognitive knowledge is "our ability to self-regulate: to plan and monitor our behaviour and to evaluate its outcomes" (Flavell, 1979; Karpov, 2014, p.

134). Metacognitive knowledge is for students to manage their thinking, learning, and problem solving. Learners' metacognitive knowledge systems are not static; they are complex and dynamic, changing and adapting according to the time, location, task and many other factors (L. J. Zhang, 2010a; 2016) Metacognitive knowledge and strategy use in language learning and teaching in diverse settings have been extensively explored by a body of researchers (Zhang & Zhang, 2013). Zhang and Goh (2006) investigated 278 Singaporean students' knowledge and use of 40 listening and speaking strategies and found that, while students said they believed in the usefulness of the strategies, they were not conscious and confident strategy users. Zhang (2001a; 2009; 2016) investigated the metacognitive awareness and reading-strategy use of 270 Chinese senior high school students, and the metacognitive knowledge of reading strategies of 10 Chinese EFL students with low achievement levels, and probed language learner autonomy from a dynamic metacognitive systems perspective. The results show that the students reported using three categories of strategies at a high-frequency level. Goh (1997; 1998; 2008; 2000; 2014; 2012; 2006) explored various aspects in the teaching and learning of listening comprehension and listening performance in L1/L2 language from a metacognitive perspective. Zhang and Zhang (2018) synthesized theory and practice on metacognitions in TESOL. These studies notably highlight the significance of metacognitive knowledge and strategy use in language teaching and learning under various contexts.

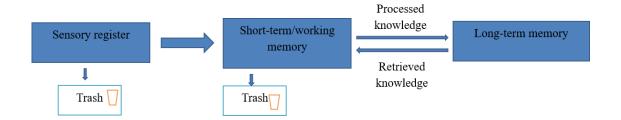
Vygotsky's theory of ZPD and mediation (Vygotsky & Cole, 1978) provides an appropriate framework for my research to explain the developmental process of Chinese university teachers' cognitions about EFL listening, as inexperienced teachers develop from their actual level to their potential level through the mediation of more capable

peers, i.e., experienced teachers. The discussion chapter provides a detailed data-driven analysis within the theoretical framework.

Knowledge processing model

In addition to knowing about different types of knowledge, it is essential for teachers to know how knowledge is processed. The human brain receives input of information from the senses, stores and processes the information, and then delivers outputs by bringing about a behavioural response, similar to the mechanism of a computer. Information processing theory has been developed and broadened through the years, most notably with Atkinson and Shiffrin's sequential model of "stage theory" (Atkinson & Shiffrin, 1968). This model reduces the complexity of human brain by adding a linearity component. Following this model of human thought represented linearly, Craik and Lockhart (1972) asserted that the way information is processed (perception, attention, labelling, ad meaning) affects the ability to access the information later on, and posited the "level of processing" model. Based on the research in this field (for example, Atkinson & Shiffrin, 1968; Craik & Lockhart, 1972; Schneider & Shiffrin, 1977; Shiffrin & Schneider, 1977) and on Bransford's (1977) addition, that information will be more easily retrieved if the way it is accessed is similar to the way in which it was stored, Rumelhart and MacClelland (1987) proposed the connectionist model, which is supported by current neuroscience research. The connectionist model states that information is stored simultaneously in different areas of human brain and is connected as a network; the more connections a piece of information has, the easier it will be retrieved. Karpov (2014) further developed the model to include four stages: Sensory register, attention, short-term/working memory, and long-term memory. This version of the model is more appropriate and adaptable to process knowledge of EFL listening during classroom learning. Figure 2.1 below illustrates the knowledge processing model adapted from Karpov (Karpov, 2014):

Figure 2.1 The Knowledge Processing Model (adapted from Karpov, 2014)



The Sensory register is the first step in students' learning. Students use their sensory organs to obtain knowledge: They read words in the textbook with eyes, listen to what teachers say with ears, etc.; the knowledge they have obtained is stored in their cognitive system for a short period of time. Thus the sensory register refers to "the component of human cognitive system in which all the information from sensory organs is collected and held for a short period of time (from less than a second to three or four seconds)" (Karpov, 2014, p. 136). In EFL listening, during the stage of sensory register, students use one of their sensory organs – ears – to capture sound signals from the recording and store the knowledge in their cognitive system for further processing.

Attention is like a flashlight beam in a dark room which lights up some objects while leaving other objects in the dark. Attention cannot be paid to all the things simultaneously; instead, humans can only attend to one thing at a time. The knowledge which gets attention will be selected for further processing; the information which does not get attention will be discarded. During EFL listening practice in the classroom, students pay attention to the sound signals obtained in the first stage for further processing. Their attention is easily distracted by a loud sound irrelevant to the listening

practice, the smell of food to a hungry stomach, and the like. Therefore, a quiet atmosphere for listening and peaceful presence of mind on students' part are required during EFL listening process.

Short-term/working memory gets its name because the knowledge that gets attention and moves on for further processing will be maintained in human mind for no more than 20 seconds (Karpov, 2014). The main function for short-term memory is not to store or maintain knowledge but to process it in depth (to think it over and over again). The processing of knowledge in short-term memory will determine if certain knowledge is to be remembered, or not, and the way in which the knowledge is to be remembered. Knowledge which is not processed will be discarded, and the processed knowledge will be moved to the long-term memory (Karpov, 2014). In EFL listening, students select and retain certain sound signals and put them into the short-term memory. The signals selected are then processed in depth to answer the questions related to the listening material.

Long-term memory is often compared to the hard drive of a computer or a set of cabinets that stores the knowledge accumulated throughout one's life. Not every piece of knowledge is properly processed in the working memory: The well-processed knowledge goes to the "right" cabinet and can be retrieved easily to working memory; the improperly-processed knowledge may go to the "wrong" cabinet and is not easy to find and use (Karpov, 2014). In EFL listening, knowledge that goes to and stays in students' long-term memory is knowledge that is properly stored and well-processed during the listening process.

In summary, in comparison with the Nativist Approach, the Behaviourist Approach and the Constructivist Approach, the Vygotskian Approach is the most suitable for my study. The two prominent theories in Vygotskian framework jointly hold that human learning can close the gap between the actual developmental level and the level of potential development with mediation of others. Types of knowledge and knowledge processing model, closely related to teaching and learning, were also introduced.

2.3 DEFINITION OF KEY TERMS AND REVIEW OF LITERATURE ON TEACHER COGNITION

2.3.1 Teacher Cognition

Research on teacher cognition began in the 1970s, thrived in the mid-1990s, and became a major area of enquiry in the field of foreign language education (S. Borg, 2006). Research on teacher cognition focuses mainly on conceptual understandings of teacher cognition, factors that affect the development of teacher cognition, the relationships between teacher cognition and their actual classroom instructional practices, and the role teacher cognition plays in the field of second language teacher education. Research in these four areas is reviewed in the following sections to inform the data analysis and discussion in my study.

2.3.1.1 Definitions of teacher cognition

The concept of teacher cognition is complex according to Borg (2015), with about 60 distinctive terms used in language teacher cognition research to refer to teacher cognition. Although the terms diverge in various contexts, the features they connote can be classified into the following categories: Personal nature, mental lives in nature, role of experience, the interactive influence of cognitive processes and instructional practices

(S. Borg, 2003). Among the many terms used to refer to teacher cognition, the most frequently-used terms are teachers' knowledge, teachers' belief, and teachers' selfperception. Teachers' knowledge of the subject matter has an effect on their instructional decisions. Shulman (1986a) and his associates conducted a series of studies into a range of school subjects. Their findings exemplify the relationship between teachers' perceptions of their knowledge and their instructional practices. Golombek (1998) explored language teachers' personal practical knowledge. Mangubhai, Marland, Dashwood, & Son (2005) suggest that teachers have a broad abstract understanding of teaching and learning. It is not easy to define an abstract concept such as belief, but there are core characteristics that can be identified. Nespor (1987) asserts that compared with knowledge, the structure of beliefs can be identified with four features: (a) Existential presumption, which refers to the inconvertible, personal truths everyone holds; (b) alternativity, which includes personal attempts to create an ideal situation that may differ from the reality; (c) affective and evaluative aspect, on which belief systems have stronger reliance than knowledge systems; and (d) episode storage, which beliefs reside in with information obtained from experience and cultural sources of knowledge transmission. Self-perception can be linked to beliefs in an indirect way. Self-perception is operationalized as an awareness of the characteristics that constitute one's self, in this case as a teacher. Apart from teachers' knowledge, teachers' belief, and teachers' selfperception, other terms such as maxims, personal theories, principles, and schema are also used to refer to teacher cognition (Kubanyiova & Feryok, 2015). According to Skott (2015), definitions of belief highlight four core elements: (a) They refer to ideas that individuals consider to be true. (b) They have cognitive and affective dimensions. (c) They are stable and result from substantial social experiences, and (d) they influence practice.

In the field of second language teacher education, teacher cognition is also used as a broad term which encompasses *teachers' knowledge*, *teachers' belief*, and *teachers' self-perception* and is defined as "the unobservable cognitive dimension of teaching – what teachers know, believe and think" (S. Borg, 2003, p. 81). Teachers' cognitions have been shown to exert great influence on their practice (Meijer, Verloop, & Beijaard, 1999).

In recent years, there has been a growing body of research on how to perceive and understand teachers' classroom teaching practice or performance, and on why and how they make their instructional decisions actively (for example, Feryok & Oranje, 2015). Studies on teacher cognition, have included research on teachers' belief, knowledge, theories, assumptions, and attitudes towards every aspect of their work (e.g. Agudo, 2014; Basturkmen, Loewen, & Ellis, 2004; S. Borg, 2003; 2011; 2012; Breen, Hird, Milton, Oliver, & Thwaite, 2001; Busch, 2010; Clandinin & Connelly, 1987; Feryok, 2010; Gatbonton, 2008; Inozu, 2011; Kuzborska, 2011; L. Li, 2013; Mak, 2011). The research on teacher cognition expanded within a wide range of language teacher education settings in both preservice and in-service contexts, at various levels (from kindergarten to adult education), with many subjects (e.g., English and mathematics) and with specific aspects of English (e.g., vocabulary, grammar, writing, reading, etc. in English learning).

The existing body of research shows that teacher cognition is defined, partly, by personal factors based teachers' own understanding of the practical classroom instructional activities (Clandinin & Connelly, 1987; Z. Fang, 1996; Kagan, 1990; 1992).

The body of research has a further, widely-accepted implication: That is, to understand the process of teaching better, both actions and cognitions underlying every decision teachers make in their pedagogical practice need to be described and taken into consideration.

Teacher cognition may involve teachers' beliefs, knowledge, theories, attitudes, images, assumptions, metaphors, conceptions, or perspectives about teaching, teachers, learning, students, subject matter, curricula, materials, instructional activities, etc. (S. Borg, 2003). In fact, teachers hold a wide range of practical theories which inform how they behave and teach in classrooms. Moreover, teachers' practical teaching experiences contribute to the development of their cognitions (Gao, & Ma, 2011).

Based on the literature reviewed, the working definition of teacher cognition in my study is "the unobservable cognitive dimension of teaching — what teachers know, believe, and think" (S. Borg, 2003), referring to what Chinese university teachers know, believe and think about EFL listening and their instructional practices. Words and phrases such as teachers' cognitions/ teaching plans/ ideas/ philosophy/ principles are also used interchangeably to refer to teacher cognition or one aspect of the concept.

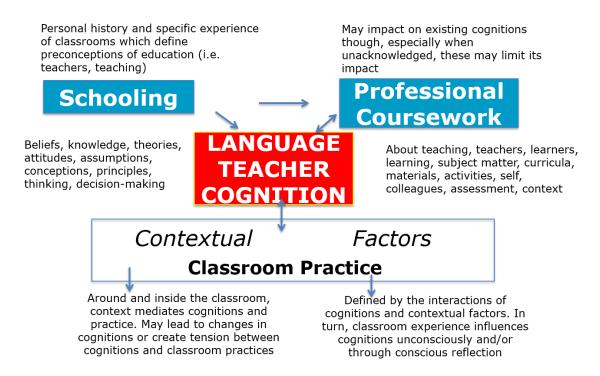
In summary, teacher cognition is complex with various terms used to refer to teacher cognition including teachers' knowledge, teachers' belief, and teachers' self-perception. Although there are distinctive connotations and denotations in various contexts, these terms share core features in terms of several aspects of teacher cognition. Recent years have seen a growing body of research investigating teacher cognition and classroom

teaching practice. The working definition of teacher cognition used in my study was also presented.

2.3.1.2 Factors affecting teacher cognition

This section discussed research on the factors contributing to teacher cognition. For example, where does teacher cognition come from? The generally accepted conclusion is that it derives from teachers' own learning experience as language learners within formal classrooms (E. M. Ellis, 2006; Pajares, 1992; Velez-Rendon, 2006), and through "apprenticeship of observation" (S. Borg, 2003) in early teaching experiences and teacher training courses (Popko, 2005) which significantly influence the way they view and approach teaching (Bao, 2017; S. Chen, 2017; Q. Sun, 2017). As Richards and Lockhart (1996, p. 30) claimed, other sources may include "teachers' personality factors, educational principles and research-based evidence", different stages the teachers are in (Berliner, 1994), teachers' emotions (Zembylas, 2005), language policy (Farrell & Kun, 2007). In short, many sources contribute to the formation of teacher cognition. Borg (2015) posits that teacher cognition is affected mainly by three main factors and established a model which presents the potential factors affecting language teacher cognition, as shown in Figure 2.2 below.

Figure 2.2 Elements and Processes in Language Teacher cognition (S. Borg, 2015, p. 333)



As shown in Figure 2.2, the definition of teacher cognition has evolved from "what teachers know, believe and think" (S. Borg, 2003, p. 81) into a new version of teachers' "beliefs, knowledge, theories, attitudes, assumptions, conceptions, principles, thinking, and decision-making" about "teaching, teachers, learners, learning, subject matter, curricula, materials, activities, self, colleagues, assessment, context" (S. Borg, 2015, p. 333). The three categories that influence teacher cognition are schooling, professional coursework, and contextual factors (classroom practice). For schooling, teachers' personal history and specific experience in classrooms help define their early cognitions and shape their perceptions of teachers and teaching. Teachers' professional coursework also may have an effect on their existing cognitions, although its impact may be limited because teachers are unaware of the relationship of their coursework to their practice. Contextual factors related to, and inside, the classroom context mediate cognition-

practice relationship and can cause teachers' cognitions to change or a tension between cognitions and instructional practices. Classroom practice is bounded by the interactions of cognitions and contextual factors, and in turn, teachers' classroom practices influence their cognitions in an unconscious and/or conscious way. Later in this thesis, Borg's model of language teacher cognition is used to guide the discussion of findings regarding sources of Chinese university teachers' cognitions about EFL listening.

2.3.1.3 The relationships between teacher cognition and instructional practices

How teacher cognition is related to teachers' actual classroom instructional practices is increasingly a focus for research in the field of teacher education, especially the cognition-practice congruence, that is, the extent to which teachers' instructional practices is consistent with their cognition. Despite considerable research in the field, the relationships between teachers' cognitions and their instructional practices have not been fully investigated, nor clearly defined, with no consensus reached, especially in relation to listening in EFL. The following section, specifically, reviews the literature on the relationships between teacher cognition and practice from three perspectives: The influence of teacher cognition on instructional practices; the consistency or inconsistency between the two; and the factors that mediate the relationships.

The influence of teacher cognition upon instructional practices

Teachers possess theoretical beliefs about teaching, and their beliefs and cognitions provide a basis for their teaching behaviour (Ajzen, 1991; Basturkmen, 2012; S. Borg, 2011; Farrell & Bennis, 2013; Farrell & Ives, 2015; Zhao, Joshi, Dixon, & Huang, 2016), and beliefs guide teachers' thought and behaviour (M. Borg, 2001). In other words, teachers' cognitions shape or affect the nature of their instructional decision-making (Z.

Fang, 1996; Longberger, 1992; A. M. Watson, 2015), teacher cognition is believed to have an impact and guide teachers' decision-making (Arnett & Turnbull, 2007; M. Borg, 2001; Isikoglu, Basturk, & Karaca, 2009). However, the reported findings are inconclusive, varying from highly consistent to highly inconsistent (S. Borg, 2011; Z. Fang, 1996). According to Wilson, Shulman & Richert (1987) and Basturkmen (2012), experienced teachers' planned aspects of teaching, such as task design (Kim, 2006), teaching orientations (Tam, 2006), and instructional approaches, and selection of activities for teaching (Vibulphol, 2004) are not improvised classroom instructional practices but show greater consistency with their expressed cognition; that is, their principles correspond with their teaching practices.

The inconsistency between teacher cognition and instructional practices

Gross (2015) states that inconsistency between what people say and do is viewed as normal in the area of critical social psychology. Inconsistency between teachers' stated cognitions and their observed classroom practice has been reported in case studies of experienced or novice language teachers. Such studies were carried out with teachers in primary schools (Farrell & Lim, 2005), secondary schools (Maiklad, 2001; Ng & Farrell, 2003), high schools (Klein, 2004; E. W. Mitchell, 2005), and tertiary settings (Q. Sun, 2017), and have examined topics ranging from beliefs about teachers' roles (Anstrom, 2003), communicative language teaching (Choi, 2000; Sugiyama, 2003), teaching methods (Tucker, 2001) and students' needs (Gilliland, 2015). The inconsistency between teacher cognition and practice is also identified in the research in a number of areas (J. C. Richards, 1998) in mainstream education (Z. Fang, 1996), literacy education (Cummins, Cheek, & Lindsey, 2004), language teaching (Feryok, 2008; Xiang & Borg, 2014), and the teaching of various curricular fields of English as a foreign language such

as grammar (Graus & Coppen, 2016; A. M. Watson, 2015), writing (Lee, 2008; Yigitoglu & Belcher, 2014; L. J. Zhang, 2013, 2017), reading (Vaish, 2012), vocabulary (Gerami & Noordin, 2013), speaking (Baleghizadeh & Shahri, 2014), and pronunciation (Buss, 2016). The degree of inconsistency, from partial congruence to clear divergence, with a low positive relationship or limited correspondence, is also reported in the research.

The factors that mediate the relationship between teacher cognition and instructional practices

Tian (2014) suggests that there are three categories of factors that mediate the relationships between teachers' cognitions and their instructional practices in the literature: The assumption that teachers' conflicted cognitions leads to their contradictory actions (Cornett, 1990); the recognized inaccessibility to the cognitions that underpins teachers' actual teaching practice (Z. Fang, 1996); and contextual constraints.

In the first category, research has found that teachers' conflicted cognitions includes the conflicted "self" of teachers' working identity (Lampert, 1985); the dilemma between the encouragement of maximum student participation and the call for stronger class control on teachers' part (Duffy & Anderson, 1986); teacher-reported need to cover the prescribed curriculum (Sinprajakpol, 2004); the influence of students' role on teachers' online decision-making (for example, Nishino, 2012; Phipps & Borg, 2009); the clash between teachers' moral and technical beliefs (Pinnegar & Carter, 1990); the discrepancy between exam-orientated teaching and modern effective teaching theories (Deng & Carless, 2010); and the inconsistency in teachers' beliefs between Western

traditions and Asian traditions in language teaching (Mak, 2011). Situated cognition notes that how one thinks, what one thinks about, and feels is not an autonomous and invariant function free of context, but a dynamic construction, scaffolded by accessible knowledge (Fiske, 1992; Förster, Liberman, & Kuschel, 2008). Culture has a potential impact on cognitive processes (Nisbett & Norenzayan, 2002), and social contexts impact on thinking and action (Smith & Collins, 2010; Smith & Semin, 2004; 2007; Smith & Conrey, 2010).

Related to the second category, according to Ellis (2012), many studies gather and process data on explicit cognitions that describe what should be done in teaching, while few studies focus on teachers' implicit cognitions which shape improvised decision-making in instruction. Ellis (2012) suggests that the absence of implicit cognitions in research may explain the inconsistency between teachers' cognitions and their instructional practices. The findings of Ellis are supported by Woods and Cakir (2011) who argue that teachers' experientially-derived knowledge tends to dominate their teaching behaviour more than their verbally-derived knowledge, and that teachers' teaching experience enables implicit ability to be explicit through detection, reflection and discussion. Their notion that "experientially-derived knowledge is more likely to occur in action than verbally-derived knowledge" (Woods & Çakır, 2011, p. 383) has received recognition.

The third category of contextual factors includes mainly time constraints (Farrell & Bennis, 2013), school context (Gilliland, 2015), the influence of exams (A. M. Watson, 2015), complexity of teachers' cognitions (Junqueira & Payant, 2015), students' personality and feeling (Roothooft, 2014), and the research method (Barnard & Burns,

2012). Contextual factors make the disjunction between teacher cognition and practice very likely (S. Borg, 2018).

To sum up, the relationships between teacher cognition and practice in the field of teacher education have been increasingly researched in recent times. The findings of these studies range from high consistency to inconsistency between teacher cognition and their practice. Three categories of contextual factors that mediate the relationships were reviewed as well.

2.3.1.4 Teacher cognition and second language teacher education

The investigation of teacher cognition has been an important area of research in Second Language Teacher Education (SLTE) since the 1970s (S. Borg, 2003), with the main emphasis being on the interaction between teacher cognition and classroom practice (S. Borg, 2006; H. Zheng, 2009). Studies of teacher cognition, through examining the complex interactive relationships between teacher cognition and their classroom instructional practice to improve language teacher education have made a considerable contribution to research on teacher education (S. Borg, 2003; 2010; Gabillon, 2005; Inozu, 2011; Kelly, 2012; Kuzborska, 2011; J. C. Richards, 2008; H. Zheng, 2009).

It has been evident that what teachers do in classrooms is in some way influenced by what they think about L2 learning and teaching (S. Borg, 2009). Teacher cognition seems to have an influential effect on the way they teach, or in other words, teachers' beliefs guide their classroom practice, as was suggested by McDonough (1994), "what we believe we are doing, what we pay attention to, what we think is important, how we choose to behave, how we prefer to solve problems, form the basis for our personal

decisions as to how to proceed" (p. 9). Beliefs, however, are not always reflected in classroom practice (S. Borg, 2009; Phipps & Borg, 2007), that is, teachers' instructional practices may not be consistent with their own beliefs at times. In short, teacher cognition is now viewed as a key aspect in SLTE and has recently become an important research area.

Second language teacher education includes both initial training and ongoing teacher educating as originally defined by Richards (1990). He observes, "The intent of second language teacher education must be to provide opportunities for the novice to acquire the skills and competencies of effective teachers and to discover the working rules that effective teachers use" (p. 15).

The theoretical base of SLTE has changed over the last three decades. SLTE theory and practice have been affected to a large extent by the rapid spread of the English language during the past 30 years (Graddol, 2006) and its "localisation" and "nativisation" (Canagarajah, 1999; Holliday, 2005). Britten (1985) reviewed teacher training in English language teaching, providing an illustration of teacher education for EFL/ESL teachers at that time. His review, which consisted of three main parts, was comprehensive covering virtually all the aspects of SLTE. Part One elaborated a wide range of topics which included the objectives of pre-service teacher training, selection of candidates, subject knowledge and the methodology component. Part Two focused on the 'teaching skills component', referring to the practice teaching and its evaluation. Other topics covered in Part Three were in-service teacher training and teacher-trainer training.

Since 1985, substantial changes have taken place to L2 teaching both theoretically and in practice. As a result, teacher education and professional development for English language teachers underwent corresponding changes. SLTE began to gain greater notice from the experts in the field of applied linguistics with increasing publications of research, including Richards and Nunan (1990), Flowerdew, Brock and Hsia (1992), Freeman and Richards (1996), and Johnson (2000). These researchers initiated an agenda for professional practice and research in SLTE to challenge the applied linguistics curriculum of language training, language content knowledge, and teaching skills. Their publications also integrated into SLTE a number of theoretical issues that arose from practice. The main strands were:

- (a) A concern with reflective practice (Farrell, 1999b; Wallace, 1991, after Schön, 1987; 1983) to the wider SLTE community, which subsequently became a basic concept in the wider SLTE community, and evolved into an emphasis on the autonomous judgment and practical theory (Richards & Lockhart, 1996).
- (b) Teacher knowledge (Freeman, 1989; 1991), teacher learning (Freeman & Richards, 1996), teacher thinking (Woods, 1996), and Pedagogical content knowledge (Roberts, 1998; Shulman, 1986b).
- (c) School-based teacher learning and mentoring student teachers in the school context (in the UK, for example, Fish, 1989).

With the globalization of the economy, the way of communication has changed in the market-driven economy with the English as a language being used for knowledge transfer in a larger range of countries (Graddol, 2006). English, as second or foreign language, is set as a basic and compulsory course in schools in many non-English-

speaking countries. As a consequence, the demand for trained English teachers has increased greatly, and has led to L2 curriculum reforms and thus new practiced for English teachers. Richards (2008) notes that SLTE is now a core activity, central to ensuring the quality of learning experiences of English learners. Freeman and Johnson (1998) proposed a "reconceptualised knowledge base" (p. 402), which means that teachers of English in SLTE have to be concerned with three domains: (a) Teachers as learners of teaching; (b) schools as social contexts of teacher learning; (c) the pedagogical process of language teaching and learning. Crandall (2000) identifies four main trends in SLTE during the 1990s:

- (a) A theoretical shift from behaviourism to constructivism;
 - (b) A perception that English teachers' prior learning and cognitions have a considerable impact on their teaching and learning;
 - (c) An increasing realization that SLTE needs to do more to prepare beginning teachers for real classrooms;
 - (d) The growth of professionalism among ELT/TESOL practitioners.

In the 21st century, against the background that the overall mission of SLTE in the sociopolitical and socioeconomic contexts has changed, four interrelated challenges have come to the fore: (a) Theory versus praxis; (b) the legitimacy of teachers' ways of knowing; (c) redrawing the boundaries of professional development; and (d) "located" L2 teacher education (Johnson, 2006). Based on a reconceptualised knowledge base, SLTE has a new agenda in terms of goal-producing reflective teachers, learning experiences and evaluation (Wright, 2010). SLTE today is obviously more complex and theoretically grounded, so that the situation of SLTE in the 21st century calls for more

research and practice, such as on teacher cognition and teachers' professional cultures. Johnson and Golombek (2011) advocate the need to promote cultural diversity and to legitimate teacher identities. They emphasize the role of concept development and strategic mediation in L2 teacher education in inquiry-based professional development, highlighting the importance of education policies and curricular mandates.

To summarize, teacher cognition has become an important research area in SLTE and an increasing amount of research has been conducted to examine how teacher cognition is reflected in classroom teaching practice and decision-making process. The definition of SLTE, the development and changes through the years since its genesis, and current role of SLTE were introduced.

2.3.2 L2 Teacher Cognition

The substantial body of literature on Second Language (L2) teacher cognition covers different curricular areas in L2 teaching, such as L2 grammar, L2 writing, L2 reading, L2 speaking, L2 vocabulary, and L2 pronunciation. The research on teacher cognition about L2 listening is reviewed in the next section separately as it is a body of literature with specific relevance to my research.

Research on L2 grammar teachers' cognitions is well-established and can be traced back to the 1980s. Chandler (1988) conducted a survey with 50 English teachers in the UK on their attitudes toward language work. One finding was that many of the teachers learned their grammatical knowledge mainly from their own school learning experiences. Eisenstein-Ebsworth and Schweers (1997) researched on 60 ESL teachers' perspectives on grammar in New York and Puerto Rico, indicating that most teachers

thought there was no reason to exclude the teaching of grammar and that their grammar teaching approaches were well-developed.

Schulz (1996), in a large-scale study in an American university, reported a substantial mismatch between teachers' and students' perspectives on grammar teaching. The study was replicated in 2001 with similar results. In 2002, Burgess and Etherington examined 48 English-for-academic-purposes (EAP) teachers from UK universities on their beliefs regarding grammar teaching. The study reported that most of the participating teachers were supportive of appropriate grammar teaching methods to meet the expectation of their students.

The early research on teacher cognition and classroom practice of L2 grammar teaching reported that teachers' perception was that clear knowledge of grammar at sentence level has a positive influence on students' L2 learning (Mitchell, Brumfit, & Hooper, 1994a; 1994b). Other studies on L2 grammar teacher cognition and classroom practice include Andrew's investigations into the role of the teachers' metalinguistic awareness (TMA) in L2 grammar teaching (Andrews, 1997; 1999; 2001; Andrews & McNeill, 2005). Borg, in a series of publications (1998a; 1998b; 1999c; 2001b; 2005; 2008), also reported research on teacher cognition about L2 grammar teaching in naturally occurring contexts through observing and describing what teachers actually do in L2 grammar teaching. His findings reported that L2 grammar teachers did not believe that formal instructions played a role in improving L2 grammar learning (S. Borg, 1999a). His research also included teachers' views on teachers' selecting unconventional teaching methods in actual instruction (S. Borg, 1999c), the role meta talk (especially grammatical terminologies) plays in grammar teaching (S. Borg, 1998a; 1999c), the

relationships between teachers' knowledge about grammar and their classroom instructions (S. Borg, 2001b; Phipps & Borg, 2009), and the five factors that influence teachers' cognitions, which include acquisition-related, awareness-raising, diagnostic, psychological and classroom management in L2 grammar teaching (S. Borg, 2001a). Basturkmen, Loewen and Ellis (2004) investigated the congruence between teacher cognition about L2 grammar and their teaching practice through interviews and observation. Hos and Kekec (2014) investigated language instructors' beliefs and practices regarding grammar teaching, and found the incongruence between their cognitive preference of CLT and the ignorance of it in their classrooms. Watson (2015) also explored the significance of teachers' affective beliefs about grammar for pedagogical practice through a case study of L1 English teachers. Finally, Graus and Coppen (2016), investigating student teachers' beliefs about grammar teaching at Dutch universities, reported that whereas the student teachers performed form-focused, explicit, and inductive instruction and focus on forms instruction, high-year undergraduates and postgraduates showed a preference for meaning-focused, implicit, and focus on form instruction.

The review of the literature on teacher cognition about L2 writing identified early studies which focused on teachers' beliefs about the process approach to L2 writing teaching (Lipa & Harlin, 1990), their cognitions about how to put the process approach into their classroom teaching practice (Tsui, 1996), and their understanding of the teaching of L2 writing (Cumming, 2003). More recently, in a disciplinary dialogue published in the *Journal of Second Language Writing*, Zhang (2013) described his beliefs, as a teacher and teacher educator, about L2 writing *as* and *for* L2 learning (see also L. J. Zhang, 2017). Yigitoglu and Belcher (2014) investigated the connections

between the ESL writing teachers' beliefs about teaching L2 writing and their own L1 and L2 writing experiences. Through classroom observation and interviews with two L2 writing teachers during a 15-week semester, they found that both L1 and L2 writing experiences have positive impact on L2 writing instructional practices.

There is also a growing body of research on teacher cognition about L2 reading, vocabulary, speaking, and pronunciation, etc. Vaish (2012) analysed teachers' beliefs about bilingualism in a reading programme in the Singaporean context through a survey of 270 teachers, in-depth interviews with five teachers within the survey map, and observations of their classroom instruction. The study reported that teachers believed in an immersion approach and that the use of L1 can positively promote EFL/ESL reading. Gerami and Noordin (2013) investigated teacher cognition in foreign language vocabulary teaching based on Shulman's theory of teacher knowledge. The qualitative research, which included semi-structured in-depth interviews, classroom observation and stimulated recall interviews, investigated second language teachers' perspective of vocabulary teaching approaches and challenges in Iranian high schools. They reported that although participants had a good mastery of English language teaching, including vocabulary instruction, their teaching methods were not congruent with their beliefs and did not include any metacognitive and socio-affective strategies. The participants' main problems with vocabulary teaching appeared to be related to either the educational system or to contextual factors.

Baleghizadeh & Shahri (2014) explored three Iranian EFL teachers' conceptions of learning and teaching of speaking skills in English through in-depth semi-structured interviews. Their research reported on the nature of the teachers' learning experience

and their cognitions about teaching EFL speaking in an EFL context. Zhang and Rahimi (2014) divided their 160 participants equally into high-anxiety and low-anxiety groups to examine the interaction between their beliefs about corrective feedback (henceforth, CF) and their levels of anxiety in oral communication. They did so by making the learners "aware of the purpose, significance, and types of CF" (Zhang & Rahimi, 2014, p.429). Their purpose of doing so was to find out "the necessity, frequency, and timing of CF, types of errors, types of CF, and choice of correctors" (Zhang & Rahimi, 2014, p.429). They found that all the 160 participants had similar beliefs about CF and liked being given CF in English oral communication classes. Buss (2016) in an investigation into the beliefs and practice of Brazilian EFL teachers regarding pronunciation through an online survey of 60 participants, reported that the Brazilian teachers highly value, and have positive attitudes towards, pronunciation instruction. They view problematic sounds, vowel sounds, and words with final consonants or epenthesis as the most difficult language features in pronunciation to learn and teach. Teachers' self-reported teaching practices were found to be fairly traditional, including extensive use of repetition and phonetic symbols, tactile reinforcement, visual aids, and focus on rules.

In short, research on teacher cognition in various curricular areas, such as grammar, writing, reading, speaking, vocabulary, and pronunciation in L2 teaching is reviewed in this section. Research cited has used a range of methods such as questionnaires, surveys, interviews, and observation, to investigate teacher cognition in these curricular areas and in classroom practice. The findings of these studies included contextualized teacher cognition about aspects of second language teaching, the relationship between teacher cognition and practice, factors that mediate the relationship, and students' perspectives.

2.3.3 L2 Listening Teacher Cognition

There is paucity of research on L2 listening teacher cognition although recent years have seen an expansion of research on L2 teacher cognition. Only a few studies exploring teacher beliefs about EFL listening instruction were identified through a search of the literature search. The following section will describe three studies that are related to L2 listening teacher cognition: Gao and Liu (2013), Graham, Santos and Francis-Brophy (2014), and Karimi and Nazari (2017).

Gao and Liu (2013) investigated Chinese college English teachers' beliefs in listening teaching and the relationship between teaching beliefs and practice with a survey of 325 teachers and a case study of four teachers. Their findings showed that although the Chinese college English teachers under investigation have a good understanding of the importance of listening teaching, and appropriately focus on the listening materials such as the background knowledge and local details, mismatches occur between their beliefs and teaching practice.

Graham, Santos, and Francis-Brophy (2014) investigated the self-reported beliefs and practices of 115 foreign language teachers in England about listening pedagogy through a questionnaire, lesson observation, post-lesson teacher interviews, and textbook analysis. The purpose was to examine whether their stated beliefs and practice confirm to the literature on listening, whether beliefs and stated practice converge, and what factors might inform them. Responses indicated a mismatch between teachers' stated beliefs in the importance of teaching learners how to listen more effectively, and a lack of evidence of this in their stated practice of teaching of listening. The findings were in relation to five key issues arising from the literature on L2 listening: (a) The teachability

of effective listening/the need to teach listening as a specific skill; (b) the importance of both top-down and bottom-up strategies for comprehension; (c) the importance of metacognitive strategies/metacognitive awareness; benefits of learner exploration and discussion of listening; (d) use of prediction and pre-listening activities; and (e) focus on global/local details/chunks/individual words.

Karimi and Nazari (2017) examined the influence of teachers' qualifications on Iranian EFL teachers' beliefs about listening and instructional practices for listening comprehension and any variations in belief-practice relationships, with a questionnaire with 85 teachers and classroom observation of 12 teachers. The findings showed that:

(a) There is no significant difference between teachers with BA and MA degrees in their cognitions about listening and their cognition-driven practice. (b) The relationship between teachers' cognitions about listening instruction and their actual teaching practice is not significant. (c) Time constraint is the major obstacle that prevents teachers from actualizing fully their cognitions about listening into practice.

To address the lack of research on teachers' cognitions about EFL listening and instructional practices, my study investigated Chinese university teachers' cognitions about EFL listening and their classroom instructional practices, the relationships between their cognitions and practice, and probed into the factors that mediate the relationships.

2.4 SECOND LANGUAGE LISTENING INSTRUCTION

2.4.1 Defining Listening and EFL Listening

What is listening? It is a question difficult to answer because "listening is a transient and invisible process that cannot be observed directly" (Rost, 2011, p. 1). Based on their personal experiences and/or theoretical insights, both individuals and specialists have conceptualized their understanding of listening from different perspectives. Underwood (1989) defined listening simply as "the activity of paying attention to and trying to get meaning from something we hear" (p. 1). A useful and more extensive definition of listening was "an active and conscious process in which the listener constructs meaning by using cues from contextual information and from existing knowledge, while relying upon multiple strategic resources to fulfil the task requirement" (O'Malley, Chamot, & Küpper, 1989, p.19). To Mendelsohn (1994), listening comprehension is the ability to understand the spoken language of native speakers. Mendelsohn (1994) also points out that listening to spoken language requires such abilities as processing the linguistic forms like speech speed and fillers, understanding the whole message contained in the discourse, comprehending the message without understanding every word, recognizing different genres, and, above all, the ability to decipher the speaker's intention. Listeners must know how to process and judge the illocutionary force of an utterance; that is, what this string of sounds is intended to mean in a particular setting under a particular set of circumstances (Mendelsohn, 1994). Purdy (1997) defined listening as "the active and dynamic process of attending, perceiving, interpreting, remembering, and responding to the expressed (verbal and nonverbal), needs, concerns, and information offered by other human beings" (p. 8). Listening, therefore, is conceived of as "a bundle of related processes – recognitions of the sounds uttered by the speaker, perception of intonation

patterns showing information focus, interpretation of the relevance of what is being said to the current topic and so on" (Mendelsohn & Lynch, 2013, p. 190).

With technology and science developments, new recording and acoustic equipment have been invented and have had a considerable impact on perceptions and understanding of listening; ways of speaking and listening experiences in various cultural and social circumstances have diversified. The definition of listening has evolved from *receiving* what the speaker actually says to constructing and representing meaning, then to negotiating meaning with the speaker and responding, and creating meaning through involvement, imagination and empathy. This journey represents four orientations: Receptive orientation, constructive orientation, collaborative orientation and transformative orientation (Rost, 2011).

Rost (2011), after reviewing definitions of listening through last century from early 1900s, defined listening "in terms of overlapping types of processing: Neurological processing, linguistic processing, semantic processing, and pragmatic processing" (p. 9). According to Rost, the first step before defining listening is to differentiate hearing from listening since the two terms are often used interchangeably. First, hearing provides a physical basis for listening. As a basic physical system and neurological circuitry, hearing allows for the process from external stimuli to auditory perceptions, and offers people specific capacities for observation and monitoring of rhythms. Second, hearing differs from listening in the degree of intention. Intention refers to the recognitions of a distal source and the willingness to accept this source (Allwood, 2006). Consciousness and attention influence listening in the way that they direct people's intentions to the external world.

Hearing is neurological processing with a complex mechanism. First, sound reaches the ear and travels through the outer ear, down the ear canal, and causes the eardrum to vibrate. The vibrations of the eardrum go on through the middle ear (three small bones - malleus, incus, and stapes - surrounding a small opening in the skull - the oval window) and are transferred to the inner ear (the cochlea and the semi-circular canals). In the inner ear the sound is converted into electrical pulses and travel down the auditory nerve to the auditory cortex in the brain for deeper processing. Second, sound reaches the brain and is processed by the areas of the brain that are involved in processing listening mostly located in the left hemisphere of the brain: The left prefrontal cortex for processing information during speech comprehension, the left pars triangularis for syntactic processing, the left pars orbitalis for semantic processing of lexical items, the right pars orbitalis for semantic processing of discourse, the left superior temporal sulcus (STS) for phonetic processing of sounds, the right STS for processing prosody, the left plenum temporal for speech-motor interface, the primary auditory cortex for speech perception, the secondary auditory cortex for processing intonation and rhythm, the left superior temporal gyrus (STG) for semantic processing at the lexical level, and the right STG for semantic processing at the discoursal level.

Listening involves linguistic processing (Mendelsohn & Lynch, 2013). The listener, in order to perceive as much information from the speaker as possible, follows two principles of processing language: maximisation of recognitions (making maximum use of the available acoustic sound for information), and minimisation of categorisation (creating as few perceptual classes as possible). The same is true of EFL listening classroom instruction: Learners need to maximise their recognitions of information from

the listening materials in the limited time and minimise the types of information perceived. Further linguistic knowledge is needed to process information during listening procedure: Units of spoken language, prosodic features of speech, words recognition, phonotactic knowledge, syntactic parsing, and non-verbal cues.

Listening includes semantic processing and involves comprehension, inferencing, and memory formation. Comprehension, the primary goal of listening, or even the sole goal of listening in some people's perception, helps the listener construct concepts in his memory to form coherence and relevance with his real world experience. Comprehension cannot occur without cognitive understanding/map (the role of schemata) and social understanding/framework (the role of common ground). Inference is achieved by the listener through linkages within language, between language used and real experience in the outside world for the purpose of anticipation (the gap between given information and new information) and analysis of the discourse. Inferences are formed based on information input, problem-solving, reasoning, and the use of compensatory strategies. Memory during comprehension occurs through activating existing memory and forming new memory connections. The formation of memory involves short-term/working memory and long-term memory, the whole process of which has been illustrated in details in the previous part.

Listening can also be described from a pragmatic perspective. Besides linguistic decoding and semantic processing, pragmatic competence which includes pragmatic comprehension (Kasper, 2006; Taguchi, 2009), interactional competence (Hymes, 2001), and symbolic competence (Kramsch & Whiteside, 2008), is an integral component of listening as well. Describing listening from a pragmatic perspective

means perceiving a language interaction from the subjective point of view of the listener, that is, the listener's presence at the time of interaction and his level of engagement. During an EFL listening class, the student/listener is engaged neither as a participant (a person who participates in the language interaction with the speaking right too), nor a addressee (a person who is spoken directly to with limited rights to respond, as a student in a traditional classroom lecture), nor an overhearer (a person who is not being addressed and unexpected to give any response); instead, the student/listener is an auditor, a person among the audience being addressed who is not expected to give a response. Listening as pragmatic processing also encompasses inferring the speaker's intention, detecting deception, enriching speaker meaning, invoking social expectations, adjusting affective involvement, formulating responses, and connecting with the speaker.

2.4.2 Listening Models

In their book *Second Language Listening: Theory and Practice*, Flowerdew and Miller (2005) reviewed three widely known listening models that explain how adults process listening: The bottom-up model, the top-down model, and the interactive model. The bottom-up model had its time in the 1940s and 1950s. The listening process in this model is as follows: Listeners form their understanding of the listening materials from the smallest units of language – phonemes – all the way through words, phrases, clauses, and sentences; the listeners then combine these sentences to create ideas and concepts of the listening material. The top-down model was formed when researchers noticed that their participants could not identify smallest sounds isolated from words. They were fairly capable of recognizing the sounds when offered in certain contexts; as well as the sounds they hear, listeners were also relying on prior contextual knowledge. The knowledge of overall structure of the listening material made up and activated the

listener's understanding of the micro-level elements of the language. The interactive model proposed by Rumelhart (1975), in the context of the reading, also applies to listening. Rumelhart found that language at different levels is processed in a parallel way rather than a hierarchical fashion. This model combines bottom-up model and top-down model, making it possible for listeners to adjust to variation in language processing.

2.4.3 The Nature and Process of Second Language Listening Instruction

Vandergrift and Goh (2012) claimed that language learners lack guidance, based on principles, from teachers on how to plan and manage listening, and that it is essential that language teachers "have a clear understanding of the process involved in listening and in particular how strategies can be used to manage comprehension efforts" (Vandergrift & Goh, 2012, p. 4). Over the last 50 years or so, listening has become established in the language classroom with three types of listening instruction prevalent. They are text-oriented instruction, communication-oriented instruction, and learner-oriented instruction.

Text-oriented instruction, based on the traditional reading and writing pedagogy of the 1950s and 1960s (Brown, 1987), emphasizes decoding skills, imitation, memorization of sound and grammar patterns, to recognize and understand the components of the listening input. Learners have to understand the listening passage and answer following-up comprehension questions. The accuracy of comprehension, however, instead of the accuracy of their listening is tested. For example, learners are asked to select answers from those provided instead of writing out the answers. Vandergrift & Goh argue that text-oriented instruction has the tendency to test rather than teach listening in the

classroom (2012). Another characteristic of text-oriented listening instruction is that the traditional listening materials are written texts read aloud, which are not suitable for listening, making them more demanding for the learners because of the cognitive loads.

In the communication-oriented instruction, listening is perceived as a complex communicative skill like reading and writing. This form of instruction was influential in the 1970s when innovation in teaching began to flourish, and listening teachers began to replace the traditional written texts with real life up-to-date audio materials such as songs, movies, or recorded conversations. Communication-oriented instruction also has its challenges for learners, such as integrating the four language skills: Listening, speaking, reading, and writing. In classroom instruction where the integrated skills approach is adopted, listening is usually treated as supplementary to the other three language skills with insufficient support provided about how language learners should handle the listening process and organize the input.

In the late 1970s and 1980s, learner-oriented instruction developed and began to influence listening instruction. This strategy-based approach for listening instruction proposed by Chamot (1995) and Mendelsohn (1994; 1998) incorporates strategies which have cognitive and affective bases (O'Malley & Chamot, 1990). The use of cognitive strategies helps learners better understand the process of listening and improve their listening comprehension with aural input. However, the strategies are not always included in the listening lessons and strategy-use is more of an individual activity.

Each of the above three instructions for listening have their drawbacks, and a more comprehensive and holistic instruction is needed for listening. According to Vandergrift

and Goh (2012), the challenges of the three types of instruction "can be addressed by teaching within a metacognitive framework" (Vandergrift & Goh, 2012, p. 12). Metacognitive learning activities "should aim to deepen learner understanding of themselves as L2 listeners, raise greater awareness of the demands and processes of L2 listening, and teach learners how to manage their comprehension and learning" (Vandergrift & Goh, 2012, p. 12).

2.4.4 Factors Affecting ESL/EFL Listening Success

Identifying factors affecting ESL/EFL listening success has aroused researchers' interest as it appears that learners "have different levels of success in L2 listening ... through the same classroom learning experiences with the same teacher and the same curriculum" (Vandergrift & Goh, 2012, p. 57). Imhof and Janusik (2006) described the aural information processing and listening through a systems model of study processes (Biggs, 1999). It is an integrated system which contains factors in three stages of the listening process: Personal factors and context-related factors, listening processing, and listening results; personal factors and context-related factors affect listening success.

Personal factors are crucial to successful listening outcome at every level. There are two types of personal factors: Cognitive factors and affective ones. Cognitive factors include linguistic knowledge such as vocabulary, syntax, and discourse; pragmatic knowledge; prior knowledge; metacognitive knowledge; sound discrimination ability; working memory capacity; and first language (L1) listening ability. Affective factors include anxiety, self-efficacy, and motivation.

Listening context-related factors include informal real-life listening outside the classroom, formal real-life listening in the classroom, formal classroom listening practice, interactive listening, and listening assessment. Each of these listening contexts has its unique demands on the listening learner. For many language learners, the context-related factor is a formal classroom which places high cognitive and affective demands on learners.

According to Field (2010), second language listening instruction should be more individual. As listening is personal and internalized, and thus an individual activity, there is a tension between its personal nature and the whole-class teaching situation with teachers as the centre, managing the class as a whole. Three specific aspects of classroom listening need mentioning. First, teachers are the centre of the listening class; they are the people who "operate the button on the CD or cassette player, predict where problems are likely to occur, ask relevant questions, replay certain passages and decide how much time is spent on each breakdown of understanding" (Field, 2010, p. 38). Second, classroom listening can have an isolating effect on a group of listeners. The process of the listener's understanding is invisible and difficult to manage, let alone control. Third, listening is a real-time occurrence instead of under the management of the listener. The content, the speed of speech and other aspects about listening is decided by the speaker instead of the listener. Unlike in reading, the listener cannot go back to the place where he or she became stuck in listening. All these three factors can lead to the listener's anxiety and thus affect the successful outcome of listening.

2.4.5 Approaches to Second Language Listening

Teachers in the listening classroom adopt mainly three approaches in listening instruction: The comprehension approach (CA), the diagnostic approach, and the metacognitive approach (Field, 2010). As listening is a difficult skill to teach, being an invisible process, the approach selected for second language listening instruction is very crucial.

2.4.5.1 The comprehension approach

The underlying assumption of the comprehension approach is that "testing for understanding is the most appropriate form for the listening class to take" (Field, 2010, p. 26). Rarely questioned, this assumption is prevalent and the term "listening comprehension" is used to refer to most work on listening skills. The comprehension approach, however, has both weaknesses and advantages for listening learners.

The comprehension approach assumes that correct answers to questions prove evidence of understanding and achievement in listening as it "was carried over from the teaching of reading" (Field, 2010, p. 27). However, listening is very different from reading in both the form of the input and level of permanence of the text: The printed reading material offers the reader a standardized spelling system while in listening the learner gets utterances which may vary greatly from one speaker to another; reading in printed form offers the reader the possibility to trace back information recognitions while listening is transitory in nature and information unfolds in time which may bring about listener's anxiety.

The comprehension approach for listening emphasizes exposing listeners to more listening materials based on the assumption that more listening experiences will lead to greater listening competence. A problem with the comprehension approach, however, is that it does not develop the learner's competence in a systematic way since "learning is localized and may not extend to future listening experiences" (Field, 2010, p. 29). Another problem is that answering comprehension questions correctly does not always signify an understanding of the listening material because the learner may heavily rely on his or her "test-wise strategies" working out the answer from the wording of the questions. Thus answering questions is considered an inadequate way to judge a learner's listening competence. A further problem is that the comprehension approach makes the listening classroom a testing room with teachers at the centre of the listening activity. The communicative language teaching method however can turn the listening class into a forum for the learner's communicative practice of the second language.

The comprehension approach however has some advantages. First, the comprehension approach uses natural listening materials of L2 and provides the listener with opportunities to process, understand and respond to the recorded message. A second benefit of the comprehension approach is that it facilitates the listener to pass the listening exams, a matter of great concern to both teachers and the listener.

2.4.5.2 The diagnostic approach

On careful analysis, the comprehension approach is found to test instead of teach second language listening, emphasizing the product rather than the process of listening. The diagnostic approach, however, views listening more as a process than a product. The goal of the diagnostic approach is not for the teachers in the listening class to just get

correct answers to questions but also to explore how they arrived at the answers. Asking the listener to explain their choice of answer helps find out how the listener understands and processes the listening material.

Underwood (1989) proposes that a standard listening lesson will have three stages: Prelistening, listening, and post-listening. Listening teachers usually emphasize the first one in their practice, wishing to prepare their students adequately for the listening session. As a result, they may pre-teach more new words and their usage than are necessary for understanding; discussion of background knowledge may be too extensive anticipating much of content of the listening lesson. These pre-listening activities can take up the time needed for the listening stage, and for remedying the learner's problems in the post-listening stage. The diagnostic approach offers an alternative format for a listening lesson which shifts the emphasis to the "listening" and "post-listening" stages. Teachers note down problems that arise during listening, with field notes, video recordings, listener diaries, and verbal reports, and deal with them in the following lesson.

Listening involves decoding and meaning building. Decoding, the changing of information from one form to another, may give rise to problems during the listening process leading to gaps in vocabulary or grammar for the listener, and unfamiliarity with the listening material. Meaning building, i.e., the listener's understanding of the message heard based on his or her knowledge of the world, may be problematic because of the level of efficiency with which the listener handles information extracted from listening. The diagnostic solution to these problems lies in classifying the error types broadly, and providing remedial practice based on teachers' field notes on instances of breakdowns in listening and understanding (Field, 2010).

2.4.5.3 The metacognitive approach

Metacognitions is "our ability to think about our own thinking or 'cognition', and, by extension, to think about how we process information for a range of purposes and manage the way we do it" (Vandergrift & Goh, 2012, p. 83-84). The concept of metacognitions was first introduced into the language learning field by Wenden (1987). It is noted that "metacognition, conceptualized as a set of dynamic systems, has been recognized as an important area of academic and pedagogical inquiry in applied linguistics from both theoretical and practical perspectives" (L. J. Zhang, 2010a, p. 320). Learners of second language listening with metacognitive awareness develop the ability of self-appraisal and self-management through personal reflection using the executive functions of human cognitions respectively. Metacognitions contains metacognitive experience, metacognitive knowledge, and strategy use.

Metacognitive experience helps the listener improve his or her second language listening ability, as thinking and learning are accompanied by other "conscious cognitive and affective experiences" (Flavell, 1979, p. 906). Furthermore, Zhang and Zhang (2013) discuss thinking metacognitively and metacognitions in second language and foreign language learning, teaching and research. For example, when listeners encounter new words, they may be able to solve the problem by themselves through applying knowledge learned from a similar situation.

Metacognitive knowledge consists of person knowledge, task knowledge, and strategy knowledge. Person knowledge is the learner's self-concept of how he or she learns and his or her beliefs about cognitive and affective factors contributing to the success or

failure in learning (the learner's self-efficacy). In EFL listening, person knowledge includes self-concept and self-efficacy about listening, and knowledge about specific listening problems, their causes and possible solutions. Task knowledge is "the knowledge about the purpose, demands, and nature of learning tasks" (Vandergrift & Goh, 2012, p. 86). It includes the knowledge about how to process and complete a learning task. In the case of second language listening, task knowledge includes the mental, affective, and social processes involved in listening procedure, skills for completing listening tasks, factors that influence listening, and ways of improving listening. Strategy knowledge refers to the knowledge about which strategy, or strategies, can best achieve the completion of the learning task. In ESL/EFL learning, it includes the knowledge about effective listening strategies and the ability to identify and use general strategies to facilitate comprehension and manage the listening process, as well as specific strategies appropriate for specific types of listening tasks. It also includes knowing what ineffective strategies are.

The third component of metacognitions is strategy use. Strategy use is the application of specific strategies by the learner to achieve his or her goals in completing learning tasks. According to Zhang and Goh (2006), learners generally use strategies if they have sound strategic knowledge. The use of strategies in second language listening contributes to the learner controlling his or her thinking and learning, that is managing the listening process, to become a skilful second language listener. Graham and Macaro (2008) claim that good metacognitive application of appropriate strategies contributes to long-term listening success.

The metacognitive approach to listening instruction helps learners become aware of the listening process through developing metacognitive knowledge about self-perception as learners, the listening tasks, and the strategies that can be used. This approach also helps learners plan and regulate their listening process to become better learners of listening and to improve their listening proficiency.

In this section, three approaches to second language listening, that is, the comprehension approach, the diagnostic approach, and the metacognitive approach, were introduced and discussed. In illustrating these approaches, comparison was made between listening and reading, the listening process was explained, and different aspects of the approach were introduced.

2.4.6 Key Issues in Second Language Listening Instruction and a Pedagogical Model

Flowerdew (2005) elaborates on three key issues in teaching and testing listening: Developing listening skills through technology, the role of questions in the teaching of listening, and testing listening. Literature on these three issues is reviewed in the following sections.

2.4.6.1 Developing listening skills through technology

The rapid development of modern science and technology provides learners of the second language a variety of learning facilities to develop listening. Technology has led to dramatic changes and expansion of learning styles and use of strategies. Listening to the radio or audiotapes, listening in the language laboratory, listening by watching video

clips or computer-assisted language learning can promote second language listening acquisition in a range of ways.

Radio broadcasts provide the learner of listening continuous and convenient access to native speaker models in specially produced language programmes. Such opportunities for extensive practice in listening for information or entertainment also helps the learner develop good listening habits and skills. Audiotapes are the simplest and most widely used ways to provide the learner with opportunities for extensive listening practice for information, and for development of comprehension skills. Audiotapes are also used for intensive practice for detailed listening skills, such as listening for the gist or key words, listening for local details, listening to complete a classroom task, and so on. Nowadays although the cassette tape is replaced by compact discs or digital audio clips in the classroom teaching, its operational mechanism and function are unchanged.

The language laboratory has been prevalent in many schools and universities across the world since 1950s (Flowerdew & Miller, 2005). It provides appropriate conditions for the learner to practice audio-lingual skills by mechanical drills (repetition drills or substitution drills). Video viewing, usually a passive private activity, has been used interactively in the classroom. Teachers integrate videos into the lesson and encourage certain types of listening skills through the video watching by designing and organizing some pre-, while-, and post-viewing activities.

Computer-assisted language learning (CALL) develops from behaviourist CALL to communicative CALL and then to integrated CALL. The aim of integrated CALL is to "integrate various skills and also integrate technology fully into the language learning"

process" (Warschauer & Healey, 1998, p. 58). Behaviourist CALL engages students in repetitive language skills with reading and writing activities that can be completed on a computer. Communicative CALL focuses on the written texts with students engaging in language learning mainly through the use of forms. CALL provides the second language listening teachers with more opportunities to engage students in more activities for higher listening proficiency.

Recent development of wireless technology, and the prevalence of language learners owning digital devices, opens up new possibilities in the teaching and learning of EFL listening. Convenience in downloading applications from online shops, and an interactive model in learning has encouraged language learners to engage in, and practise, listening to learn a second language.

2.4.6.2 The role of questions in the teaching of listening

In classroom teaching, teachers ask questions for a number of reasons, the most common of which is to find out what students already know, identify gaps in their knowledge and understanding, scaffold the development of their understanding and close the gap between what they currently know and their learning goals. Aschner (1961) called the teacher *a professional question maker* and claimed that asking questions is a basic way to stimulate student thinking and learning. Gall (1970) separated questions used by teachers in regular classroom teaching from questions in textbooks and examinations, classified the questions by types, examined teachers' questioning practices and the effect of teachers' questions on student behaviours, and looked into programmes to change teachers' questioning behaviour. Browne & Keeley (2018) connect asking the right questions with bridging the gap between simply memorizing or blindly accepting

information and the greater challenge of critical analysis and synthesis. These studies described the boundaries of questioning in classroom teaching and emphasized its importance, but they did not connect questioning with language teaching, let alone specific curricular areas such as EFL listening in diversified contexts.

What types of questions to ask, when and how the questions are asked, and the way teachers evaluate students' response play a big part in classroom teaching of second language listening. Appropriate use of questions in EFL listening classroom teaching instead of testing helps develop the learner's extensive listening skills. A process approach instead of product approach should be adopted when using questions teaching listening in an EFL classroom. At the outset, teachers set the scene for the following listening materials, activating students to listen, and providing them with specific listening strategies for listening to different kinds of information. During the listening process, teachers organize comprehension-checking activities to help students monitor their comprehension of the text and to identify any problems that might arise. In this model, a process approach, the questions asked consist of display and referential questions, focused and open questions, the questions in pre-, while-, and post-listening stages, and the questions asked to individuals or the whole class.

2.4.6.3 Testing listening

What, and how, to test EFL listening has a pivotal place in the curriculum for a course on listening, and informs the approaches for EFL listening teaching. Testing of listening has evolved through three historical developments (Buck, 2001): The discrete-point approach, the integrative approach, and the communicative approach.

The discrete-point approach to listening testing focuses on "the identification of isolated items of the language" (Flowerdew & Miller, 2005, p. 198), including phonemic discrimination, paraphrase recognition, and response evaluation. The theoretical basis for this testing approach is that listening materials are like written texts and thus individual parts of the materials can be isolated and tested.

The integrative approach to listening testing avoids the weakness of the discrete-point approach by testing two or more items at once; it focuses more on the process instead of the product of listening. This approach mainly includes gap-filling, dictation, sentence repetition, statement evaluation, and translation. Criticism of this approach is that it tests at the sentence level of the listening text and does not encompass a higher level or a wider context.

The communicative approach to listening testing aims to assess listening in a wider communicative context. As Weir (1990) summarizes, the communicative approach to listening testing has the following main characteristics: The focus is on communicative performance rather than linguistic accuracy; tests replicate actual performance as closely as possible; and a series of tests are needed to ensure it is in accord with the communicative purpose.

The literature reviewed above on EFL listening has described research on listening in the classroom, for example, the research on behaviourism from the perspective of teachers and students respectively. There is a lack of research, however, on what influences and mediates EFL listening teachers' decisions made during the classroom instruction.

2.5 CHAPTER SUMMARY

This chapter introduced the theoretical framework that guided the data collection and analyses of the present study, and reviewed literature related to teacher cognition and EFL listening instruction. Vygotsky's theories of ZPD and meditation were introduced briefly. The genesis and ongoing development of teacher cognition research in general, and in relation to second language teaching especially EFL listening teaching specifically, was briefly synthesized. The concept of teacher cognition was introduced, and the factors that attributed to language teacher cognition within Borg's framework were examined: Schooling, professional coursework, and contextual factors such as classroom practice (S. Borg, 2015). The relationships between teacher cognition and practice were discussed, and the position of teacher cognition research within second language teacher education was described. This review of literature related to EFL listening instruction covered several topics including a definition of listening, listening models, the nature and process of listening instruction, factors affecting listening, and approaches to listening. The literature review suggests little intersection of teacher cognition and EFL listening instruction within Chinese university context influenced by Vygotsky's meditation and ZPD. My study has tried to address some of the gaps by investigating teacher cognition about EFL listening, its relationships to teaching practice in the classroom, and the factors that mediate the relationships.

The following chapter describes and justifies the research paradigm and design, the methodology and the associated procedures, including sampling, participants, and data collection and analysis, used to investigate the Chinese university teachers' cognitions

about and practice in EFL listening. The ethical issues addressed in my study are fully discussed.

CHAPTER 3 RESEARCH DESIGN AND

METHODOLOGY

3.1 INTRODUCTION

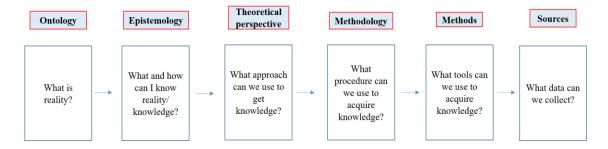
Before considering the research design and methodology, I repeatedly asked myself the following questions: What is research, what is quantitative and qualitative research, which research approach and design best suit the current study, and what are the specific methods and procedures for data collection and data analyses? Through seeking the answers, I learnt research is an abstract concept not easy to define. The definition of research obtained from online academic resources ranges from a simple "process to discover new knowledge" (Module 1: Introduction: What is research.2018) to a complex "creative and systematic work undertaken to increase the stock of knowledge, including knowledge of humans, culture and society, and the use of this stock of knowledge to devise new applications" (Organisation for Economic Co-operation and Development, 2015). From the offline resources, Mertens (2014) defined research as a systematic inquiry to describe, explain, predict and control an observed phenomenon. Creswell (2013) emphasized the philosophical worldview of the researcher in the initial stage of conducting research – preparing the research design.

With these ideas and principles about research in mind, my research design includes three major foci: The philosophical worldview, the choice of qualitative approach, and case studies in applied linguistics research. Following the research design, the research methods in details, including the sampling of the participants, the research instruments, the data collection methods and the data analysis procedures are described. The ethical considerations involved in the research process are also discussed.

3.2 RESEARCH PARADIGM

A research paradigm is "the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed" (Kuhn, 2012, p. 10). According to Guba (1990), the research paradigm is characterized through its ontology, epistemology, and methodology. Ontology is "the study of being" (Crotty, 1998, p. 10): Ontological assumptions involve "what constitutes reality" (Scotland, 2012, p. 9). Epistemology is related to "the nature and forms of knowledge" (Cohen, Manion, & Morrison, 2007, p. 7): Epistemological assumptions are related to "how knowledge can be created, acquired and communicated" (Scotland, 2012, p. 9). Methodology is the strategy of plan of action which underpins "the choice and use of particular methods" (Crotty, 1998, p. 3): It is "why, what, from where, when and how data is collected and analyzed" (Scotland, 2012, p. 9). Figure 3.1 below explains the elements of a research paradigm as well as their relationships:

Figure 3.1 Terms and Their Relationships in a Research Paradigm (Hay, 2002, p. 64)



As shown in Figure 3.1, the six components work in a linear relationship starting from ontology to the sources of data. The research paradigm components construct a holistic

view of how we perceive knowledge, and where we stand in relation to knowledge, and the methodological approaches we use to discover it. An awareness of a philosophical paradigm increases quality of research and contributes to the creativity of the present research. In the following sections, the constructivism as the philosophical worldview, the qualitative research approach, and the role of case studies in applied linguistic research is discussed.

3.2.1 Constructivism as the Philosophical Worldview

In the first step of planning the study, I needed to choose a philosophical worldview through which I perceived the real world and brought to the study. The research design was consistent with this worldview, and the specific research methods rendered the approach into actual practice. Consciously applying such conceptualizations to an ontological interrogation would naturally bring about the epistemological and methodological possibilities. Among the three major philosophical worldviews (positivism, constructivism, and pragmatism) (Crotty, 1998), constructivism is the most sympathetic to qualitative research. Table 3.1 provides an overview of each philosophical worldview.

Table 3.1 Differences Among Three Major Philosophical Worldviews (adapted from Crotty, 1998)

Philosophical worldviews	Positivism	Constructivism	Pragmatism
Ontology	There is a single reality or truth (more realist).	There is no single reality or truth. Reality is created by individuals in groups (less realist).	Reality is constantly renegotiated, debated, interpreted in light of its usefulness in new unpredictable situations.
Epistemology	Reality can be measured and hence the focus is on reliable and valid tools to obtain that.	Therefore, reality needs to be interpreted. It is used to discover the underlying meaning of events and activities.	The best method is one that solves problems. Finding out is the means, change is the underlying aim.
Theoretical perspective	Positivism Post-positivism	Interpretivism (reality needs to be interpreted), Phenomenology, Symbolic interactionism, Hermeneutics, Critical inquiry, Feminism	Deweyan pragmatism Research through design
Methodology	Experimental research Survey research	Ethnography, Grounded theory, Phenomenological research, Heuristic inquiry, Action research, Discourse analysis, Feminist, Standpoint research, etc.	Mixed method Design-based research Action research
Method	Usually quantitative, could include: Sampling, Measurement and scaling, Statistical analysis, Questionnaire, Focus group, Interview	Usually qualitative, could include: Qualitative interview, Observation, Participant, Non-participant, Case study, Life history, Narrative, Theme identification, etc.	Combination of any of the above and more, such as data mining expert preview, usability testing, physical prototype

The ideas of constructivism were first put forward by Mannheim and are found in works such as Berger and Luckmann's (1991) *The Social Construction of Reality* and Lincoln and Guba's (1985) *Naturalistic Inquiry*. Recent writers, among others, who have contributed to theoretical development of constructivism are Crotty (1998), Lincoln and colleagues (2011), and Mertens (2014).

Within constructivism, reality, is constructed by individuals interrelating with their cultural and social world: They seek understanding and perceptions of the real world where they live and work, and develop subjective understanding from their experience. Qualitative researchers are interested in understanding the meanings people construct (Merriam, 1998); qualitative research "implies a direct concern with experience as it is 'lived' or 'felt' or 'undergone'" (Sherman & Webb, 1988, p. 7). In qualitative research, the questions can be broad and often general and participants can construct their understanding and meaning of a situation. These subjective meanings are often negotiated socially and historically. When listening carefully to the participants about what they do or say in their real life, I can find underlying answers and insights into their perceptions if the questions are open-ended. I am aware that my background shapes my interpretation of the world, and I acknowledge my interpretation of my research flows from my personal, cultural, and historical experience. My intent is to make sense of (or interpret) the interpretations others have about the world.

Crotty (1998) identified several assumptions in discussing constructivism: (a) Since people construct meanings from the world they are in, qualitative researchers tend to use open-ended questions to elicit views from the participants. (b) People engage with the world and understand it from their historical, cultural and social perspectives.

Therefore, qualitative researchers tend to understand the context of the participants through personally visiting this context and gathering information, and interpret the information through their own experience. (c) Meaning, generated basically through social settings, arises from interactions within a human community. Qualitative research, therefore, is largely inductive — the inquirers interpret the data collected in the field.

3.2.2 Qualitative Research Approach

Quantitative and qualitative research methods are the two major approaches that researchers use in social studies. Quantitative research can be defined as research to explain, or investigate, phenomena based on numerical data, which is analysed with mathematical methods using statistics. It can be defined as empirical research consisting of variables measured with numbers to test if a theory explains or predicts phenomena of interest in social studies (Creswell, 1994; Gay, Mills, & Airasian, 2012). Qualitative research is not easy to define due to its "multifaceted nature" (Hitchcock & Hughes, 1995, p. 26). Working definitions of qualitative research by researchers include Corbin and Strauss (2014), who state, "By the term 'qualitative research' we mean any type of research that produces findings not arrived at by statistical procedures or other means of quantification" (pp. 10-11); and Gay and Airasian (2012), who define qualitative research as "the collection of extensive data on many variables over an extended period of time, in a naturalistic setting, in order to gain insights not possible using other types of research" (p. 627). However, both these definitions of qualitative research are simplistic and do not cover all aspects of the qualitative research design. A more comprehensive definition of qualitative research is that of Yilmaz (2013), who described qualitative research as "an emergent, inductive, interpretive and naturalistic approach to the study of people, cases, phenomena, social situations and processes in their natural

settings in order to reveal in descriptive terms the meanings that people attach to their experiences of the world" (p. 312).

In discussing the differences between quantitative and qualitative research methods, Yilmaz (2013) puts forward four essential elements of the research process to be covered: Epistemology, theoretical perspectives, methodology, and methods. To illustrate, as Denzin and Lincoln (1998) suggested, the four basic factors help form the structure of a research study: The philosophical worldview on which the study is based on, the research object, the research strategies, and the research methods used to collect and analyse data.

The epistemology of quantitative research is that it is based on an objectivist and positivist viewpoint, which believes that reality can be observed and measured quantitatively, usually using statistical tests. The emphasis is put on measuring and analysing the causal relationships between variables based on a priori theory. Quantitative research holds that the psychological and social phenomena are independent from the subjects to be studied, with both the researcher and the subjects independent. In contrast, qualitative research is based on the epistemology of constructivism and employs a descriptive, context sensitive, and flexible framework to study the socially constructed dynamic reality. In qualitative research the researcher and the subjects are closely connected.

The theoretical and methodological differences between quantitative and qualitative research approaches, based on Glesne and Peshkin (1992), and Lincoln and Guba (1985), can be summarized as follows. In quantitative research, the assumptions are as follows:

(a) Reality is single, tangible, and fragmented; social facts have an objective reality. (b) Researchers and subjects are independent. (c) Methods play a significant role. (d) Variables can be identified and their relationships can be measured. (e) Inquiry is objective and value-free. The purposes are generalizability, prediction, and causal relationships. Approaches include beginning with hypotheses and theories, manipulation and control, using formal and structured instruments, experimentation and intervention, deductive analysis of variables, seeking consensus or the norm, reducing data to numerical indices, and abstracting language in the write-up. The researcher's role is detached and impartial, objectively portrayed, and has an etic stance (the researcher being an outsider).

For qualitative research, the assumptions are that: (a) Reality is socially constructed. (b) Researchers and subjects are interactive and inseparable. (c) Subject matter plays a significant role. (d) Variables are complex, interwoven, and difficult to measure. And (e) inquiry is subjective and value-bound. The purposes are contextualisation, interpretation, and understanding of participants' perspectives. Approaches include working towards a grounded theory with the researcher as an instrument, naturalistic or non-intervention contexts, inductive analysis searching for patterns, limited use of numerical indices, and a descriptive write-up. The researcher's role is characterized by personal involvement and partiality, empathic understanding, and emic stance (the researcher being an insider).

Quantitative research requires pre-constructed standardised instruments to collect data, into which the participants' various responses are supposed to fit, such as questionnaires, surveys, and other instruments involving numbers. In analysing data, the researcher uses

mathematical models and statistics, and the findings are reported in impersonal, thirdperson text using numbers. The method has an advantage in that it allows the responses
of many participants to be measured within a pre-structured set of questions, which
enables statistical comparison and synthesis of the data. The main drawback of this
method is that, using a deductive approach it does not let participants use their words
about their experiences, feelings, and thoughts; it fails to include in the findings insights
into the participants' individual or personal experiences. The outcomes of quantitative
research put more emphasis on generalization, prediction, and cause-effect relationships
with the researcher taking an etic (outsider) role.

In contrast, qualitative research is more concerned with process, context, interpretation, and understanding via inductive reasoning. Observations, interviews, document analysis, and focus groups with open-ended questions are the major methods to collect data by listening to participants telling their own experience and reflection. The data enable the researcher to describe and gain insights into the social phenomena. In analysing and interpreting data, qualitative researchers construct patterns, themes or categories from the data collected by organizing them into a more abstract form of information. In presenting or reporting research findings, qualitative researchers use first-person narratives in more than one form such as matrices, comparison tables, diagrams (Creswell, 2014) with the researcher being emic (insider) (Denzin & Lincoln, 1998; Miles & Huberman, 1994).

Dörnyei (2007) illustrates the differences between quantitative research and qualitative research by describing six qualitative-quantitative distinctions: Ideological differences, contrasting categorizing/coding practice, different approaches to individual diversity,

statistics versus researcher sensitivity, the qualitative-quantitative contrast and the "paradigm war", and three positions regarding the qualitative-quantitative difference: Pursuit, situationalist, and pragmatist.

In education research field, qualitative research is frequently employed because of its unique characteristics. According to Merriam (1998), there are five characteristics: (a) In qualitative research, the understanding of related phenomenon is gained from the participants' perspective instead of the researcher's. This is often described as an *emic*, or insider's perspective. (b) The researcher plays an essential role in collecting and analysing data. Data, the participants' understanding of the world in which they live and work, are processed and mediated through the researcher, a human instrument, instead of some inanimate inventory such as computer programmes. During data collection and analysis, the researcher is responsive to the whole context and may adapt techniques to fit emerging circumstances (Merriam, 1988). (c) Fieldwork is usually involved in qualitative research. The researcher needs to go to the field or institution, setting, or site to watch or record what the people do in a natural context; at times only documents analysis is involved in qualitative study. (d) An inductive research strategy is employed primarily in qualitative research. In other words, instead of testing existing theories, qualitative research tends to construct or derive theories, hypotheses, or concepts from the data collected and analysed. When qualitative research is adopted, there is often no ready theory or hypotheses to guide the field investigation. (e) The product of qualitative research is typically descriptive because the research emphasises understanding, perception, and meaning constructed from the participants and the data collection process.

Dörnyei (2007) also discussed the main characteristics of qualitative research identifying six aspects: (a) Its emergent nature. Qualitative research is fluid, flexible and open to new details from the change of literature to research questions and research focus. (b) The nature of qualitative data. Data collected in qualitative research can take many forms from various kinds of texts (documents, diary entries, field notes, etc.), images, to video clips of interview or observation; all the data are transcribed into textual form. (c) The characteristics of the research setting. Qualitative research is done in a natural setting without being manipulated as the objective of the study is to describe and record social phenomena happening naturally. (d) Insider meaning. Qualitative research involves participants' opinions, understandings, and perceptions of the situation being studied, so the qualitative researcher must understand the social phenomena from the participants' viewpoint, that is, the insider perspective. (e) Small sample size. Wellprepared and all-rounded qualitative research is very time and energy-consuming and, therefore, often involves a small sample size. (f) Interpretive analysis. Products of qualitative research are the researcher's subjective interpretation and understanding of the data collected from the investigation. Creswell (2014) also similarly describes the main features of qualitative research. Although the characteristics are expressed differently, there are some features in common about the nature of qualitative research such as the researcher's role and the nature of data.

Compared with quantitative research, qualitative research is more suitable for the present research due to its characteristics. The present research intended to gain insights into, and understand, how Chinese university teachers think about EFL listening, and to what extent their cognitions influences their practice during classroom pedagogical instruction. It also investigated what factors influence the outcome if a mismatch

between their cognitions about and practice in listening instruction was apparent. Qualitative research was selected for the present research because of its strength in the following seven aspects (Dörnyei, 2007): (a) Exploratory nature. Qualitative research is accepted as a means to explore new and uncharted fields. Due to little literature on Chinese university EFL teachers' cognitions about listening instruction, an in-depth study of a few cases can help find what is going on in their minds; (b) Making sense of complexity. Qualitative research can help me understand and analyse a complex phenomenon. As data are collected from a complex social phenomenon, the participants' sensitivity helps in deciding what to attend to during the process of data analysis. (c) Answering 'why' questions. Qualitative research is more effective for an in-depth as it is flexible and emergent. (d) Broadening our understanding. Qualitative research does not seek "correct interpretations" of human experience; instead, it finds a series of 'possible interpretations' which can enhance the breadth and depth of our understanding of data collected from a social phenomenon. (e) Longitudinal examination of dynamic phenomena. Qualitative research is a better choice for a dynamic process, such as the study of applied linguistics, because it explores and records changes in the process. (f) Flexibility when things go wrong. Research in the education field involves many uncontrollable elements which may render the research meaningless. Qualitative research, which is flexible and emergent in nature, allows for changes within the framework. (g) Rich materials for the research report. Using words and illustrations, qualitative research is more suitable to reflect the months' hard work and to produce vivid and convincing accounts for the audience.

3.2.3 Case Studies in Applied Linguistics Research

My study used case studies as a research method. The following subsections provide an overview of case studies to justify their suitability for my research based on their strengths and weaknesses. Case studies are first defined and categorised.

3.2.3.1 Definition and types of case studies

Case studies have been used in the field of educational research for more than forty years and have included case studies of students and teachers to case studies of training programs and policies. Case studies have been employed to construct deep insights and understanding of a process or a situation. They are concerned with a holistic context instead of a specific variable, with a process instead of a product, and with explanatory or exploratory findings instead of confirmatory studies with a pre-assumed hypothesis (Yin, 1994). Case studies are frequently preferred by researchers when they want to find answers to "how" or "why" questions, have little control over the investigating process, and when the focus is on existing and real-life social phenomena (Yin, 2003).

Definitions of case studies vary from researcher to researcher as case studies can be viewed from different perspectives. Some researchers view case studies as a research process. For example, Yin (1994) defines a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 13). Some researchers view case studies as a product of fieldwork. In Merriam's (1988) first edition of *Qualitative Research and Case Study Applications in Education*, a case study was defined as "an intensive, holistic description and analysis of a single instance, phenomenon, or social unit" (p. 21). Other researchers, such as Smith and Stake, focus

on the object of the study - the case. From their perspective, a case should be a "bounded system" (L. M. Smith, 1978) or an "integrated system" (Stake, 1995). So a case can be a person, a programme, a policy, and so on. Creswell (1998) defines a case study as "an exploration of a 'bounded system' or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in context" (p. 61). Definitions of case studies described above identify that there is something in common about the nature of the case study and help to justify my decision to use case studies in the design of this research.

Case studies in education can be sorted into categories or types based on various criteria (Merriam, 1998). From the perspective of disciplinary orientations, there are ethnographic case studies, historical case studies, psychological case studies, and sociological case studies. From the perspective of overall intent, case studies can be divided into descriptive case studies, interpretive case studies, and evaluative case studies. According to Stake (1995; 2013), there are three types of case studies: (a) The "intrinsic case study", which focuses on a particular case for the reason that the case is interesting, valuable or special in its nature rather than being representative of other cases. (b) The "instrumental case study", which is used as an instrument to get understanding of a wider range of cases; with the case in study being of less interest. (c) The "multiple or collective case study". In this type of case study, a couple of cases are studied jointly, rather than one case in particular, to gain insights into a general condition or phenomenon.

3.2.3.2 Strengths of case studies

When conducting qualitative research and answering the research questions, the case study is always the best plan (Merriam, 1998). A case study is the best choice of research method to study a social and cultural phenomenon such as an aspect of education and applied linguistics. It can provide plentiful data that is in-depth and comprehensive. In my research, using case studies can expand and enrich my, and the readers', understanding and insights of the phenomena.

Case studies are also appropriate to develop knowledge in a certain field as insights and understanding from study can elicit further hypotheses in the field for future research. Case studies are especially useful for research on educational innovations, on evaluating programme, and on education policy amendments. For example, Collins and Noblit (1978) identified the advantage of case studies (referred to as *field studies* in their words) for policy amendment:

Field research better captures situations and settings which are more amenable to policy and program intervention than are accumulated individual attributes. Second, field studies reveal not static attributes but understanding of humans as they engage in action and interaction within the contexts of situations and settings. Thus inferences concerning human behaviour are less abstract than in many quantitative studies, and one can better understand how an intervention may affect behaviour in a situation ... Field studies are better able to access social change than more positive designs, and change is often what policy is addressing (p. 26).

Case studies are suitable for my research because they offer in-depth explanation of social behaviour within an educational context. Specifically, there are three reasons. First, the collection and examination of the data is frequently conducted within the context of its use (Yin, 1994). In other words, the data are collected within the situation in which the activity takes place. Second, variations in terms of intrinsic, instrumental and collective approaches to case studies allow for in-depth qualitative analysis of the data. Third, the data, in the form of qualitative accounts in my research, not only help explore teachers' cognitions and their instructional practices in real-life environments, but also explain their complexities which cannot be captured through experimental research.

3.3 RESEARCH DESIGN

The following section describes the research design including how the participants were selected, participants, and the methods of data collection and data analysis.

3.3.1 Purposive/Purposeful Sampling

The design of qualitative research needs to be open and flexible o get as much as possible information from the social and cultural phenomenon or human experience under investigation. The focus of qualitative research is to understand, describe and clarify the information obtained instead of erasing individual differences as in quantitative research (Dörnyei, 2007). Unlike quantitative research, qualitative research aims to show idiosyncratic experiences of individuals rather than the representativeness of the sample of the research population. (Polkinghorne, 2005). Thus sampling in qualitative research can be best achieved by purposive sampling to identify participants who can offer varied and rich understanding of the case. Selection of the sample of

participants affects the quality of qualitative research profoundly, however, sampling procedures in qualitative research, compared with those in quantitative studies which are prescribed rigidly, are so flexible that confusions and mistakes from qualitative researchers frequently occur (Dörnyei, 2007).

Morse (1991) describes four types of sampling in qualitative research: The purposeful sample, the nominated sample, the volunteer sample, and the sample consisting of the total population. Patton (1990) claims that sampling in qualitative research, regardless of its type, is "purposeful" by stating: "qualitative inquiry typically focuses in depth on relatively small samples, even single cases, selected purposefully" (p. 169). Sandelowski's (1995) perception of sampling in qualitative research is consistent with Patton's in that purposeful sampling covers all types of sampling in qualitative research. Patton (1990) describes 15 purposeful sampling strategies including maximum variation sampling, homogeneous samples, typical case sampling, snowball or chain sampling, and convenience sampling.

Several issues should be taken into consideration when the purposive/purposeful sampling plan is used in the research design, including feasibility, iteration, and saturation issues. Feasibility issues include time, money, site, and participant availability. Iteration in sampling, the back and forth process between data collection and data analysis, requires that the selection of participants should be open until the end of the research so that more participants can enter and offer their accounts (Dörnyei, 2007). Glaser and Strauss (1967) define saturation in sampling as the point of the process when extra data appears to be redundant as its repeats what previous informants have already contributed.

Dörnyei (2007) argues that three main sampling strategies can help quickly achieve saturation in sampling: (a) In *homogeneous sampling*, participants from a certain subgroup, with the same experience related to the study, are chosen so that an in-depth analysis can be carried out to find out similar patterns in a group. (b) In *typical sampling*, participants are selected whose typical experiences are related to the research focus. Under this circumstance, typical characteristics of related experiences can be identified although generalization is not possible as participants do not share the same experience. (c) In *criterion sampling*, participants are selected when they meet some pre-set criteria.

Purposive/purposeful sampling was adopted based on these previous three strategies, in my research on Chinese university teachers' cognitions about EFL listening and their instructional practices. Five EFL teachers of listening were selected based on their experience in teaching EFL listening to the English majors in a Chinese university which is located in northern China. The EFL listening teachers in this university differ from one another in many aspects, and thus have distinct beliefs about EFL listening instruction. They are in different age groups, have taught for differing lengths of time, and so have different life experiences and experiences of teaching listening in EFL contexts. Their gender and educational backgrounds may influence their understandings of EFL teaching. For example, some participants graduated from teacher's college with Bachelor's Degree in English Education; others graduated from non-teacher college with no background in education related to teaching. In addition, as well as being EFL listening teachers, they have different part-time jobs as translators, interpreters, foreign affairs officers and so on, and will have their own experiences and insights into EFL listening learning and teaching. Travel to English-speaking countries such as Britain,

America, and Australia, for study or leisure, also may have impacted on their understanding of EFL listening.

3.3.2 Participants

The participants in the research were five Chinese EFL listening teachers from a major university in northern China chosen through purposive sampling. The sample, although small, provided rich information related to their cognitions about EFL listening within the educational context.

The five participating teachers selected from the EFL listening teachers in the Chinese university were invited to participate in my research voluntarily. Apart from the principle of voluntariness, teachers were also chosen according to the following criteria:

Table 3.2 Criteria for Choosing Participants

Criteria	Reason(s)
They must have been teaching EFL	They can systematically arrange and
listening to English majors for one	share their cognitions about their
semester.	classroom pedagogical instructions with
	me.
They represent a range of EFL listening	They are at different ages, with different
teachers' characteristics.	educational background and work
	experiences, and having different
	teaching styles.

The procedures of recruiting the participants were as follows. First, the College Dean's permission and cooperation were sought for conducting this project. I then contacted the Administrative Secretary of the College to arrange for the distribution of the information about my research among the teaching staff in the college. The Secretary circulated the advertisement for recruiting participants via email among the teaching staff. Teachers who saw the advertisement and were willing to participate in this research found printed

copies of *Participant Information Sheet* (PIS) and *Consent Form* (CF) in the Secretary's office and signed them. With the Dean's permission, I set up a box for teachers to drop in their signed forms near the Secretary's office. The Secretary returned and collected the signed forms after one to two weeks. The Secretary was asked to assign a code to each name of teachers who had agreed to take part in the research. From these I chose five participants for the case study based on the principles of purposeful sampling. Then I contacted the five teachers directly and talked with them about the details of the research.

3.3.3 Data Collection

The data were collected over the academic semester from September 2015 to January 2016. The data collection consisted of two major phases and one supplementary stage. In Phase One (the first week of the semester) pre-observation interviews were conducted with each participant, which provided a holistic overview about the participating teachers' cognitions about EFL listening. In Phase Two (the 2nd – 16th week of the semester), classroom observation and post-observation interviews were held in an integrated way. The purpose of Phase Two was to observe and record the teachers' EFL listening instruction in the classroom and probe further into their mental lives that shaped their pedagogical decision-making. Post-observation interviews also sought explanations for the consistency or inconsistency between their cognitions and practice. The data collected in these two phases were summarized briefly and were found insufficient. The subsequent interviews were held with participants, to supplement the data, after the two major phases.

The data in my research were collected through two main instruments: Interviews and observation. The interviews included pre-observation interviews, post-observation interviews, and supplementary interviews with the participating teachers. The pre-observation interviews were in-depth, semi-structured qualitative interviews which took about one hour for each teacher participant. The post-observation interviews were the stimulated recall interviews with the participating teachers about their account of their decision making during classroom teaching. The supplementary interviews were similar to the pre-observational interviews in form and structure. The observation of teachers' instructional practices of EFL listening happened during classroom teaching process with teachers' voice recorded for later data transcription and analysis. Details about the data collection procedures regarding interviews and observation are presented in the following section.

3.3.3.1 Interviews

Interviews are used frequently in educational research because they are an in-depth instrument to gather information about the understanding of cognitions and behaviours of teachers and students. According to Dörnyei (2007), there are four main types of interviews: (a) Single or multiple sessions. As a one-off interview is insufficient to elicit data with depth and profoundness, Polkinghorne (2005), based on Seidman's work, recommended a series of three interviews. The first interview is for introducing the topic and getting acquainted with the participant, the second interview is more focused on the research area as both the interviewer and the interviewee have had time to be prepared and think more deeply about their experiences, and the third interview allows for follow-up questions to conclude the interview. (b) Structured interviews are tightly controlled for which the interviewer prepares a list of questions for the interviewees as in a

questionnaire. The advantage of the structured interviews is that the interviewees focus on a well-defined research topic and the data collected are comparable among different interviewees. A disadvantage is that, with a standardized format, the structured interview does not allow for variations on the interviewee's part. (c) Unstructured interviews, at the other extreme to structured interviews, allow most freedom and flexibility for the interviewees to elaborate on the research topic. The interviewer does not prepare a detailed list of questions but asks a few opening questions. The atmosphere is relaxing for the interviewee to provide more information than in a formal environment. A drawback is the unpredictability of the direction in which the interview might go. (d) Semi-structured interviews, for which the interviewer prepares some open-ended guiding questions to direct the interview, and the interviewee is encouraged to give detailed responses related to the questions of the research topic. This kind of interview is most frequently used in the educational research area since it avoids the disadvantages of both structured interviews and unstructured interviews. That is why my research employed semi-structured interviews to elicit data from teacher participants about their cognitions about EFL listening.

An interview protocol is needed to guide the interview. Creswell (2014) describes one which includes seven parts: (a) A heading, which records the basic information about the interview such as the date, place, interviewer, and interviewee. (b) Interview instructions for the interviewer to ensure the steps of the interview proceed appropriately. (c) The questions, which includes ice-breaker questions at the outset, four to five research questions for the research, and a concluding question or statement. (d) Probes that can be used with the four to five research questions, by asking the interviewees about to expand on their responses to the questions. (e) Spaces between every two

questions to record responses from the interviewees. (f) A statement, which expresses gratitude to the interviewees for their cooperation and time spent; and (g) a log kept to record documents for analysis.

In my research, there were two major sessions of interviews in the 16-week semester from September 2015 to January 2016: Pre-observation interviews (or initial interviews), and post-observation interviews (or follow-up interviews) and one subsequent session of supplementary interviews. The pre-observation interviews, which took about one hour, were held once with each of the five EFL listening teacher participants with me as the interviewer in the place chosen by the participants. Languages used in the interviews included both English and Chinese as preferred by the participating teachers. In the interviews, teachers were asked questions about their individual cognition, including beliefs and subject matter knowledge about EFL listening and their ways of EFL listening instructions based on their teaching experience. The teachers' voices were audio-recorded and transcribed by me. After the pre-observation interviews, I immediately transcribed and analysed the data to identify the research areas on which to focus on during the following classroom observation. Questions for the pre-observation interviews were the same for every teacher participant (See *Appendix H*).

The post-observation interviews took an average of 15 minutes each. They were held with each teacher on a one-to-one basis after the classroom observation using stimulated recalls with data in the form of audio-recordings and written field notes. Teachers were asked what was on their mind that affected their decision-making during classroom instructional activities under observation. They were also asked about what they thought might have led to a match, or mismatch, between their cognition, as stated in pre-

observation interviews, and their actual pedagogical practice when observed. Questions in the post-observation interviews differed for each teacher participant as they were based on the teachers' individual instructional practices. Both pre-observation interviews and post-observation interviews were audio-recorded with a digital voice recorder.

The supplementary interviews, each in a similar form and structure to the preobservation interviews, took about 40 minutes. The teachers were asked questions that they neglected or failed to elaborate deeply in the pre-observation interviews and postobservation interviews. Further information on the teachers' cognitions about EFL listening was elicited to form a complete picture of each participant's cognition.

3.3.3.2 Classroom observation

Borg (2003) stated that language teacher cognition cannot be usefully studied without classroom observations of teachers' actual pedagogical instructions. Borg (2015) also summarizes nine dimensions which help construct the classroom observation of language teachers' actual instructional practices: (a) Participation -- the degree to which the researcher participates in the classroom instructions under observation, by which dimension observation can be participant or non-participant; (b) awareness -- the degree to which the participants know they are being observed and by whom, by which dimension observation can be overt or cover; (c) authenticity -- the degree to which the classroom activities under observation are naturally occurring, by which dimension observation can be real or contrived; (d) disclosure -- the degree to which the observational objectives are explained to those people under observation, by which dimension observation can be full or minimal; (e) recording -- the manner in which

observation is recorded, by which dimension observation can be manual or technological; (f) structure -- the degree to which the data collected through observation accord with pre-determined categories, by which dimension observation can be closed or open; (g) coding -- the way in which the data are coded in the knowledge system, by which dimension observation can be deductive or inductive; (h) analysis -- the degree to which quantification is used in the data analysis process, by which dimension observation can be quantitative or qualitative; and (i) scope -- the degree to which people, activities and times under observation, by which dimension observation can be limited or extended.

According to these nine dimensions, the classroom observation in my research was non-participant, overt, real, full, manual and technological, open, inductive, qualitative, and extended. During the 2nd to 16th week in the semester in 2015, the instructional practices of each of the five EFL listening teachers was observed. I, as a non-participant, sat at the back of the classroom, taking notes and audio-taping the instructional practices of teachers without interaction or interruption. Before the observation, teachers and students in the classroom were told of the observation. The instructional practices under observation occurred naturally without any pre-arranged elements, with the teachers and students told of the objectives for the observation before it started. A checklist for the observation was reviewed during the process; the observation was recorded both manually and technologically; that is, both field notes and audio-taping were obtained.

3.3.4 Data Analysis

The goal of qualitative data analysis is "to discover variation, portray shades of meaning, and examine complexity" (Rubin & Rubin, 2011, p. 202). The analysis of qualitative

data is governed by four main principles (Dörnyei, 2007): (a) Qualitative data analysis is a language-based analysis because of the textual form of the qualitative data after transformation. (b) Qualitative data analysis is an iterative process. It differs from linear quantitative data analysis; it is nonlinear in that the emergent nature of qualitative research gives rise to the researcher moving to and fro between data collection and data analysis. (c) Choices must be made during the qualitative data analysis process between two diametrically different analytical approaches, subjective intuition and formalization, to let new results arise. (d) The choice is to be made between the use of a specific methodology or a general and generic analytical practice to find a pattern through analysing the qualitative data.

There are five major types of qualitative data analysis (Dörnyei, 2007): Content analysis, narrative analysis, discourse analysis, framework analysis, and grounded theory. Content analysis, which was used in my research, is originally an analytical method of quantitative research for written texts, and comes to qualitative research as qualitative data also takes a textual form after transformation. Qualitative content analysis can be divided into four phases: (a) Transcribing the data; (b) pre-coding and coding; (c) growing ideas; and (d) interpreting the data and drawing conclusions.

Software programmes for the Computer-aided qualitative data analysis (CAQDAS) can be employed in the qualitative data analysis process. These include NUD, NVivo, The Ethnograph, Atlas.ti, winMAX, Qualrus, QDA Miner, and HyperRESEARCH (Dörnyei, 2007). These CAQDAS software programmes offer qualitative data analysts the speed of handling large volumes of data, almost unlimited storage capacity and easy indexing options, more sensitive second-level coding, potential for new analytical strategies,

improvement of rigour, easy generation of an audit trail, and increased legitimacy of qualitative research (Dörnyei, 2007). The software used in the data analysis of my research was NVivo 11 Pro, which will be described in *Chapter 4 Data Processing and Findings (1)*.

The data analysis procedures for my research began immediately after the preobservation interviews and continued after each observation and post-observation interviews. Audio- data collected from interviews and classroom observations were transcribed and processed. In addition, field notes taken from each classroom observation were typed, read, and summarized by me, the researcher. Data collected through pre-observation interviews and post-observation interviews were analysed through thematic analysis. The findings from the interviews contributed to answering the first and the fourth research questions. The data illustrated the participating Chinese university teachers' cognitions about EFL listening instruction in the classroom, and identified the factors they think mediate the relationships between their cognitions about EFL listening and their instructional practices. The data from the classroom observation were analysed through content analysis; the findings contributed to answering the second and the third research questions. The data described the participating teachers' instructional practices in the classroom and exemplified the extent to which their cognitions was consistent with their instructional practices. A brief description of the data analysis in my research is presented in the following six steps. A fuller account of the data processing is presented in the following chapter.

Step 1 was organizing and preparing the data for analysis. The recordings of preobservation interviews and post-observation interviews were transcribed, the field notes taken during classroom observations were tidied up, and the data were grouped, tentatively, according to the different sources. Step 2 was reading all the data and forming an initial idea of the depth and usefulness of the data from various sources. Step 3 was analysing the data in a detailed way using a coding process, i.e., categorizing the data according to emerging themes such as the learning objectives of students in the EFL listening class, teachers' main instructional methods, teachers' role in the classroom teaching, ways to lower the difficulty level of listening materials, and their attitudes towards after-class homework, etc. Step 4 was generating the detailed description of the setting and the participants according to the themes mentioned above. Step 5 was enhancing the description with subthemes and specific illustrations from different perspectives. Step 6 required interpreting the meaning of the data in accordance with my personal understanding of the project about the EFL listening instructional practices and the literature reviewed.

3.4 ETHICAL ISSUES

Consideration of the ethics of the research is essential during all steps and processes of research. The design and implementation of my research followed the ethical criteria of the University of Auckland, and it was submitted to and approved by The University of Auckland Human Participants Ethics Committee (UAHPEC). Four major ethical issues relevant of this research are reported here: Informed consent, voluntary participation, data management, and anonymity and confidentiality.

Informed consent

An advertisement was distributed to attract the interest of the potential participants. In the advertisement, the criteria for choosing participants, ways to get in touch with me if

interested, an overview of the research procedures, participants' involvement, and what was expected of their time and engagement were stated clearly. When they contacted me and expressed their interest, the written form of a PIS was given to them. This included the purpose of the research, the research procedures, participants' involvement, and the use and the security of the data collected from their cases. Based on the information provided, they could then decide whether or not to participate in the research; if they decided to participate, they were required to sign their names on the CF.

Voluntary participation

The EFL listening teachers participated in the research on a voluntary basis; they were informed that, during the research procedures, they were entitled to withdraw at any time, or request the return or deletion of any data provided by them, at any time without having to give a reason; they had the right not to answer any specific question(s) in the interviews and have the audio-recorder turned off at any stage of the interviews. The Dean was required to give an assurance that teachers' participation or withdrawal did not affect their careers, full employment, or employment evaluation at any level.

Data management

The hard copy data were securely stored in a locked cabinet at Faculty of Education and Social Work, The University of Auckland, and electronic data were stored in a password-protected file on the University of Auckland server. After six years, all the hard copy data will be shredded and the electronic data deleted. The data collected from the research will be used for my PhD thesis at the University of Auckland, and might be used for my academic publications or conference presentations. If any participating teacher would like

to have a copy of the research findings, he/she could indicate this in the Consent Form, and a summary would be sent to them.

Anonymity and confidentiality

In my research, participants' confidentiality was assured. Participants were informed that the university and the college would not be identified, and when the information provided by participants was reported or published, pseudonyms would be used to protect their identity. The participants were also asked to keep their participation confidential. While anonymity in the interviews with the participants could not be guaranteed due to the nature of interviews, as they were interviewed individually by me, their identity was known only to me. No identifying information would be disclosed to a third party.

3.5 CHAPTER SUMMARY

This chapter presented three major issues involved in my research ahead of the actual field work: The research paradigm I followed, the research design I adopted, and a deliberation on ethical issues surrounding the conduct of this study. Constructivism is the philosophical worldview adopted in my research as it holds that reality rests with individuals' perception and needs to be interpreted under certain contexts. The qualitative research approach is appropriate for my research because of its emergent, inductive, interpretive and naturalist nature, investigating the meanings that people attach to their experiences of the world in natural settings. The research method of case studies is suitable for applied linguistics research because it is concerned with holistic context over a specific variable, process over product, and exploratory findings instead of the confirmation of pre-assumed hypotheses. A description of my research design and

methodology was presented. It included the purposive sampling of participants, the data collection methods using interviews and classroom observation, and an initial account of data analysis procedures. Lastly, the four major ethical issues were discussed.

In the following four chapters (Chapters Four to Seven), findings based on the analysis of data collected through interviews and classroom observation will be presented: Chapter Four provides the detailed description of data processing and the participants' personal profiles; Chapter Five and Six report teacher cognition about EFL listening; Chapter Seven presents the findings about teacher practice in EFL listening in the classroom.

CHAPTER 4 DATA PROCESSING AND

PARTICIPANTS' PERSONAL FILES

4.1 INTRODUCTION

Chapters Four to Seven present the data obtained from the in-depth semi-structured preobservation interviews, classroom observation, and stimulated recall post-observation
interviews. Documents including teaching plans, PowerPoint slides used in classroom
teaching, the examination papers, and images taken during the data collection procedure
are included. The data presentation contains mainly two aspects: Teacher cognition
about and practice in EFL listening. The first aspect covers four facets of teacher
cognition about EFL listening; these are the nature of EFL listening, students of EFL
listening and their learning, the teaching and the materials of EFL listening, and the EFL
listening teachers' reflections. In the second aspect there are four major themes in
classroom instruction of EFL listening. They include instructional techniques, three
stages in handling a listening material, dynamic decision-making, and after-class
homework. Chapter Four presents data processing and participants' personal profiles;
Chapter Five and Six report the four facets of teacher cognition about EFL listening;
and Chapter Seven provides data about teachers' classroom practice.

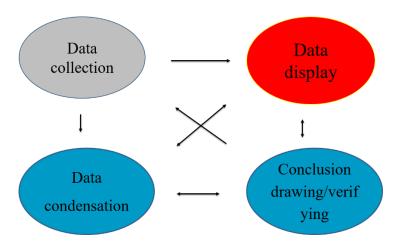
The approach adopted in presenting the data across cases is the constant comparative method of qualitative analysis (Glaser, 1965; Glaser & Strauss, 1999; Kolb, 2012; Leech & Onwuegbuzie, 2007; Strauss, 1987), through which similarities and differences of teachers' cognitions among the five participating teachers are identified and described. This chapter presents the data processing and the participants' personal profiles,

including their experiences of learning listening in EFL and in-service professional development. First, a detailed description of the data analysis process using a framework guided by three stages of data processing: Data condensation, data display, and conclusion drawing/verification (Miles, Huberman, & Saldana, 2014) is provided. The second and main part of this chapter is the presentation of personal profiles detailing the participants' EFL learning experience and in-service professional development in terms of their EFL listening learning experience includes the influence of their teachers, their own classroom learning, and their self-reflection on the learning of EFL listening; this is followed by a review of their in-service professional development. The last part of this chapter is a brief summary.

4.2 DATA PROCESSING

As noted by a number of researchers, qualitative approaches are incredibly diverse, complex and nuanced (Holloway & Todres, 2003), and "qualitative data analysis is a continuous, iterative enterprise" (Miles *et al.*, 2014, p. 14). Figure 4.1 shows an interactive model of qualitative data analysis components established by Miles and associates.

Figure 4.1 Components of Data Analysis: Interactive Model (Miles & Huberman, 1994; Miles *et al.*, 2014)



As is shown in Figure 4.1, the interwoven data condensation, data display, and conclusion drawing/verifying are closely connected to data collection; the whole process is called "analysis" in the general sense. The qualitative researcher keeps the network in mind during data collection processes and moves from one to another among the remaining three activities in the following part of the study.

4.2.1 Data Condensation

Because qualitative data (transcripts of interview recordings, field notes from classroom observations, documents, and images) are substantial, rich and dense, I needed to do some "winnowing" work about the data (Guest, MacQueen, & Namey, 2012) in the preparation of the data analysis stage. This "winnowing" work refers to selecting and focusing on some and abandoning other parts of the data. This process is similar to what is defined by Miles, Huberman, and Saldana as data condensation.

The process of selecting, focusing, simplifying, abstracting, and/or transforming the data that appear in the full corpus (body) of written-up field notes, interview transcripts, documents, and other empirical materials. It involves choosing

"which data chunks to code and which to pull out, which category labels best summarize a number of chunks, which evolving story to tell" (Miles *et al.*, 2014, p. 12).

The data condensation process actually occurs through the whole process of the present qualitative research project from the research design through the data collection to the data analysis, although sometimes I was unaware of it when I decided on the theoretical framework, research questions, and data collection approach. The condensation of data through the integration of the main methods and stages of qualitative data analysis elaborated in the literature (Braun & Clarke, 2006; Creswell, 2014; Strauss, 1987), was conducted by me in the following steps: Transferring the raw data, organizing and preparing the data for analysis: transcription, coding and analysing the data. These steps are in a linear direction but in fact are inseparable from each other; they are closely interrelated and pave the way for each other. I, as the manager of the overall data from various sources, often moved cyclically among these steps. The whole process of data condensation is for the purpose of familiarizing myself with the data and preparing myself for further display and interpretation of the data.

4.2.1.1 Transferring the raw data

The raw data for my study were collected in two major phases and a subsequent stage as stated in Chapter Three. The data include 35 audio recordings of interviews (averaging 40 minutes in length), field notes, more than 30 images, and tens of documents. These various forms of data, which are rich in information as well as amount, were originally stored in different places from the digital voice recorders to cameras and file cases. Transferring the raw data from various places of storage into the computer in

a systematic way involves some physical as well as intellectual work. Besides the folders for raw data, some new folders had to be created for further treatment of the raw data, such as transcriptions of recorded interviews. Establishing folders at different hierarchies according to pre-set criteria and placing the raw data of various forms into these folders provided me an initial and rough familiarization with the data, and was beneficial for further organizing and preparing the data for analysing.

4.2.1.2 Organizing and preparing the data for analysing: Transcription

As recommended in well-known research methods books, "Raw data must be processed before they are available for analysis" (Miles *et al.*, 2014, p. 71). Inappropriate or inadequate preparation decisions can delay or negatively affect the analysis process (MacQueen & Milstein, 1999). After the initial step of transferring the raw data (the recordings, field notes, images, and documents), the transcribing of the recordings of interviews and classroom observations into textual data ready for further analyses and interpretation followed.

Transcribing is an intricate piece of work. As Bailey (2008) points out, it "... involves judgements about what level of detail to choose, data interpretation, and data representation" (p. 127). Also, the transcriber is a key element influencing the quality of transcription as the transcribing of recordings "is fraught with slippage; it is dependent on the knowledge and skill of the transcribing person" (Miles *et al.*, 2014, p. 71). The challenge that researchers face in transcription is "to selectively reduce the data in a way that preserves the possibility of different analyses and interpretations" (Lapadat & Lindsay, 1999). In view of the transcription quality and the trustworthiness of the transcripts, four decisions need to be made before the transcription process commences

(D. Sun, 2010): The choice between full or partial transcription, what to include and exclude during transcription, who should do the transcribing work, and to what extent the transcripts can be edited. In the following paragraphs the four decisions made in the transcription process in my study are elaborated.

The protocols that guided the transcription process were seven operational transcription rules developed by Mergenthaler and Stinson (1992): "(a) Preserve the morphologic naturalness of transcription; (b) preserve the naturalness of the transcript structure; (c) the transcript should be an exact reproduction; (d) the transcription rules should be universal; (e) the transcription rules should be complete; (f) the transcription rules should be independent; (g) the transcription rules should be intellectually elegant" (pp. 129-130). With these transcription guidelines in mind, I did the transcribing work manually with two main aims. The first aim was to produce a verbatim transcript of the recordings, and reread the transcript to decide what to exclude from the actual textual data for analysis. Despite the best intentions, the textual data will never fully encompass all that takes places during an interview (Kvale, 1996; Mishler, 1991), and so the process of selecting transcriptions involves ongoing interpretive and analytical decisions (McLellan, MacQueen, & Neidig, 2003). The second aim was to condense some loosely structured parts of the interviews so that the transcription became more concise and suitable for subsequent analysis. To ensure the trustworthiness of the transcription process, I checked the transcripts against the original recordings and presented the recordings to the interviewees for a member check, who confirmed they were accurate.

One issue concerning the trustworthiness of transcription during this process is the translation of transcripts. All the five participants are teachers of EFL listening in a

university in northern China; their mother tongue is Mandarin Chinese and English is a foreign language which is used only in classroom teaching. As Mandarin Chinese is the only official language across China in every sense, English is seldom used in the participants' everyday life. I have the same non-English language background. Therefore in every interview, the interviewees were told that the interview could be in either Chinese or English. The participants were so cooperative that they chose to use English at the beginning of the interviews. With the progression of the interviews, both I, the interviewer, and the teachers, the interviewees, found that Mandarin Chinese was a better choice for the interviewees to share experience more vividly and express feelings more appropriately. Consequently, apart from those initial interviews, Mandarin Chinese was the language used in the interviews, so that the flow of ideas from participants to the interviewer proceeded smoothly.

The only "disadvantage" of using Chinese in interviews is that it does not fit my purpose of writing up the thesis as a requirement of my doctoral degree of The University of Auckland; thus translation of the interviews was necessary. However, what to translate and when to translate was also a difficult choice as, "Language differences may have consequences, because concepts in one language may be understood differently in another language" (Van Nes, Abma, Jonsson, & Deeg, 2010). During the interviews, however, the participants sometimes paraphrased some concepts in the question raised by me to clarify their own understandings and sought confirmation: "By ..., do you mean ...?" The positive and active cooperation from the participants at times inspired me and to some extent helped shape the research.

During the interview transcriptions, no translation work was done of the non-English data because the original language used by the participants could better convey their meanings and be understood by me for comprehension and analysis purposes. This decision was made because as stated by Van Nes *et al.* (2010), "The relation between subjective experience and language is a two-way process; language is used to express meaning, but the other way round, language influences how meaning is constructed" (pp. 313-314). Much information can be lost in the course of translation because of the lack of equivalent vocabulary, syntax, idioms, and concepts between the source language and target language (Sechrest, Fay, & Zaidi, 1972). In view of these issues, in qualitative research, the findings are considered valid if the interpreted meanings and the meanings of participants' experiences are as close as possible (Polkinghorne, 2007).

4.2.2 Data Coding and Analysis

After transcribing the recorded data, the second scheduled step was to code and analyse the transcribed data in tidy written form. Before actual coding and analysis, it is necessary to understand some concepts or terms related to data: Data corpus, data set, data item, and data extract. As defined by Braun & Clarke (2006),

Data corpus refers to all data collected for a particular research project; data set refers to all the data from the corpus that are being used for a particular analysis. Data item is used to refer to each individual piece of data collected, which together make up the data set or corpus. Data extract refers to an individual coded chunk of data, which has been identified within, and extracted from, a data item" (p. 79).

These definitions of concepts related to data gave me a clearer picture of the data and data condensation and selection during the process of data analysis.

The second key point in the process of data coding and analysis was to choose an appropriate method. My study adopted the thematic analysis and the constant comparative method. Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data (Braun & Clarke, 2006), during which process the researcher discovered themes and concepts embedded throughout the interview (Rubin & Rubin, 2011). The constant comparative method of analysis was first put forward by Glaser (1965), who claimed that

The purpose of the constant comparative method of joint coding and analysis is to generate theory more systematically ... by using the explicit coding and analytic procedures, and the constant comparative method is designed to aid analysts ... in generating a theory which is integrated, consistent, plausible, close to the data (Glaser, 1965 p. 437).

Harding (2013) stated that "The constant comparative method is a helpful approach to identifying similarities or differences between cases in a data set" (p. 66), while Barbour (2013) has argued that the constant comparative method is at the heart of all qualitative data analysis, which relies on constantly comparing and contrasting. This method is appropriate for studies with qualitative information such as observations, interviews, documents, articles, books, and the like (Glaser, 1965). Both the thematic analysis and constant comparative methods suit my study because of the nature of the data collected from the different sources. For example, the five participants' interviews and classroom teaching, as well as the documents collected, are all related to EFL listening but in different contexts; thematic analysis helps find themes from a bottom-up perspective;

and a constant comparative method enables me to be aware of the similarities and differences in opinions concerning the same theme across the participants.

The six-phase thematic analysis model was established by Braun & Clarke (2006) as shown in Table 4.1.

Table 4.1 Six Phases of Thematic Analysis (Braun & Clarke, 2006, p.87)

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and rereading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking in the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic "map" of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Inspired by the six-phase thematic analysis model of making summaries and constant comparison, I created my own six-step data analysis model, illustrated in Table 4.2.

Table 4.2 Steps of Data Coding and Analysis in My Study

Steps	Description of the process
1 Getting familiar with the data	Reading and rereading the transcribed data, and leaving initial comments besides certain chunks of data.
2 Writing summaries within cases	Reducing the sections of transcribed data into key points within each case.
3Constantly comparing and contrasting across cases	Constantly comparing and contrasting the key points summarised across the cases.
4 Generating initial codes	Open coding of the interesting features of the data across the entire data set.
5 Searching, reviewing, and naming themes	Selecting certain codes to form potential themes, checking the themes against relevant data, and generating the names (with or without definitions) for the themes.
6 Producing the report	Producing a scholarly report of the data analysis with vivid, compelling extract examples, relating back to the research question and literature.

The six-step data analysis model adopted in my study best served the analysis of the data. Formal coding and analysis process started when the transcriptions of the recordings of the interviews and classroom observations were completed. These steps again were not a linear process during the course of data coding and analysis but cyclic.

In the first step, the transcriptions were read and reread several times line-by-line. The key words and phrases were highlighted with comments left on the margin which prepared me for further condensation and coding. Ambiguous and unclear points were checked against the recordings for proof and correction, and the repetition of points and senseless silent fillers were removed from the transcripts to make the data set tidy and

concise. As a result, I familiarized myself with the corpus of data, gained an initial impression of the interviews and observations, and established key points in each participant's texts. The reading and rereading of the transcripts was beneficial in that it enabled me to clarify participants' cognitions about several aspects of EFL listening.

The second step was writing summaries and reducing sections of transcribed data into key points to condense the large amounts of data present in the interviews. The loose data thus became compact and tight.

The third step was constant comparison and contrast of key points summarized for similarities and differences across cases. As the five participants all mentioned certain aspects of teacher cognition and instructional practices in EFL listening, their opinions overlapped and varied in some peripheral details. The product of this step is a systematic and coherent overview of the data.

In the fourth step, with a deeper understanding of the key points in the transcripts, I generated initial codes that emerged from each participant's interview data and established codes in a correlated system across the entire data set. The participants in their interviews mentioned many details about their cognitions and instructional practices about EFL listening which were related to their personal learning experiences of EFL listening, the materials, students, and classroom teaching procedures and techniques, after-class homework, and their reflection on these elements. These generated codes were reviewed, compared, and collated with the relevant data chunks for further confirmation or correction.

In the fifth step, I studied the established codes and searched for themes, reviewed the themes, and named the themes. For example, the scattered codes related to the sources of students' anxiety while doing listening exercises and their corresponding countermeasures were grouped into two themes, "sources of anxiety" and "ways adopted to alleviate the anxiety". The two themes form a subcategory of "students' anxiety" which is a subcategory of "students" in the category of "cognition". The four categories generated are "profiles", "cognition", "practice", and "influencing factors".

The sixth and last step of the data coding and analysis process was to produce a report. In this step, the final product needed to be a scholarly and systematic display of the themes with vivid, compelling examples extracted from the data set, relating back to the research question and literature.

Data coding and analysis were carried out based on Chinese transcripts (including some initial part in English used by the participants) of the interviews; themes and categories generated and citations used in the thesis were translated into English by myself manually. In translating teachers' talk about their inner thinking about EFL listening and their teaching practice, there existed the dilemma between their non-English way of expressing themselves and the customary expressions in English research traditions. As Subedi and Rhee (2008) asked, "Within the complexities of such translations, how should researchers ethically speak about what is told to them?" (p. 1087) I, therefore, adopted the translation strategy of foreignization (Fuadi, 2016; Sechrest *et al.*, 1972; Zhang & Liu, 2007) to ensure the comprehensibility and the trustworthiness of the translation. In addition, I sent my translation to my PhD supervisor who shares the same linguistic background (Mandarin Chinese and English) for correction and confirmation.

4.2.3 The Use of NVivo 11 Pro during Data Coding and Analysis

Qualitative software for data analysis has been designed on the assumption that researchers need both closeness and distance to the data (L. Richards, 1998). Or as Bazeley & Jackson (2013) said, "closeness for familiarity and appreciation of subtle differences, but distance for abstraction and synthesis" (p. 7). Computer technology also helps the qualitative researcher with textual data storage and retrieval, and helps "manage data, manage ideas, query data, visualize data, and report from the data" (Bazeley & Jackson, 2013, p. 3). The version of qualitative software NVivo that the University of Auckland provides PhD students with is NVivo 11 Pro, the latest and most powerful version in August 2017 during data coding and analysis.

NVivo 11 Pro demonstrated its power in assisting qualitative data analysis in a very convenient way. After the transcribed data and the initial comments and codes were entered into NVivo 11 Pro, a strong connection was built between the nodes and the relevant chunks of words, and a network in the form of a tree map appeared among the nodes which could be seen and grasped at a glance. NVivo supported my data coding and analysis process in the following ways: NVivo helped store and manage the textual data more efficiently; NVivo handled sources in various forms such as word files, PDF files, pictures, social media data, and audio or video clips. NVivo helped remove most of the drudgery in the coding process of the textual data previously stored in word files or printed on paper, instead of coding by cutting, labelling, and gluing. NVivo provided a sound ground for building links between emergent nodes and retrieving the coded references as each node serves as "a container for everything that is known about one particular concept or category" (Bazeley & Jackson, 2013, p. 17).

4.3 PARTICIPANTS' PERSONAL PROFILES

Background information on the participating teachers in my study, the five EFL listening teachers at a university in northern China, from the interviews is summarized and presented below.

Table 4.3 Participating Teachers' Demographic Information

Name	Amy	Daisy	Ella	Hannah	Alfred
Age	44	44	37	38	39
Gender	Female	Female	Female	Female	Male
First	Mandarin	Mandarin	Mandarin	Mandarin	Mandarin
language	Chinese	Chinese	Chinese	Chinese	Chinese
Qualification	Bachelor	Master	Master	Master	Master
Years of	20+	20+	13	14	15
teaching EFL					
Years of	20+	0.5	7	1	15
teaching EFL					
listening					
Stage of	Second-year	Second-year	Second-year	First-year	First-year
students	English	English	English	English	English
	majors	majors	majors	majors	majors
Other EFL	Pronunciation	EFL	EFL Reading,	EFL	EFL
courses		Reading,	Pronunciation,	Reading,	Reading,
taught		EFL	Business	EFL	EFL Writing
besides		Writing,	English, etc.	Writing,	
listening		English		Literature	
		Novels			
Overseas	2 months	2 months	None	None	None
academic					
visit					

As is shown in Table 4.3, the five teachers had in common their first language and more than ten years of EFL teaching experience. On the other hand, their academic and professional qualifications (BA or MA), years of teaching EFL listening (0.5 years to more than 20 years), courses taught besides EFL listening, and overseas academic visiting experience (short-term to none) differed.

4.3.1 Experience of Learning EFL Listening

In the pre-observation interviews and supplementary interviews, teachers talked about their learning experience of EFL listening. The subthemes emerged in the recollection of their experiences as EFL listening learners were their English teachers, classroom learning, and self-reflection about EFL listening learning.

4.3.1.1 Their English teachers

All participants emphasized that their English teachers took the leading role in their English learning journey, especially at early stages of when they did not have a clear understanding of what English was. "I like my English teacher very much" was a sentence frequently heard during the interviews. Their fondness of teachers led to their intense interest in English language and motivated them to spend time practicing EFL listening. Hannah's comments are typical of the five participants.

(Hannah) The secondary school I went to was a very ordinary factory-run school. However our English teacher had an enormous influence on us English learners. At that time I was very much fond of our teacher; therefore I liked attending English classes.

In Hannah's narration, the fondness of her English teacher led to her intense interest in English, and so she was willing to spend a lot of her spare time practicing EFL listening.

(Hannah) Although I lived in city and it was in 1990s, the only device for listening to English I had was a tape cassette player with some tapes. Because of my fondness of English, in my spare time I would often listen to the tapes and read after them at home.

It was my initiative learning habit out of my interest (in English); no one had ever asked me to do that.

Hannah's motivation to practice EFL listening led to her success in her high school entrance exam and her excellent performance in the placement test of English listening and speaking after she entered the high school. This is illustrated in her account of English learning when at high school.

(Hannah) How did my interest in English influence my academic achievements? Well, I was admitted into No. 5 Middle School, the top middle school in our city. My experience in that school was extraordinarily interesting because ... At that time (it was 1994), our principal had a research trip to southern China and decided to have a placement test of English listening and speaking among the 300+ new entrants. It was a new tide at that time; even nowadays people do not emphasize English listening and speaking that much. During the placement test, I didn't understand what English speaking meant; I just answered teachers' English questions in English. To me, that was natural. The starting questions were easy ones like "What's your name? Where are you from?" Then the questions were focusing on the English textbooks we learnt in Junior Three, to which I gave fluent answers without any hesitation. They were fairly easy for me since I was so familiar with the textbooks that I could recite every text. About the listening test, as told later by our head teacher, my score ranked the first place in our class of 60 students chosen from the 300+ new entrants.

Hannah's illustration of her fondness of her English teacher, and the following successful development of her English suggest a positive cycle of learning success of

EFL listening and the entire English language learning overall. However, she did not identify her English teacher's qualities which triggered feelings. Other participants in their interviews when they recalled their learning experiences, however mentioned that it was the graceful bearing and beautiful voice of the EFL listening teachers which attracted them. As Amy said:

(Amy) We started to have EFL listening course in freshman year as English majors. Nothing impressive: we sat in separated booths and wrote down the answers to the exercises on the textbook. The only thing that sticks in my mind is the voice of our EFL listening teacher which was particularly pleasant to hear through the microphone/headset. ... That's Ms. Fu from Taiwan; she came to our city from Taiwan or Hong Kong and took over some classes in our university. She was a teacher with graceful bearing.

From Amy's vivid description, a graceful lady with pleasant voice can be visualized. Her qualities left a deep and favourable impression on Amy, which appeared to stimulate her subsequent interest and high achievement in EFL listening. These qualities of EFL listening teachers were also noted in Daisy's interview:

(Daisy) When I was a university student, our EFL listening lessons were delivered by a charming teacher with graceful pronunciation, intonation, and manners, therefore we all liked this course.

The above excerpts from participants' interviews lead to a tentative conclusion that an EFL (listening) teacher's image and voice helped form their first impression of the

English language. They appeared to see their teacher as a positive example and a role model for them to achieve academic success in English.

4.3.1.2 Classroom learning

The second subtheme which emerged in the participants' recalling of their EFL listening learning experiences is classroom learning. They talked about the classroom conditions, the materials chosen by their teacher, and the listening techniques they learnt. Due to the age difference, the participants attended the high school in different years. Because of being in different years and with regional differences, EFL listening was not a compulsory course for all high school students. As the participants are teachers of EFL listening, however, they all specialized in English Language during their university years, and so were bound to have EFL listening lessons, although these might have been at different stages of their education (before or during university). Therefore, all participants had something to say about this subtheme. Amy and Daisy said that they did not have any EFL listening lessons until they attended university as English majors, while Ella and Hannah clearly claimed to receive EFL listening training before university.

(Hannah) We had EFL listening lessons upon our admission into high school. Once or twice in one week; I cannot remember this exactly. No. 5 Middle School was advanced with audio-visual classrooms as listening facilities.

Ella had similar experience in EFL listening learning:

(Ella) After being admitted into high school, we had EFL listening lessons in the language lab. Not very frequent; only once in two weeks. As a key middle school, we had comparatively better facilities (than ordinary middle schools). The EFL listening lessons were held in the language lab, which gave me a feeling of freshness and advance at that time.

Apart from the language lab with audio-visual facilities, the listening materials chosen by their teacher for EFL listening lessons were also an aspect that participants said aroused their interest in EFL listening. They spent quite some time talking about this subtheme during the interviews, suggesting their keen interest and strong memory of the teaching materials in their past EFL listening lessons. Related excerpts are presented below.

(Hannah) (High School) We watched the whole series of Family Album U.S.A; besides this, our teacher bought the series of Step by Step (prevalent textbook series for EFL listening in China) and recorded the tapes attached for every student in our class.

(Amy) (University) We watched two movies in the EFL listening lessons: Kramer VS. Kramer, and High Noon. The two movies were used for one semester. Well, there's one more, The Sound of Music. The three movies were used for one year. One movie for one semester; listening to it over and again. We had Kramer VS. Kramer for the whole semester and did the gap-fillings of subtitles with repeated listening to the recordings. One scene after another. That's how we learned.

Apart from the materials used in classroom teaching, Daisy also talked about the materials used by her teacher for students' after-class EFL listening practice as an extension of classroom instructions.

(Daisy) (University) Every day she gave you (students) a ... she didn't ask you to do listening exercises in big quantities; instead she required you to fully comprehend the material she recorded in class. There weren't any illustrations for the material. You were to listen to the 15-20-minute-long recording over and again until you fully understand it; all done by yourself. The difficulty level was moderate, not something particularly hard. It was within your reach given enough times of listening.

The listening materials are not the only teaching content that participants' recollected about their EFL listening learning experiences. As Hannah said:

(Hannah) (University) At that time, Mr. Li was unique in one way: as he had much contact with foreigners and had an intense preference for western countries, he often told us something about western ways, such as table manners, way of life, etc.; a lot of this kind of knowledge.

The third subtheme mentioned by the participants when they talked about their learning experiences is the EFL listening techniques they learnt. Some EFL listening techniques they recalled as useful are abbreviation skills (for taking notes), persistence in practicing until comprehension, repeatedly listening, and so on.

4.3.1.3 Self-reflection about learning EFL listening

Other aspects of EFL listening learning experiences were embedded in the reflections of the participants in the interviews. The first is that interest is the best teacher. Hannah, in narrating her EFL listening learning experience, mentioned interest several times. In secondary school, she practiced EFL listening by herself out of interest instead of being pressed by teachers or her parents; in high school, she enjoyed watching *Family Album U.S.A*; while at university, she said, "I chose English Language as my major because I like it", and took delight in the listening activities in class and the western ways of life preached by her teacher.

(Hannah) In secondary school, I listened to tapes attached to English textbook many times because I liked listening to them. I chose to be an English major in university out of my interest in English language.

Another aspect identified was the awareness of the importance of EFL listening. Ella said that from high school she began to recognize the existence of EFL listening, and then value it after the assessment of students' EFL listening and speaking skills. This motivated her to work harder in her course and to develop a positive cycle of learning.

(Ella) After I entered high school, I attended the placement test of English which contained listening, speaking, and a test paper. Since then I began to realize the importance of listening.

A third aspect that emerged is that EFL listening ability is closely connected with pronunciation. Ella talked about her bewilderment at why some students couldn't

understand the content read clearly and explicitly. It lead her to reflect on the relationship about correct pronunciation and listening.

(Ella) (High School) At first I felt strange why some of my classmates couldn't understand the tape. Some people are not so sensitive to numbers and thus slow at figuring out numbers; I am one of those with medium (even below medium) sensitivity to numbers. Except this, why cannot you understand what has been read out? I was puzzled. Later I found that some students were poor in pronunciation, so he naturally thought the wrong pronunciation was right, which blocked him/her from correct comprehension. EFL listening is closely connected with pronunciation.

4.3.2 In-service Professional Development

In-service professional development is important for teachers in that it provides sustainable facilitation of classroom teaching. Teachers at different stages have different views of in-service professional development and tend to choose different ways for improvement and development. Berliner's (1994) five-stage model of teacher development (Andrews, 2008; Berliner, 1994) provides a framework or a continuum which describes the features of teachers at different stages of development.

Table 4.4 Berliner's Five-Stage Model of Teacher Development (Andrews, 2008, p. 120)

Stage	Features
Stage 1: Novice level	1. Needs context-free rules/procedures
[all student teachers and 1st-year	about teaching;
teachers]	2. Operates rationally, but fairly
	inflexibly, in following such
	rules/procedures;

3. Starts	to le	earn	the	obje	ective	facts	and
features	of	siti	uatic	ons	and	to	gain
experience	ce.						

Stage 2: Advanced beginner level [many 2nd-year and 3rd-year teachers]

- 1. Experience begins to be melded with the verbal knowledge acquired in Stage 1;
- 2. Starts to acquire episodic and case knowledge, and to recognize similarities across contexts;
- 3. Still unsure of self and of what to do when experience / case knowledge is lacking;
- 4. May still have little sense of what is important in a specific situation.

Stage 3: Competent level [many 3rd-year and 4th- year teachers + more experienced teachers]

- 1. Personally in control of events going on around him/her:
- 2. Makes conscious choices about what to do:
- 3. Has rational goals and is able to set priorities, decide on goals and choose sensible means for achieving those goals;
- 4. When teaching, is able to determine what is or is not important;
- 5. Still not very fast, fluid or flexible in behaviour.

Stage 4: Proficient level
[a modest number of teachers, from around 5th year of teaching onwards]

- 1. Intuition and know-how become prominent;
- 2. Is able to view situations holistically and to recognize similarities between events:
- 3. Can therefore predict events more precisely;
- 4. Is able to bring case knowledge to bear on a problem;
- 5. Still analytic and deliberative in deciding what to do.

Stage 5: Expert level [a small number of teachers, after at least 5 years]

- 1. Has an intuitive grasp of situations;
- 2. Seems to sense in non-analytic and non-deliberative ways how to respond appropriately in classroom situations;
- 3. With routine, repetitive tasks, acts fluidly, effortlessly and without consciously choosing what to do or to attend to;
- 4. When a problem arises, and with non-routine tasks, is able to bring deliberate, analytic processes to bear;

According to the different stages of teacher development, the relevant features described in Table 4.4, and the participants' EFL teaching experience, all five participants can all be categorized at the expert level (Stage 5). Their teaching years in EFL listening, however, combined with their teaching features suggest a range of levels. For example, Daisy, with 0.5 years' experience, and Hannah, with 1 year's experience, are at Stage 1 (novice level); Ella, with 7 years' experience, is at Stage 4 (proficient level); Amy and Alfred, with 15+ years' experience, are at Stage 5 (expert level). In spite of the different stages, the participants are striving for professional development in various ways available to them.

As a representative of teachers at a novice level, Daisy described her sources of professional development after working as an EFL listening teacher:

(Daisy) It (EFL listening) is a new challenge and a new task to me... I feel I still need to overcome many obstacles, handle many things, and explore the elements (of EFL listening) unknown to me: a long way to go. To me, it is also a learning process, learning how to teach it better. I gradually improve my teaching levels during the teaching process.

Apart from learning from her own teaching process, Daisy also mentioned self-training by searching for relevant knowledge online.

(Daisy) I didn't get formal, sit-in-class in-service training (in regard to EFL listening); instead I learn mainly online. I think teachers should have strong self-directed learning ability to remedy their shortcomings. You know where to find the relevant information to fill the gap in your knowledge base; therefore you have a strong sense of initiative. And the means to get that knowledge with such a developed Internet nowadays you actually do not need to sit in real classes to fulfil this aim. The Internet is a classroom; you can find the knowledge in need and apply it into your teaching. Although I don't get any formal training, I have been training myself through Internet in the process of preparing for lessons in this new course.

Ella, a teacher at the proficient level, said that her way of improving her teaching of EFL listening was mainly reading related literature and occasionally attending public academic lectures with relevant topics. She mentioned one lecture that impressed her because the findings were congruent with her teaching experience:

(Ella) The lecture (I attended once) was relevant to every EFL course including EFL listening of course. It was not about the specialization of English language but about something general in education like the reform orientation of college English. The positive influence of reading the scripts and extensive listening was mentioned in this lecture, which was congruent with my idea. I couldn't remember my idea was generated before or after this lecture; if it was before the lecture, I could say that my idea got confirmed by that lecture.

Amy's case is very typical of the expert stage:

(Amy) I have been teaching EFL listening since the beginning of my career as a teacher; it's more than 20 years. I think EFL listening ... in-service training ... there seems not any; it is from my constant summarization of experience during the teaching process. I didn't receive any in-service training.

From the interviews, it appears that although the participating teachers did not have formal in-service training, they assess their teaching situations and actively find solutions independently through reading related literature, referring to advanced peer teachers (online blogs or reflections) for support and advice, attending lectures if available, and reflecting on their teaching and accumulating their own experience.

4.4 CHAPTER SUMMARY

This chapter described the data analysis procedures in detail and presented the personal profiles of the five participating teachers focusing on their EFL listening learning experience and in-service professional development. Guided by the interactive model of qualitative data analysis, which involves four major components of data collection, data display, data condensation, and conclusion drawing/verifying, the analysis of data was carried out in two main steps: Data condensation, and data coding and analysis. The use of NVivo during data coding and analysis was noted. At the stage of data condensation, the practice of transferring raw data, organizing and preparing the data for analysis (transcription) were introduced. My concern about the quality and trustworthiness during this stage was also discussed and resolved. At the stage of data coding and analysis, thematic analysis and constant comparative methods were described. The qualitative software, NVivo 11 Pro, was used effectively and efficiently for all stages of data coding and analysis.

The second half of this chapter presented the personal profiles of the five participating teachers incorporating the main themes that emerged from the data: Their EFL listening learning experience, and their in-service professional development. The EFL listening learning experiences of participants focused predominantly on the influence of their English teachers, classroom learning, and their self-reflection about EFL listening learning. Participants' in-service professional development was introduced in accordance with the participating teachers' developmental stages.

CHAPTER 5 TEACHER COGNITION ABOUT

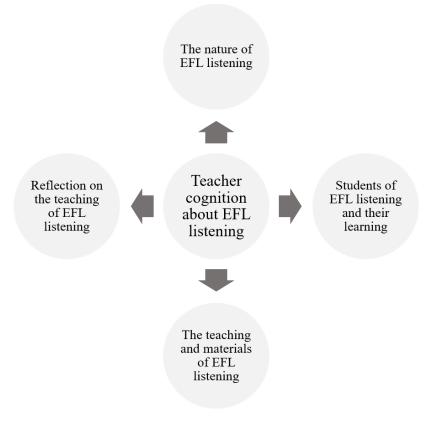
NATURE AND STUDENTS' LEARNING OF EFL

LISTENING

5.1 INTRODUCTION

Based on the previous literature on teacher knowledge (for example, Hedges & Cullen, 2005) and the data, four categories of themes were derived to explore teacher cognition about EFL listening. The four categories are illustrated in Figure 5.1.

Figure 5.1 Four Categories in Teacher cognition about EFL Listening



This chapter presents the first two categories: Teacher cognition about the nature of EFL listening, and teacher cognition about students of EFL listening and their learning. Four subcategories of teacher cognition about the nature of EFL listening are presented. In the second category, objectives and status of students in EFL listening classes and their learning process are presented. Chapter Six will report on the latter two categories: Teacher cognition about the teaching and materials of EFL listening, and reflection on the teaching of EFL listening.

5.2 TEACHER COGNITION ABOUT THE NATURE OF EFL LISTENING

Teachers' shared and individual understandings of the nature of EFL listening elicited from interviews fall into four subcategories: Features of EFL listening, status of EFL listening in EFL learning, importance of EFL listening skills, and peripheral limiting factors. Table 5.1 displays these data.

Table 5.1 Teacher cognition about the Nature of EFL Listening

Ideas elicited from participants	Source(s)
EFL listening is complex and comprehensive ability	Amy/Alfred
and it is related to the cultural background of the	
material.	
EFL listening is an ability; it takes time to develop	Amy
familiarity.	
In EFL listening exercises, correct answers do not	Alfred
mean comprehension.	
EFL listening is an ability that is not easy to	Amy
evaluate.	
EFL listening is a process of memorization.	Amy/Hannah
EFL listening is related to real-life environments.	Amy
The highest and ideal level of EFL listening is like	Alfred
listening to the mother tongue.	
EFL listening is transient in nature.	Daisy
Extended reading is important for freshmen in EFL	Daisy
listening.	
Good performance in EFL listening can facilitate	Hannah
the learning of other EFL courses.	
	EFL listening is complex and comprehensive ability and it is related to the cultural background of the material. EFL listening is an ability; it takes time to develop familiarity. In EFL listening exercises, correct answers do not mean comprehension. EFL listening is an ability that is not easy to evaluate. EFL listening is a process of memorization. EFL listening is related to real-life environments. The highest and ideal level of EFL listening is like listening to the mother tongue. EFL listening is transient in nature. Extended reading is important for freshmen in EFL listening. Good performance in EFL listening can facilitate

	EFL listening is closely related to EFL speaking. EFL listening should be offered first in EFL learning.	Amy Hannah
	EFL listening is the most important subject in EFL learning.	Hannah
	EFL listening is one aspect of language learning processes.	Alfred
	Similarities exist between EFL listening and EFL	Amy
-	reading. EFL listening skills provide aid and assistance in the	Alfred
EFL listening skills	primary stage of EFL listening learning. Practice makes perfect; real skills are acquired through exercises or practice.	Alfred
Peripheral	Gender difference has an impact on EFL listening	Hannah
limiting factors	learning. The machine used to play recordings restricts/confines the speed and time of EFL	Daisy
	listening.	

As shown in Table 5.1, teachers' understandings of the features of EFL listening include a range of aspects. They all agree that EFL listening is a complex and comprehensive ability for learners, which involves various factors: Listening is related to cultural background; it is a process of memorization; it is related to real-life environment; it takes time to develop familiarity; it is difficult to evaluate; it is transient in nature; correct answers in EFL listening exercises do not necessarily mean full comprehension of the listening materials. One teacher, Alfred, considers that the ideal for EFL listening is like listening in mother tongue. These factors refer to features of EFL listening in different contexts, which were identified before the teachers' practices were observed.

Participants views of listening in EFL learning and its relationship to other aspects of EFL courses varied from a statement that it is "one aspect of language learning process" to a more emphatic statement that it is "the most important subject in EFL learning" and thus "should be held first in EFL learning". Other EFL courses, such as reading and speaking are referred to, with some participants arguing that reading facilitates students'

intake of information in EFL which thus enhances their familiarity with the materials during listening. EFL speaking, as illustrated by Amy, is mutually reinforcing with EFL listening:

(Amy) EFL listening is related to speaking. Without listening as an information input, speaking cannot be achieved. They are closely related to each other.

Teachers' opinions about the EFL listening skills are represented by Alfred who commented that EFL listening skills are acquired mainly through exercises or practice; and that providing EFL listening skills assist mainly in the primary stage of EFL listening learning.

The last subcategory here includes statements about the peripheral factors that limit EFL listening. Two main factors highlighted by teachers are gender difference and the audio machine used to play recordings which restricts the speed, and time, of playing EFL listening materials. In the extract below Hannah reports she was a little puzzled and dejected when she found that boys and girls perform differently in her class:

(Hannah) I pay more attention to the boys in my class because I have discovered that boy English majors fall into two extremes: some of them are quite good, much better than girls while others are very poor: they don't even want to study very well. ... Maybe I mentioned something about the gender difference. For girls, comparatively speaking, they will work much harder. But for boys, they will either work very hard or do nothing. Some of them will just play computer games and ruin their lives.

Daisy represented the views of the other participants on the peripheral factors that constrained EFL listening in the classroom when she mentioned the impact that the audio machine had on time management of classroom teaching of EFL listening. To illustrate her point more clearly, she compared EFL listening with EFL reading:

(Daisy) When doing reading comprehension, we can skim, scan or read more slowly and carefully for a paragraph; but for EFL listening, the time is fixed. You can neither change the speed of the recordings nor leave a part out; otherwise the rewinding back and forth will take too much time of classroom teaching. If there were no such element as the machine which controls the time, you can allocate the time for a certain sentence in EFL listening exercise.

5.3 TEACHER COGNITION ABOUT STUDENTS IN EFL LISTENING CLASSES AND THEIR LISTENING DIFFICULTY

5.3.1 Students in the EFL Listening Classes

The participants spent substantial time talking about students in their EFL listening class. Participants' perceptions of their students include the following three aspects: Students' learning objective of EFL listening, students' attitude(s) toward EFL listening and English language proficiency, and students' status in classroom.

5.3.1.1 Students' learning objectives of EFL listening

The participants' students were English majors at the beginning of either their first or second year of university study, and EFL listening is a compulsory course for them. As they are at different stages of their study, they have different objectives for attending this course. The first-year students were starting their university academic studies in the

first week after one month of military training; this was the common practice for university new entrants when this study was conducted. Students were curious and enthusiastic about the coming academic classes. Alfred and Hannah, who taught the first-year English majors EFL listening, both agreed in the interviews, that their students who were fresh out of high school, did not have accurate expectations of EFL listening learning. Instead, students were trying to be successful in every EFL course including listening. As they gradually realized the requirements of this course and became aware of the distance between their present level of achievement and the requirement for the course, they adjusted their objectives and expectation of the learning process. The requirements set in the curriculum for the first year EFL listening by the university for students are as follows:

At the end of the course, students should be able to (a) Follow lectures and reports made by English native speakers within their linguistic knowledge, grasp the gist, understand the main contents, and identify the speaker's attitude and mood; (b) Understand simple stories; (c) Understand short and simple dialogues under the speed of 100 words/minute; (d) Understand Special English news broadcast or cultural programs by Voice of America (VOA) and grasp the gist; (e) Dictate within 15 minutes the material compiled based on learnt knowledge with around 150 words in total which is read four times at a speed of 100 words/minute and the error rate does not exceed 10%.

Alfred understood students' aims for EFL listening in the first year as a general improvement in EFL listening ability:

(Alfred) I think their purpose to attend this course is to improve listening ability, to understand English better, and to improve their intonation and their listening ability. As freshmen, for most first-year students, their EFL listening ability is poor. Their main purpose in this course is to improve their listening ability. Because it is their first semester, it is my first time to meet them and teach them. It is now the first week I teach them.

Hannah gave students in the first year a simple test in their first EFL listening class to gain an impression of their EFL listening level at the beginning of the class. She talked about her plan for students of EFL listening, saying she preferred materials that could help the beginners with their pronunciation and vocabulary.

(Hannah) I gave them tasks concerned with dictation. You know dictation is one of the most important parts in TEM-4. I just want to show them how difficult TEM-4 is, so I gave a test to two of my classes. And I have found that they have a lot of spelling mistakes; and also some of them say that they could not write all the words down. I have plans for them. My teaching objective for this semester is to let them improve their pronunciation through listening. This is my first goal. And then in this semester I hope they can practice some basic materials in listening, for example, numbers or address. Some basic training I think. They need to listen to something more. Although next year in TEM-4 there will be no news broadcast anymore, I believe that VOA or BBC are very good material for the beginners to train their pronunciation, and also their vocabulary.

Hannah mentioned TEM-4 in the interview. TEM-4 was officially launched in 1992 to measure the English proficiency and performance of Chinese university undergraduates

majoring in English Language and Literature; that is, listening, reading, writing, and speaking in English (Jin & Fan, 2011). The test is administered by the National Advisory Commission on Foreign Language Testing in Higher Education (NACFLT) in China (L. Cheng, 2008). TEM-4 is essential for English majors to obtain their Bachelor's Degree at the university where this research was carried out. English majors will fail to get their Bachelor's Degree upon graduation if they do not pass TEM-4.

With the pressure of passing TEM-4, and after one year adapting to the EFL listening course, the second-year English majors, differed from first-year students in that they had clearer objectives for attending the course. Amy, Daisy and Ella shared their views on their students' learning objectives in EFL listening as they combined the pressure of passing TEM-4 with their long-term goals of learning EFL listening. Amy briefly mentioned what she expected her students to achieve after two years of EFL listening learning that is the objectives for the course.

(Amy) Two years after taking my course (EFL listening), they should be able to meet the requirements of TEM-4: grasping the gist of news item and local details, mastering long dialogues and passages.

As well as passing TEM-4, Ella understood students' objectives to be practical, such as for entertainment and potential use of the language during their future study overseas.

(Ella) They have various kinds of goals in their EFL listening study. One of the important goals to achieve after the second year's study of EFL listening is to pass TEM-4. Besides this practical goal, some of them may want to go overseas to further their

study in the future... Others may want to improve their listening ability so that they can entertain themselves, for example, they want to listen to the English news, and some entertainment programs in English.

Unlike Amy and Ella, Daisy relates students' objectives to lifelong learning of English language.

(Daisy) As for their objective in EFL listening learning, they of course want to pass TEM-4 first. That's their most pragmatic objective at the present stage. Their long-term objective is of course doing well in EFL learning. Listening is one aspect of language learning; it is also a way to use language later on, which should be the strongest and the most consolidated aspect of learning. They have to learn it well, be it a means of livelihood or a way to acquire new knowledge: it is their ultimate objective. (Pre-observation interview with Daisy)

This section has presented data on teachers' knowledge and perceptions of students' learning objectives of EFL listening. Teachers perceived that the first-year students do not have specific objectives; instead, they are looking for general improvement in EFL listening ability and to pass TEM-4. In teachers' views, the second-year students have clearer objectives for attending EFL listening course, which are to meet the requirements of TEM-4, practical needs, and lifelong learning of English language.

5.3.1.2 Students' attitude(s) toward EFL listening and their English language proficiency

Teachers obtained knowledge of their students' attitude(s) toward EFL listening and their English language proficiency level via various means. Teachers of second-year students formed clear perceptions about students' attitude(s) and language proficiency through classroom questioning and observation, homework grading, and even after-class casual talks with students. Daisy is a good example. She found that her students attached great importance to EFL listening, therefore she had confidence in her students, was reflected in the following excerpt:

(Daisy) Students attach great importance to EFL listening and they take the initiative in doing listening exercises after class even if you don't ask them to. I provide them with a direction, so he will definitely practice listening back at home. I have confidence in students. ... They deem EFL listening important. I don't have to check class attendance; they all show up in the class. If students do not value a certain course, then teachers need to adopt some powerful measures to supervise them... As long as I give them necessary guidance, they can achieve that.

Ella found that her students misunderstood the amount of exercises required to prepare for TEM-4:

(Ella) I think this originates from students' idea about EFL listening and testing. They did all sorts of exercise as they wished to improve his listening ability; however, it's not necessarily the case that the more exercises you do, the higher level you will achieve. You need to do the exercises in a scientific way... Blind effort on 40-50 practice

tests equals no effort at all because he doesn't have teachers' guidance how to practice. He doesn't know how practice influences the improvement in EFL listening ability and scores; he just holds that more practice means better.

Teachers who taught the first-year English majors were accumulating knowledge about their students' attitude(s) toward EFL listening and English language proficiency. For example, Hannah gave her students a quiz to diagnose their EFL listening proficiency on first meeting her first-year students:

(Hannah) Two weeks ago I gave the first quiz to my students. Actually it was very easy. I made them do a dictation, to write a passage. Listen to the passage which was read four times. They needed to write the passage down. This is the first part. In the second part, it is very easy, just 20 words. I read the words and asked them to write the 20 words down. But to my great surprise, they did a very bad job. ... So I have discovered that my students have some basic problems of listening and also of spelling.

Through talking with students and colleagues, Hannah found that her students of EFL listening focus on, and stop on completion of, exercises instead of ensuring that they fully comprehend the materials:

(Hannah) Passing examinations is regarded as the purpose of learning by the primary schools through to high schools and has been internalized by students as a habit. It is a big obstacle which needs to be reversed.

In summary, teachers of second-year students formed perceptions about their students' attitude(s) toward EFL listening and their English language proficiency through various means such as in-class questioning, observation and casual talks outside the classroom. They found that students attach importance to the EFL listening course but had misunderstandings about the some of the content. Teachers of first-year students felt they were increasing their understandings of students' attitude(s) toward EFL listening and English language proficiency.

5.3.1.3 Students' status in the classroom

Teachers have been viewed as "fulfilling a central, controlling function within a classroom environment which is complex and potentially unpredictable" (Calderhead, 1983, p. 3). In a traditional Chinese EFL classroom, teachers "play a central role" and spend most of the class time "explaining the vocabulary, language points, and sentence structures, and then ask students to learn them by heart" (Rao, 1996, p. 468). Traditional classroom teaching in China, seems to be a linear flow of knowledge from teachers to students, while students are passive, listening to teachers carefully and trying to remember as much knowledge as possible. However, students' status in the EFL listening classes, in the teacher participants' perception, differs from that in a traditional Chinese EFL classroom. Alfred's views are also shared by the other participants:

(Alfred) Looked from the surface, (EFL listening) classroom teaching and learning seems teacher-centred and teacher-led. However, combining my teaching experience gained in EFL reading and writing classes these years, I find that teachers in EFL listening classes take a rather passive role in terms of students' in-class reaction. Teachers play audio clips, question students, and then make the decision of following

activities based on students' performance and feedback. Students may do well in the follow-up exercises like today because of the easy material; if they do not perform very well, which can be judged from their answers to the questions, or if teachers think the material is difficult for certain students, teachers may replay the audio clips to the class. At that time it is students instead of teachers who are the centre of classroom teaching.

As Alfred commented in this post-observation interview, and mentioned also by other participants, students take centre stage in an EFL listening classroom teaching, with their performance and feedback influencing teachers' decision-making during the instruction process.

5.3.2 Sources of Difficulty in EFL Listening Comprehension and Some Solutions

EFL listening is viewed as "a process of constructing meaning based on multidimensional relationships between the learner and all of the internal and external influences and the intrinsic and extrinsic elements involved in that learner's reality" (Vogely, 1995, p. 43). Zhang (2001b) suggested that language anxiety, when experienced by language learners, can be damaging to the learning process, directly undermining motivation and having a negative influence on the foreign language being studied. It has been argued that foreign language (FL) listening anxiety could affect FL listening performance (X. Zhang, 2013). EFL listening comprehension anxiety, therefore, is an issue which needs to be addressed in the classroom (Vogely, 1998). Listening anxiety occurs when students feel they are faced with a task that is too difficult or unfamiliar to them (Scarcella & Oxford, 1992).

The findings in my research reflect these views. The teachers agreed that the difficulty students experience in EFL listening comprehension is a primary source of anxiety that can prevent them from reaching expected performance level in tests. Vogely's (1998) categories of sources of listening comprehension anxiety were used to analyse teachers' perceptions about sources of difficulty in EFL listening comprehension and solutions adopted by the participants as shown in the Table 5.2 and 5.3.

Table 5.2 Teacher cognition about Sources of Difficulty in EFL Listening Comprehension

Vogely's	Sources of difficulty	Participant(s)
Categories		
Input	Unfamiliar cultural	Amy, Ella, Hannah, Alfred
	background	
	Unfamiliar topic	Amy, Daisy, Ella, Hannah, Alfred
	Syntax	Amy, Daisy, Ella, Hannah, Alfred
	Vocabulary	Amy, Daisy, Ella, Hannah, Alfred
	Lack of visualizing ability	Alfred
	Genre	Hannah
	Fast speech rate	Amy, Daisy, Hannah, Ella
Process	Lack of EFL listening	Daisy, Ella, Alfred
	strategies	
	Failure to check answers	Daisy
	Poor short-term memory	Daisy
Instructional	Lack of EFL listening	Alfred
factors	practice	
	Uncomfortable	Daisy, Ella
	environment	
	Task types	Hannah
Personal	Nervousness of students	Amy
factors	when doing EFL listening	
	Students' incorrect	Amy, Daisy, Ella, Hannah, Alfred
	pronunciation	
	Instructors' teaching	Amy, Daisy
	styles	

Table 5.3 Teachers' Solutions to Reduce the Difficult Level

Category	Solutions	Participant(s)
Input	Providing cultural and technical knowledge	Ella
-	Advising students to do extensive listening to relevant audio materials	Hannah
	Advising students to do extended reading after class	Daisy
	Advising students to read the exercises to predict what to listen to	Daisy
	Focusing on the main clause of long and difficult sentences	Daisy
	Dictating and/or translating key sentences	Amy
	Explaining technical terms	Ella
	Advising students to guess the meaning of new	Daisy, Ella,
	words from contexts	Hannah
	Advising students to combine listening with reading to visualize new words	Alfred
	Complementing knowledge about slangs and advising students to accumulate slangs in everyday learning	Ella
	Playing the recordings for more times	Amy, Daisy, Ella, Hannah, Alfred
	Pausing at key information	Ella, Hannah
	Providing EFL listening tips like link-ups, stress, etc.	Daisy, Ella
Process	Training students to do note-taking during listening	Daisy
1100055	Training students to do oral or written summaries after listening	Alfred
Instructional factors	Combining listening with other language skills of reading, speaking, and writing	Alfred
	Increasing the amount of practice in and out of classroom	Alfred
Personal factors	Abandoning over-difficult materials to protect students' self-confidence and morale	Amy
	Encouraging students to overcome difficulties	Daisy
	Improving students' pronunciation and intonation	Ella
	Providing audio scripts to students and make them	Hannah
	read aloud after the recordings in chorus	
	Advising students to learn English songs	Daisy, Alfred

The sources of difficulty in EFL listening reported by the participating teachers are presented based on four categories, that is, input, process, instructional factors, and personal factors; the solutions adopted by the participants are presented in accordance

with these reported sources. As Table 5.2 and Table 5.3 show, teachers state that there can be 16 sources of difficulty in EFL listening and they take 22 corresponding solutions to cope with the sources and modify the difficulty level. The following sections will elaborate on these sources of difficulty and corresponding solutions.

5.3.2.1 Sources of difficulty in EFL listening related to input features

Input features are the greatest source of difficulties in EFL listening reported by the participants. There are three main subcategories: Background information about the culture and topic, linguistic factors of syntax and vocabulary, and the speech rate of the recordings. There was a consensus amongst the teachers that unfamiliarity with background information about the culture and topic in the listening material can cause difficulty in EFL listening. Amy's views are representative of the other participants.

(Amy) The cultural background is the first thing to know about (for students). A listening passage will be beyond comprehension without knowing the cultural background.

Amy also gave an example which illustrates the importance of familiarity with background information of topic.

(Amy) The listening material will be too difficult if it is not familiar (to you), isn't it? ... Let's say the material is about a western custom: If you know about this western custom, it will be easy for you to comprehend; if you know nothing about it, it will be too difficult for you.

Daisy's suggestion that familiarity with topic is important was agreed with by other participants:

(Daisy) Maybe students are not familiar with the topic of the listening material. It can be about something very technical, such as topics concerning biology or engineering that students of liberal arts haven't learnt, which results in the loss in students' listening efficiency. Contrary to an ancient Chinese idiom that goes "every subject has its own experts", everyone has blind spots in his or her learning.

The second subcategory of linguistic factors, syntax and vocabulary, is an important source of difficulty in EFL listening. Difficulty with syntax, especially long and complex sentences, was identified by all the participants. When sentences are too long, students can lose their focus on the meaning, and as EFL listening is a linear and transient process, they cannot go back and check the parts where they don't get the point. The complexity of English sentences also makes them difficult as they are very different in structure from Chinese ones, as Amy says in this interview extract:

(Amy) English sentence structures are different from those of Chinese sentences. A very simple example is about the sequence of sentence constituents: English sentences put the important information first, while Chinese sentences have a lot of attributive modifiers at the front and put the most important information at the end.

As well as differences in the sequence of sentence constituents, English sentences are especially difficult with complex grammatical features such as parenthesis and ellipses.

Compound sentences consisting of a main clause and subordinate clauses are also difficult for students during EFL listening practice.

The second linguistic factor is vocabulary. Daisy thinks this is the biggest and the most important factor which hinders students from in-depth EFL listening comprehension. Hannah also found that vocabulary is one of the biggest barriers to listening, and the weakest point of her students. They emphasised that vocabulary blocks students from efficient EFL listening comprehension in two ways: For students who are at the primary stage and do not have large command of vocabulary (as in Hannah's and Alfred's case), some everyday English words may stand in their way; for students who do have a large vocabulary, unfamiliar technical terms and slang that occur in listening can be a problem. Examples can be found in the participants' interview data:

(Alfred) As for students in Year One in our college, their command of vocabulary is small. They need more time to memorize or to get familiar with the words. In my class I find that their main difficulty in comprehending listening materials is their limited vocabulary.

(Amy) Vocabulary is a factor. They (students) sometimes may get stuck in a key word which they don't understand, and the word appears many times: This definitely has a negative influence on their listening efficiency.

Technical terms are included in the technical topics of the EFL listening materials. They cannot be separated from the content and principles and account for much of the

difficulty of EFL listening materials with technical topics. Slang words are another aspect of vocabulary in the EFL listening has causes students' comprehension problems.

(Ella) Another source of difficulty of EFL listening in vocabulary is slangs. In slangs, every word is familiar (to students), and the sentence patterns involved are also simple. However, students just don't understand the meanings conveyed (in the slangs). The meaning of a slang is not the simple combination of the meanings of the words contained in the slang.

The third subcategory is the speech rate of the recordings. Four out of five participants mentioned that the fast speech rate is frequently a factor which accounts for the difficulty in EFL listening. When the speech rate is fast, the message delivery to students becomes slower and less efficient.

Apart from the three main subcategories presented above, some other input-related factors, such as lack of visualizing ability and genre of the listening materials, were also mentioned in the interview data. In Alfred's opinion, the ability to visualize during listening is an indicator of a good listener.

(Alfred) There is a saying concerning EFL reading: "An efficient reader can visualize what he reads". I think it is also true of a good listener. An efficient listener can visualize what he or she is listening to. He or she is able to visualize what they have heard.

The genre of the listening materials can be a cause of difficulty, especially news items because of the fast speech rate, up-to-date content and structure that is particular to news reports. The research on the criteria for selecting TV news items in the EFL classroom (Bell, 2003) has pedagogical implications for the EFL listening classroom teaching in terms of material selection.

5.3.2.2 Sources of difficulty in EFL listening related to process features

Teachers mentioned three subcategories of process-related sources of difficulty in EFL listening: The lack of EFL listening strategies, failure to check answers, and poor short-term memory. The first subcategory is the lack of EFL listening strategies in students. There is a misunderstanding about EFL listening comprehension among students that comprehension of the listening material means understanding or translating every word of the material. An interview excerpt from Daisy provides evidence of her the cognitions about a process-related source of difficulty:

(Daisy) Strategies are important for EFL listening. For example, some students do not know how to take notes during the listening process; as a result, they lose much information, which prevent them from good understanding of the material.

Students, instead should be focusing on the message conveyed in the listening material. A misunderstanding of the process of EFL listening raises the difficulty of the listening activity, and can frustrate students through their preoccupation that they may miss the key point, or find that the topic is not what they expect. As a result, students of EFL listening always feel uncertain about the sentences they are listening to, which lowers their confidence, and thus reduces the time to engage with the following sentences.

The second subcategory is the failure to check answers during the listening process. Unlike EFL reading, during which students can confirm the information and message by re-reading when they feel uncertain about some part of the material, EFL listening is linear and transient process during which students can only move forward and may lose the sound information they had just heard. Failure to check answers makes EFL listening process more difficult for students. Alfred talked about this topic:

(Alfred) Students look like lost at the time during listening process when they try to confirm some information but cannot. Listening is a linear process and cannot be reversed; you cannot listen back to the point that confuses you as you can in reading.

The third subcategory is students' poor short-term memory. Daisy mentioned the effect of short-term memory on listening outcomes:

(Daisy) Short-term memory is important. As short-term memory affects reading, it also affects listening. A student will definitely have high listening scores if he or she has good short-term memory.

In the teacher participants' views, there are three subcategories of sources of difficulty related to process features. The lack of EFL listening strategies, failure to check answers, and poor short-term memory increase the difficulty level of the listening materials. Teachers also provided specific examples as evidence of their beliefs.

5.3.2.3 Sources of difficulty in EFL listening related to instructional factors

Three subcategories mentioned by the participants fall into this category: The lack of listening practice, uncomfortable environment, and task types. The first is the lack of listening practice. Alfred and Hannah emphasized this factor in their talks:

(Alfred) I think the primary reason for students' difficulty in EFL listening is the lack of listening practice. The amount of input is important.

(Hannah) Without a large amount of time immersed in EFL listening practice, I think it is super unrealistic for students to achieve anything in this course.

Alfred further explained that the insufficient class hours contributes to this difficulty.

(Alfred) Limited help is offered through the EFL listening lessons to the improvement of students' listening ability due to the insufficient class hours. Let's say there are 48 or 64 periods of EFL listening in one semester, which occupies only a small portion of all the class hours in the whole semester. Even if you use every class hour 100% efficiently, the overall time (spent on EFL listening practice) cannot reach the ideal level.

The second subcategory is an uncomfortable or distracting environment for listening. Anything that happens in or outside the classroom, such as a broken bulb in the classroom, may distract students, or make them feel uncomfortable, thus negatively influence students' EFL listening performance. Daisy's view was consistent with other participants:

(Daisy) The environment of EFL listening, such as the noise outside the classroom, influences students' performance in listening practice. Therefore if there is noise outside the classroom in my class, I will have the door and windows closed to prevent those noises from distracting students away from attentive listening.

The third subcategory is task types. Studies have found that task types have an influence on EFL listening difficulty (for example, Brindley & Slatyer, 2002; Chang & Read, 2006; Y. Hu, 2006; Huang, 1998). The task types mainly adopted in EFL listening classes include dictation, multiple choices, gap-fillings, and answering questions. The difficulty level of EFL listening practice related to task types is not fixed and unchangeable, but is subject to individual students' listening experience and their strength and weakness in listening. Although there are individual difference in students, it is generally accepted that, in terms of the requirements of type of task and the information provided, the hierarchy of tasks from easy to difficult is multiple choice, gap-filling, dictation, and answering questions.

Lund (1990) established a taxonomy for teaching second language listening, in which he classified listening tasks into two main categories: Listener function and listener response. In his taxonomy, listener function has six subcategories: Identification, orientation, main idea comprehension, detail comprehension, full comprehension, and replication; while listener response contains nine subcategories: Doing, choosing, transferring, answering, condensing, extending, duplicating, modelling, and conversing., The classification of the four common task types in EFL listening, according to Lund's framework of listener function and listener response, are demonstrated in Table 5.4

below. For conciseness the following abbreviation are used: MC -- multiple choices; GF -- gap-filling; DT -- dictation; and AQ -- answering questions.

Table 5.4 Classification of EFL Listening Task Types in Terms of Listener Function and Listener Response

Function	Identif		Main idea	Detail	Full	Repli-
D	ication	n	compre-	compre-	compre-	cation
Response			hension	hension	hension	
Doing						
Choosing		MC	MC	MC	MC	
Transferring	GF	MC; GF	MC	MC; GF	MC	
		1 60 40	MG 40	MG 40	MG 40	
Answering		MC; AQ	MC; AQ	MC; AQ	MC; AQ	
Condensing	GF	GF; AQ	AQ	GF; AQ	AQ	
Extending		AQ	AQ	AQ	AQ	
				-	_	
Duplicating	GF;	GF		GF		DT
Modelling	DT					
Conversing		MC; AQ	MC; AQ	MC; AQ	MC; AQ	

In multiple choice task, which is a traditional type of EFL listening tasks, students are asked to choose one answer from four options provided below the question. It is the easiest type of EFL listening tasks in form in that it provides all the information needed to answer the question; what students need to do is tell the correct one from the four options. In this task type, the listener functions involved are orientation, main idea comprehension, detail comprehension, and full comprehension; the listener responses involved are choosing, transferring, and answering.

Gap-filling ranks as the second easiest on the list because information, which assists students with listening comprehension process and working out the answers, is provided in the question. In this task type, the listener functions involved are identification, orientation, and detail comprehension; the listener responses involved are transferring, condensing and duplicating.

Dictation is difficult because no written information is provided and students need to replicate the original text accurately including every punctuation mark. In this task type, the listener functions involved are identification and replication; the listener response involved is duplicating.

The most difficult task type is answering questions in which no information is provided and students are asked to use their logical reasoning and language skills to answer the questions in organized sentences. Students need to first organize their thinking and then to organize their words, which involves a number of strategies and skills. In this task type, the listener functions involved are orientation, main idea comprehension, comprehension of details, and full comprehension; the listener responses involved are answering, condensing, extending, and conversing.

5.3.2.4 Sources of difficulty in EFL listening related to personal factors

Three subcategories under the source of difficulty related to personal factors are nervousness of students when doing EFL listening, students' incorrect pronunciation, and instructors' teaching styles. Among the three subcategories, students' incorrect pronunciation was highlighted by teachers.

(Ella) Some students incorrectly pronounce certain words and regard the wrong pronunciation as correct, which results in their poor EFL listening ability.

5.3.2.5 Solutions related to input features

The solutions adopted by the participants in their classroom teaching to reduce the difficulty level in EFL listening related to input features can be grouped into three categories according to their respective sources: Background information, linguistic factors, and the speech rate.

First, the solutions related to background information adopted by teachers range from lecturing on cultural and technical knowledge in class to advising students to do extended and/or extensive listening or reading practice after class. The following except from the interview with Hannah illustrates this point.

(Hannah) Repeated listening, extensive listening, and extensive reading are important. Here I want to share with you an example of my college classmate. She might not have received any EFL listening training in high school; her EFL listening was very poor during the first days in university and her EFL listening marks were hardly improved for a fairly long period of time. But she had firm determination. For some days she stayed in the dormitory room and kept practicing 10 sets of TOEFL listening exercises repeatedly every day; finally one day she found that she could understand the recordings. From then on, her EFL listening ability improved fast. I asked students to do listening and reading exercises during holidays and told them that if those jobs were done well, exams at the low level would not be a big issue, and looking from a high level these materials can make a difference and help with many other things like nurturing

spirituality and expanding knowledge, etc. The key point is to listen and read.

In Hannah's example, her classmate's experience in EFL listening demonstrates her cognitions that repeated and extensive listening practice can lead to a qualitative leap in EFL listening abilities. Hannah also mentioned that there were other benefits of extensive listening and reading as well as an improvement of EFL listening abilities, such as spiritual cultivation of students and expansion of knowledge.

Second, the solutions related to linguistic factors reported by the participants include focusing on the main clause of complex or compound sentences, dictating and/or translating key sentences, explaining technical terms, and advising students to guess the meaning from contexts, etc. In dealing with long and difficult sentences, Daisy's and Amy's solutions are typical of the other participating teachers. Sometimes Daisy's solution is advising students to focus on the main clause of the long sentence.

(Daisy) I would tell students to note down the main clause quickly when they meet long thus difficult sentences during listening. This helps them form a thought process to deal with the long sentences: the main clause of the long sentence is the primary part to be comprehended; if the main clause is neglected while some other information is obtained instead, students may lose the main information, which will make the sentence incomprehensible.

Amy's solutions for long and difficult sentences are dictating and/or translating key sentences.

(Amy) If students didn't understand the recording, I would put the following exercises away and do a dictation of the sentence which blocked their comprehension first. Sometimes I would translate the difficult sentences (into Chinese).

Vocabulary, for example, technical terms and slang, is a major obstacle which teachers emphasised in their interviews, and for which teachers shared with me their usual solutions. Ella's solution for technical terms is explaining the terms, and for slang she would explain the term and advise students to collect slang from everyday reading and listening.

(Ella) About the technical terms, I would introduce some background information or basic mechanism in the relevant field and list the technical terms emerging in the recording, then the rest would be readily solved. The meaning of the slang is not the combination of meanings of the words which form the slang, most of which belong to colloquialism. Such courses as EFL listening and EFL intensive and extensive reading involve slangs; students need to be reminded to accumulate the slangs they meet.

Daisy's usual solution is advising students to guess the meaning of new words emerging in the recordings from contexts:

(Daisy) About the new words, I would deal with them in advance only when they are really difficult; otherwise I would deal with them during listening because during EFL listening tests or in our real-life situations, the new words are dealt with during listening. We would guess the meaning (of the new words) from contexts. If the new words are provided in advance, students would form the habit of relying on the prior

work done before actual listening.

Alfred's solution for difficulty with vocabulary is to advise students to combine listening with reading and to visualize new words.

(Alfred) I would tell students that if you fail to comprehend the recordings, you can do the listening and reading the scripts at the same time to combine your vision and hearing. Failure in listening comprehension happens when you don't have the words stored in your mind which leads to your loss of information in your hearing. If you have the word in vision, the combination of your vision and hearing can deepen your impression of the word.

Third, there are three main solutions against the fast speech rate of the recordings the participants reported using: Repeated playing of recordings, pausing at key information, and giving students listening tips such as link-ups, stress, etc. Ella's comment below represents teachers' views which were unanimous as stated in their interviews.

(Ella) Another factor is the fast speech rate (of the recordings). To solve this, my first solution is to play the recording for more times; second is to pause at key information. I think that to overcome the difficulty from fast speech rate and make progress, two qualities are needed: language sensitivity and pronunciation tips, such as link-ups. What I often do is pause in the middle (of the link-ups) or tell from the meaning when sometimes several articles and prepositions are placed together and read very fast.

To sum up, teachers adopted three categories of solutions to reduce the difficulty level of EFL listening related to input features, a lack of background information, linguistic factors, and the speech rate. Solutions related to a lack of background information are lecturing on cultural and technical knowledge and advising students to do extended listening/reading after class. Solutions related to linguistic factors include focusing on the main clause of complex and compound sentences, dictating and/or translating key sentences, explaining technical terms, and advising students to guess the meaning of new words from context. Solutions related to fast speech rate of recorded listening material consist of playing the recordings repeatedly, pausing at key information, and providing listening tips.

5.3.2.6 Solutions related to process features

As teachers mentioned in their interviews, there were three subcategories of process-related source of difficulty in EFL listening: The lack of EFL listening strategies, the failure to check answers, and short-term memory. The solutions against these problems are training students to do note-taking during listening, and training students to do oral or written summaries after listening. Taking notes was identified by Amy in her interviews:

(Amy) I would let students listen to the recording without pauses and do some notetaking work on their exercise books. Take down the things they deem important. During the first time listening, students are asked to take down the words they hear; during the second time listening, students are asked to listen for the gist and work out an outline.

Taking notes is also a frequently adopted solution by Daisy.

(Daisy) I ask my students to take notes in every piece of listening material. Just now I also processed the retelling exercise as note-taking, because it will take too much time in class if you ask some students to share their views with the class. Now that I purposefully processed retelling part as note-taking, students can listen together and repeat in chorus.

Training students to do oral or written summaries after listening is often used by Alfred as a solution against process-related source of difficulty in EFL listening.

(Alfred) After listening, students can do a summary. An oral summary is one form; a written summary is another which can be done by students after they listen to a recording or watch a video clip.

The excepts from interviews show that solutions related to process features adopted by teachers in their classroom teaching include training students to do note-taking during listening, and training students to do oral or written summaries after listening. These measures can provide solutions to the difficulties that arise in EFL listening that are related to process features.

5.3.2.7 Solutions related to instructional factors

Consistent with the three subcategories of sources of difficulty in EFL listening related to instructional factors (the lack of listening practice, uncomfortable environment, and task types), teachers reported that they combined EFL listening with other language skills, such as speaking, reading, and writing, increased the amount of EFL listening

practice, and adjusted task types of EFL listening practice. The first solution they advocated is combining EFL listening with other language skills, such as speaking, reading, and writing. Alfred mentioned this approach in his interview:

(Alfred) EFL listening should be combined with speaking, reading, and writing. The main activity in the listening class should be listening. However, when students confront with difficulties in comprehension, their exertion to listen diligently should not be encouraged; instead, reading should be added, then writing.

In Alfred's opinion, the addition of other language skills such as speaking, reading, and writing into EFL listening can support and enhance students' performance in listening comprehension.

The second solution is increasing students' practice time for EFL listening, as describe by Hannah.

(Hannah) It is necessary to push (even if we have to push them with mild mandate) students to learn actively. It should not be the case that we teachers lecture with sweat like rain every day while students are watching down there without any learning activities. My requirement is that you can dictate whatever materials you like, be them movies or lectures. Everyday practice is very important.

The third solution is adjusting the task type of EFL listening practice. Amy found that students in her EFL listening class would be reluctant to do passage dictation at the initial stage because of its intense difficulty. To solve this problem, Amy changed the

task type into gap-filling to reduce the difficulty level:

(Amy) At the initial stage of passage dictation, students would think of giving it up because the task was too difficult for them. Facing this situation, I offered to students the scripts with blanks scooped by me and asked them to fill in the blanks while listening to the recording. With the support of the text with key information missing, students would feel the task of filling blanks not that difficult as whole passage dictation and then become willing to do it. The initial listening practice would frustrate students; the lateron alteration in task type lowers the difficulty level and then improve students' confidence in completing the task.

From Amy's report on the task type alteration, it can be seen that with her knowledge of her students' perceptions about the difficulty of EFL listening practice, she manages to find a solution. Changing the task type proves to be efficient and helpful.

5.3.2.8 Solutions related to personal factors

The solutions taken by teachers against the sources of difficulty of EFL listening related to personal factors mainly fall into two subcategories: Building students' self-confidence in dealing with listening difficulties, and improving students' efficiency in EFL listening practice. In terms of building students' self-confidence, Amy and Daisy have different perceptions which leads to their different practices.

(Amy) If students really cannot understand a certain piece of recording, I would give it up because students would feel depressed if you keep them listening to the

material which is too difficult for them. I would tell them that it's ok for them to give up listening to it.

Amy's solution of replacing difficult materials has theoretical support from Krashen's (1985) i+1 language input hypothesis. In this hypothesis "i" refers to students' present language proficiency and "i+1" refers to the level of input language. The hypothesis states that the input is comprehensible when it is a little higher than students' present language proficiency (Krashen, 1985).

Daisy described a solution that differed from Amy's:

(Daisy) Students will encounter many technical terms in the recording when the topic is not familiar to them. It doesn't matter; we should build confidence in students to face the difficulty and overcome it when they may not be able to understand the recordings they meet.

To improve students' efficiency in EFL listening practice, teachers' advocated solutions focus on students' pronunciation.

(Alfred) As freshmen students they should differ pronunciation of different accents.

They should get familiar with pronunciation and intonation of the words and sentences.

We should have time to improve their pronunciation of the word.

(Alfred) The more they listen to the material, the more they will differentiate the pronunciation, and the more they will get familiar with pronunciation so that the

pronunciation of words can stay in their mind and they can retrieve the meaning of words when they are listening to the standard sound.

As well as Alfred's suggestion of more practice, some other solutions to improve students' pronunciation were mentioned; for example, Ella emphasised providing EFL students with listening tips such as the use of link-ups, contractions, and other similar strategies. Daisy identified similar ideas in her interview as well:

(Daisy) Experienced EFL listening teachers will remind students of paying special attention to pronunciation and intonation about the link-ups or stress at a certain point of the recording.

The way Hannah reported improving students' pronunciation and intonation involves considerable engagement on students' part:

(Hannah) If it is a little bit difficult, I will just let them read with the recording, reading the script aloud in chorus; they just read aloud as the speaker talked, following the speaker's speed. It takes about 40-60 minutes. It is the main training in the class.

Students' engagement as well as their interest in pronunciation and intonation was aroused when Daisy used the following solution; this was an approach that also mentioned by Alfred:

(Daisy) Sometimes I would recommend some beautiful or inspiring English songs to students for their leisure listening. When their EFL listening and speaking competences became better and better, I would run some tiny singing contests among students to see their pronunciation and rhythm.

Teachers had different understandings of what caused difficulties for students of EFL listening related to personal factors. The solutions they took in their practice to reduce the difficulty level therefore differed. While some of their perceptions and practices were similar, others were very different, so that each of the participating EFL teacher was quite unique in their perceptions and practices.

5.4 CHAPTER SUMMARY

This chapter started with introducing the four major categories of teacher cognition that arose from the semi-structured interviews. The four categories included teacher cognition about the nature of EFL listening, teacher cognition about students of EFL listening and their learning, and teacher cognition about the teaching and materials of EFL listening, as well as EFL listening teachers' reflections. The major part of this chapter presented data from the interviews which focused on the first two categories, namely, teacher cognition about the nature of EFL listening and about students of EFL listening and their learning.

CHAPTER 6 TEACHER COGNITION ABOUT TEACHING AND MATERIALS OF EFL LISTENING AND REFLECTIONS

6.1 INTRODUCTION

This chapter reports the data on the third and fourth category of teacher cognition of EFL listening: Teacher cognition about the teaching and materials of EFL listening, and teachers' reflections on the teaching of EFL listening. It starts with a summary of teacher cognition about the teaching and materials of EFL listening presented in descriptive texts and tables. The themes and subthemes about teacher cognition about the nature of EFL listening teaching, the elements facilitating EFL listening teaching, and the role of EFL listening teachers are included. Teachers' comments on the EFL listening textbooks and their criteria for selecting the extracurricular materials are also presented in full. The chapter then reports findings on the participants' reflections on the teaching of EFL listening which include the form, content, and effect of reflection. It includes teachers' reflections on students' listening abilities and classroom involvement, changing listening materials, teaching methods, and the form of reflections. Finally a brief summary is provided.

6.2 TEACHER COGNITION ABOUT THE TEACHING AND MATERIALS OF EFL LISTENING

In this section, teacher cognition about the teaching and materials of EFL listening is presented. The presentation focuses on three themes that emerged: Cognitions about

EFL listening teaching, cognitions about the role of EFL listening teachers, and cognitions about EFL listening materials.

6.2.1 Teacher cognition about EFL Listening Teaching

Teachers' illustration and accounts centred on themes related to two subcategories of cognitions about the teaching of EFL listening: Cognitions about the nature of EFL listening teaching, and elements influencing EFL listening classroom teaching.

6.2.1.1 Teacher cognition about the nature of EFL listening teaching

The participants' understanding of the nature of EFL listening teaching included topics such as the properties of EFL teaching process, the relationship between EFL teaching and teachers, and the relationship between EFL teaching and students. Their views are presented in Table 6.1 below.

Table 6.1 Teacher cognition about the Nature of EFL Listening Teaching

Themes	Cognition	Participants					
Properties of	EFL listening classroom teaching is teachers'	Daisy					
EFL	subconscious application of certain research						
listening	implications.						
teaching	There are rarely marked highs and lows in EFL	Daisy, Ella					
	listening classroom teaching.						
PPI		ъ.					
EFL	EFL listening classroom teaching has a high demand on teachers' oral English and command of related	Daisy					
listening teaching and	knowledge.						
teachers	•						
teachers	seems subtle and hidden.	Daisy					
	seems saeue and madein						
EFL	EFL listening classroom teaching puts spurring	Alfred					
listening	situational stress on students.						
teaching and	Students' subjective initiative matters.	Ella					
students	Students' listening practice should be prioritized over	Daisy					
	classroom interactions.						

As Table 6.1 shows, teacher cognition about the nature of EFL listening teaching consist of three themes: Properties of EFL listening teaching, EFL listening teaching and teachers, and EFL listening teaching and students. Each theme contains two to three major understandings described by the participating teachers. In the first theme, two understandings are prominent. The first, articulated by Daisy based on her teaching experience, is that EFL listening classroom teaching is teachers' subconscious application of certain research implications. As Ella added, her EFL teaching did not generate extreme emotions, and that there are rarely lessons that feel particularly good or particularly bad, that is lessons she would mark ups or downs.

(Daisy) Last year I read a research paper about EFL listening which mentioned a certain theory. Then I applied and tested the theory in my classroom teaching. I think as a matter of fact we are doing research-related activities in everyday classroom teaching; however it is regretful that we do not put them into words; instead we do them in a subconscious and passive state. We are doing research subconsciously; we haven't changed it into conscious movement. Therefore when I read about that theory, I was aware of its existence in my classroom teaching. My idea was confirmed through the observation of my classroom teaching. But relevant data were not collected and analysed due to various actual reasons. I think all teachers are subconsciously applying certain techniques or theories of research into their classroom teaching.

The second understanding that classroom teaching of EFL listening generally proceeds smoothly without extremes of reactions was first mentioned by Ella and was further explained and emphasized in details by Daisy.

(Ella) It rarely happens that I feel good or bad about one EFL listening classroom teaching; that is, there is no big difference between the good ones and the bad ones. Perhaps my classroom teaching is quite smooth without marked ups and downs or excitement and emotions.

(Daisy) Chances are few for teachers to be dramatically emotional in the EFL listening classroom teaching; instead teachers may sense the subtle nuance. The nuance is subtle instead of fluctuant. Sometimes when you realized it, it has passed and you didn't do anything; maybe you decide to remind yourself of being attentive the next time you meet it. There are not many ups and downs in my classroom teaching.

As the excerpts show, teachers' perception of properties of EFL listening teaching centre around actual classroom teaching and its relationship with research in this field. From their perspective, teachers' classroom teaching is usually smooth and steady without dramatic changes, and it also reflects research implications in the field of EFL listening (for example, see Field, 2009; Rost, 2011). As for the first theme, there are two major ideas in the second theme of the relationship between EFL listening teaching and teachers. Firstly, EFL listening classroom teaching has a high demand on teachers' oral English and command of related knowledge. Secondly, teachers' position in EFL listening classroom teaching seems subtle and hidden. Daisy, when talking about how her ideas of EFL listening classroom teaching changed before and after taking the course, emphasized the high demand on teachers' oral English and command of related knowledge, which she described in length.

(Daisy) EFL listening has a high demand on teachers' oral English. Unlike in EFL reading classes where teachers' pauses can be ignored, any of teachers' oral mistakes in an EFL listening class will be passed out immediately into students' ears because you are talking in the headset system and students are listening attentively. Second, to some laymen, EFL listening teaching seems as simple as playing the recordings; as a matter of fact, it involves a lot of related knowledge. What to emphasize and remind students of during and after playing the recordings involves a lot of knowledge.

Daisy's second idea, that teachers' position in EFL listening classroom teaching seems subtle and hidden, emerged when noting that teachers have less influence on listening than reading in the EFL classroom teaching.

(Daisy) In my opinion, the influence of teachers on the EFL listening class is not as obvious as that on EFL reading classes because students concentrate on listening and analysing the materials more than on teachers' facial expression. Less eye contact is maintained in EFL listening classes. Thus teachers' position at EFL listening classroom teaching seems subtle and hidden.

In the third theme, the relationship between EFL listening teaching and students, three perceptions aroused my attention during data analysis: EFL listening classroom teaching puts situational stress on students; students' subjective initiative matters; students' listening practice should be prioritized over classroom interactions. Alfred emphasized that although nowadays EFL listening can be learned and practiced in many ways, classroom teaching has a unique and irreplaceable status.

(Alfred) Why do we have teaching and learning in the classroom? I think that studying together in the classroom offers some situational stress to students and lengthens their concentration span. Without the stress, for example doing EFL listening practice at home, there will be too much distraction. In my idea, questioning randomly in class gives students situational stress and pushes them to make greater effort, which leads to a better outcome than self-directed learning of EFL listening.

When asked about the relationship between EFL listening teaching and students, Ella identified the importance of students' subjective initiatives in EFL listening classroom teaching. She viewed students' initiatives as elements that may lead to distinctive learning outcomes.

(Ella) Students' subjective initiative matters. Some students are rigid in learning, following strictly what teachers said or what can help achieve high marks in exams as the Chinese traditional instruction preaches. Some students are realistic and have their own goals in learning EFL listening: Listening comprehension for communication. That's why some students are good at working out questions while others are good at communication.

The third idea is about time allocation in EFL listening classroom teaching. In Daisy's opinion, teacher-student interaction activities should not take up too much classroom teaching time; instead, students' listening practice should be prioritized and should be allocated the plenty of time.

(Daisy) The teaching schedule cannot be maintained if there are too many teacher-

student interaction activities in classroom teaching. I often tell students that I will try to spare time for their listening practice even if they complain that they don't have enough interactions. The time is better used if it is spent on another listening to the recordings.

To summarize, in teachers' perception, the nature of EFL listening teaching covers three themes. The first theme, properties of EFL listening teaching, noted that EFL listening teaching in the classroom is teachers' subconscious application of research implications, which proceeds smoothly with few highs or lows. The second theme, the relationship between EFL listening teaching and teachers, identified that EFL listening teaching makes a high demand on teachers' oral English and command of related knowledge, and that their position in the classroom teaching appears to be subtle and hidden. The third theme, the relationship between EFL listening teaching and students, incorporates that EFL listening teaching puts situational stress on students, students' subjective initiatives matter, and students' listening practice should be prioritized over classroom teacher-student interactions in the classroom teaching of EFL listening.

6.2.1.2 Elements facilitating EFL listening teaching

Teachers believed that four elements facilitate EFL listening classroom teaching: Conscious application of research findings, teaching experience from other EFL courses, EFL listening tests, and students' active engagement. The first element is teachers' conscious application of related research findings. Daisy's idea in this respect was consistent with other teacher participants.

(Daisy) In my understanding, successful classroom teaching primarily needs prior preparation at full length, and conscious application of research findings into

classroom teaching can help achieve a better effect than subconscious application.

Some teachers may consider it troublesome to apply research findings into actual teaching due to the lack of time, energy or interest, while as a matter of fact they have been doing so all the time.

Daisy's words can be interpreted that teachers have been consciously and/or subconsciously applying research findings into classroom teaching of EFL listening although they may be unaware of it. She did not express explicitly that the application of research findings facilitated her teaching, but her positive attitude could be implied through her expression. Daisy proposed the second element, that teaching experiences of other EFL courses have contributed to her EFL teaching, while Hannah also talked about some specific practices she adopted in her EFL classroom teaching which had been influenced by teaching experience of another EFL course.

(Daisy) Although it is my first time teaching EFL listening, I have gained teaching experience from other EFL courses. EFL courses have a lot in common and can be compared by analogy. Teaching is interlinked and teaching experience of other EFL courses will have positive influence on the teaching of EFL listening.

(Hannah) I think that I pay more attention to not only listening but also the usage or the function of a passage because I have been teaching Intensive Reading for a long time. I will tell my students to pay attention to the whole passage and how to express something well.

(Hannah) I have been teaching Intensive Reading for more than ten years.

Sometimes I analyse words and sentence structures in EFL listening class.

Daisy and Hannah agreed, with supporting evidence from their teaching practice, that teaching experiences from other EFL courses facilitated their EFL listening teaching.

The third element believed by teachers to have a positive impact on EFL listening classroom teaching is EFL listening tests. Amy explicitly argued for the relationship between EFL listening tests, especially TEM-4, and EFL listening classroom teaching, while Daisy explained her insights into the process of how EFL listening tests help consolidate knowledge for students.

(Amy) Tests and classroom teaching complement each other. Some exercises related to TEM-4, for example, dictation, are interwoven into my EFL listening classroom teaching; when TEM-4 is approaching, several mock tests will be organized by our department for students. With the motivation to pass the tests, they (students) will put all their heart into doing the exercises. Repeated exam-related listening practice over a period of time results in great help with their listening ability improvement.

(Daisy) Personally, I hold that tests are spurring and helpful. Quite a few things in students, such as knowledge, learning methods, or awareness of certain points, got reinforced through tests. During preparation for tests, students make great effort to recite or memorize knowledge, and to do a lot of listening practice, through which knowledge and abilities get reinforced and stationed into the hard disk of human brain,

not easy to be returned to the books again. If there were no such tests and we just learnt for general professional ability, the learning outcome would not have been so good.

Amy and Daisy agreed that tests of EFL listening teaching increase students' inner drive to pass the tests and enhances their efforts to consolidate knowledge. A customary saying in China, that knowledge learned and reinforced through repeated hard work will not be "returned to the books/teachers" easily, means knowledge is not forgotten after being learned. The fourth element believed to exert a positive influence on EFL listening classroom teaching is students' active engagement. Daisy expressed her insight into this element by referring to students' raising questions for teachers.

(Daisy) Students' classroom engagement in some way influences teachers' performance. For example, students' actively keeping on asking questions can excite teachers' potential because teachers have to answer questions; they cannot avoid questions. When questions are raised, teachers are obviously supposed to know more than students do because they have more experience and have prepared for teaching. With the questions from students, the interaction between teachers and students will be activated and the atmosphere in the classroom will be better, so is the teaching effect.

To summarize, four elements believed to have positive impact on EFL listening teaching are teachers' conscious application of research findings in classroom teaching of EFL listening, teachers' teaching experience of other EFL courses, EFL listening tests, and students' active engagement. Teachers' voices about the four facilitating elements offers empirical evidence for the research in this field.

6.2.2 Teacher cognition about the Role of EFL Listening Teachers

EFL teachers take a number of roles in the EFL classroom. The participants' perception of the role of teachers can be categorized into three groups: An instructor/trainer, a helper/guider, a role model for students or a learner/explorer of EFL listening. Some of the participating teachers reported that they play multiple roles at different stages of classroom teaching. In the first category, teachers play the traditional role of classroom teaching, that is, they are an instructor or trainer, giving students instructions on EFL listening skills. Daisy and Alfred shared their views on this topic in their interviews.

(Daisy) Sometimes I would explain certain issues to them or help them underpin their problems. Of course sometimes I would give instructions about EFL listening techniques and methods.

(Alfred) In this course I think the role or teacher is more like a trainer. We train students to have their own way to develop their own strategies, to help them improve their listening and improve their knowledge. By my method or by my teaching discipline, I let them know how to practice their listening ability after class, to understand and to get a hint what should be learnt in their after-class activities.

Daisy and Alfred justified their understanding of teachers' role as an instructor/trainer with their individual teaching experience of EFL classroom teaching, through stating that they teach students EFL listening skills and train students to develop their own listening strategies. The second category: A helper or guider. In describing the process of teaching EFL listening, Amy made an analogy to coaching swimming.

(Amy) I think a listening teacher should be a helper, helping students with listening. It is like helping them complete a listening task instead of taking a leading or controlling role in the EFL listening class. In this sense, teaching EFL listening is similar to coaching swimming classes. That you can swim does not necessarily mean they can swim; your continuously demonstrating swimming does not necessarily result in their swimming ability. Their actual swimming practice is a must. Therefore you just assist them in the process like a swimming coach and prevent them from being drowned or deorbiting.

By comparing teachers' role with swimming coaches, Amy emphasizes the guidance and protection function of teachers for students. Ella also regarded herself as a helper to students, but her perception of "helper", while similar to Amy's understanding, has some differences. Ella says that while she cannot take students' place in the learning process, she offers *targeted guidance* to meet their learning needs.

(Ella) My role of the EFL listening teaching is a helper. Firstly I have the thinking that I don't want to interfere too much of students' learning or do everything for them. Secondly I feel that my capacity is limited in this field and I still need to learn and enrich my professional knowledge. Therefore I try my best to help at their needs, but I let them work on the task by themselves when I think they can do it on their own. I just offer some targeted guidance.

Ella viewed teachers' role as a helper from a different perspective. Although she did not try to define "helper", her understanding of teachers' role as a helper was expressed clearly through exemplification. The third category of the teachers' role in classroom teaching of EFL listening is a role model or a learner/explorer of EFL listening learning. Whereas Hannah talked about her experience in EFL listening classroom teaching as a role model and a learner, Daisy emphasized she was more like an explorer of EFL listening.

(Hannah) Sometimes I talk with them about how I dealt with some EFL listening difficulties when I was a college student. I am also a learner. So I do the exercise with my students together. I will not just ... you see before the class I just get a lot of knowledge of the material but I will not do the exercise before the class. I will not prepare for this part. I will just do the exercise with my students together.

(Daisy) The experience in classroom teaching is very delicate and every time I have new acquisitions. As I am new to EFL listening teaching, every class is a new exploration to me.

In addition to the roles elaborated, participants in the interviews also mentioned that teachers' role in classroom teaching is not fixed; instead, it varies according to the learning needs of students in the classroom. The idea that teachers take multiple roles at different stages of classroom teaching of EFL listening gets consensus from the participating teachers. Daisy's comments are representative of those of the other participants.

(Daisy) EFL listening classroom teaching mainly consists of students' doing listening exercises and teachers' lecturing on EFL listening skills and methods.

However, I am actually like a tape-player when students listen to the recordings; sometimes I am a role model when I share my learning experience in EFL listening with them.

To sum up, teachers perceive that they take a range of roles in classroom teaching of EFL listening and their role is not static in two ways. Firstly, teachers are viewed as taking different roles at different stages, and secondly, teachers' roles are multiple during the classroom teaching process.

6.2.3 Teacher cognition about EFL Listening Materials

EFL listening materials are indispensable in the classroom teaching as they are the carriers of knowledge and thus the bridge between teachers and students. Textbooks are especially important in Chinese universities where curriculum and testing are closely connected to required materials such as textbooks. Traditional language teaching and learning tends to focus on three *centeredness*: Teachers, textbooks, and grammar (Yen, 1987; Bao, 2017). Interview data provides evidence that the participating teachers reached a consensus that EFL listening textbooks play a significant role in their classroom teaching. Ella emphasized the place of teaching materials through differentiating teaching with unified materials when teaching large classes and teaching according to students' aptitude with small classes.

(Ella) Teaching according to students' aptitude suits small class sizes (10-12 students), and teaching according to the unified materials is more suitable for big class sizes. Limited class hours prevent teachers from knowing students thoroughly thus

teaching according to students' aptitude is impossible. Therefore, the selection of textbooks and other teaching materials is more important for big class teaching.

Ella's opinions on teaching materials of EFL listening received support from other teachers as well. The following sections describe the data concerning teaching materials, textbooks and extracurricular materials, used in EFL listening classrooms. The two topics that arose, teachers' comments on textbooks and teachers' criteria on choosing extracurricular materials, are presented in the next section.

6.2.3.1 Teachers' comments on EFL listening textbooks

The textbook is one of the three *centeredness* of traditional Chinese language teaching and learning (Yen, 1987; Bao, 2017). The unique significance of textbooks in the classroom teaching of EFL listening was re-emphasized by Daisy when she elaborated on her understanding of a good textbook and its facilitating function in classroom teaching.

(Daisy) The selection of textbooks is very important for classroom teaching. A well-compiled textbook with a step-by-step structure, up-to-date content, and appropriate knowledge supply can facilitate teachers in the classroom instructions. If the textbook is not so good, teachers need to add some extracurricular materials.

In this study, textbooks used in EFL listening teaching were *Book 1* and *Book 2* (*Students' Book* and *Teachers' Book*) of *A Listening Course* published by *Shanghai Foreign Language Education Press* in 2004. This series of textbooks is among the *Nationally Planned Textbooks for Regular Higher Education in "Tenth Five-Year Plan"* and the

Textbook Series for Undergraduate English Majors in Universities in New Century. The Students' Book, used by the English majors for classroom learning and practice, provides structured exercises with a brief background information and glossary. The Teachers' Book offers corresponding teaching tips and suggested answers to exercises in the Student's Book. Book 1 contains 16 units, two tests, and an appendix with vocabulary. Each unit contains four sections: Section One -- Tactics for listening; Section Two -- Listening comprehension; Section Three -- Oral work, and Section Four -- Supplementary exercises. Book 2 has a structure similar to Book 1 but with the content at a higher difficulty level.

Teachers' comments on the textbooks used in classroom teaching can be divided into two categories, positive comments and negative comments. Positive comments on the textbooks mainly came from Daisy, who thought that the textbook she used was demanding but rewarding to students.

(Daisy) I emphasize to them (students) the focus of the textbook. Some students always want teachers to add some extracurricular materials. In my eyes, it is enough to focus on the textbook since it was compiled by experienced and prestige professors and experts who were sure to consider the materials and vocabulary holistically.

(Daisy) Every coin has two sides, so do textbooks. As a Chinese proverb goes, "You need to do much practice after the master gives you the basic instructions". However good the textbook is, students still need to do a lot of additional work after class. I find every unit in this textbook is a mixture of easy and difficult exercises, which may be against our habit of learning new knowledge gradually; but after you use it for some

time you will find it quite good to have a combination of some difficult tasks that challenge you and some easy tasks that give you a sense of accomplishment.

Daisy pointed out that every unit in the textbook contains easy as well as difficult listening tasks for students. Although this incurred complaints from students, she thought that students should get used to the style and appreciate it is "a combination of some difficult tasks that challenge you and some easy tasks that give you a sense of accomplishment". The textbooks, on the other hand, received criticism from other teachers in terms of the structure, content, pronunciation, and difficulty level. Amy, Alfred, and Hannah expressed negative attitudes explicitly towards textbooks.

(Amy) I am not quite satisfied with the textbook in which the exercises in each unit, instead of the whole textbook, are from easy to difficult.

(Alfred) Textbooks of such basic EFL courses for English majors as Intensive Reading, Extensive Reading are all traditional content-based carrier of knowledge. For example, through the Intensive Reading textbook, students learn language points in vocabulary, grammar, rhetoric, etc.; through the Extensive Reading textbook, students learn knowledge of meaning, stylistics, or background. However, the EFL listening textbooks, no matter how primary, intermediate, or advanced they are, even including some books for training some special skills or for certain tests such as International English Language Testing System (IELTS) or TOEFL, except for some cultural tips or words from texts at the beginning, contain heaps of exercises. Therefore, various EFL listening textbooks would be better called EFL listening exercise-books.

(Hannah) It (the textbook) has a big drawback: All the listening materials were read by the same two or three broadcasters at the same tune which sound monotonous. The content is comparatively obscure and divorced from reality which lacks a sense of time and is thus not appealing to students. And it doesn't train students from basic skills; instead it starts with dialogues, passages, and even news items. It is suitable for students who received good training of basic skills of EFL listening in their secondary and high school stages.

The three teachers talked about their dissatisfaction of textbooks from different perspectives. In Amy's mind, the textbook is not satisfactory because each unit contains listening tasks of different difficulty levels. Alfred regarded the textbook as an exercise-book because its major content is exercises. Hannah commented on the monotonousness of audio materials attached to the textbook, saying the changeless tunes of broadcasters and the out-of-date content were not related to real life situations and did not interest students. Hannah also mentioned that the mixed difficulty levels of listening tasks in each unit were a problem.

To summarize, although there is one positive comment on textbooks used in EFL listening classroom teaching, textbooks were criticised by the participants for the following aspects: The structure of each unit and the whole book is not reasonable; the content focus is exercises; the materials are read monotonously and the content is detached from real life situations; the mixed difficulty levels of listening tasks in each unit is not suitable for those students who did not receive any EFL listening training prior to university. Consequently, the participants chose various extracurricular

materials as supplementary exercises for students. The next section will represent teachers' criteria for choosing the extracurricular materials.

6.2.3.2 Teachers' criteria on choosing extracurricular materials

Extracurricular materials were preferred as supplementary exercises by teachers who were not satisfied with textbooks for students in EFL listening classes. Teachers reported they were very careful in choosing extracurricular materials because of their varied content and quality. Daisy explained her understanding of why some extracurricular materials were of poor quality in her interview.

(Daisy) Some extracurricular materials for EFL listening sold in the market with seemingly rich and colourful content may be compiled for profitable purpose only without a holistic view since most compilers do not have the knowledge and experience about compiling national textbooks. Their limited capacity prevents materials from being scientific; sometimes it is only to attract students to visit their websites and buy related products and services.

Faced with the questionable quality of extracurricular materials, teachers gradually have developed their own criteria for choosing appropriate materials for students. The criteria that emerged from the interview data were appropriate difficulty level, being realistic and abreast with times, and being examination-oriented. The first criterion, *appropriate difficulty level* for students in different stages, was valued highly by the participants. They stated that, while extracurricular materials for freshmen should be simple, for sophomores, the materials should be demanding. Amy, Daisy, and Hannah described their perception and practice in choosing the extracurricular materials.

(Amy) Putting the textbook aside, I introduce some simple extracurricular materials to train students in EFL listening classroom teaching, such as the first part of IELTS exercises off the shelf. The IELTS exercises themselves are everyday conversations; the first part is even simpler — exercises about addresses, numbers of houses, telephone numbers, and some easy dialogues. For sophomores, some talks in TED (Note: abbreviation for Technology, Entertainment, and Design) are suitable.

(Daisy) The extracurricular materials include some audio clips from IELTS, Voice of America (VOA) Special English programs, English songs and poems, etc.

(Hannah) I believe that VOA or British Broadcasting Corporation (BBC) are very good materials for beginners to train their pronunciation and vocabulary.

(Hannah) I plan to add the book "Listen to This" to the EFL listening classroom teaching. This book is good in two aspects: First it helps train students' basic listening skills; second it contains quality listening materials of accents from different English-speaking countries such as Britain, America, Canada, Australia, New Zealand, etc.

Teachers described the materials they chose as supplements to textbooks in classroom teaching and justified their choices as being at an appropriate difficulty level for the students. The materials chosen were mainly testing materials from public English proficiency tests, well-established radio programmes from English-speaking countries, or textbooks especially designed and compiled for English majors. The second criterion

was being realistic and abreast with the times. The advantage(s) of applying this criterion was highlighted by Amy.

(Amy) News items are good materials for EFL listening because they can keep us abreast with times and news vocabulary is closely related to life.

Amy's expressed preference for news items identifies the advantage of her criterion that materials should keep students abreast with times and be realistic, to attract students' interest in listening to them. The third criterion, noted by Daisy in her interview, was that extracurricular materials was *being examination-oriented*.

(Daisy) After completing listening exercises on the textbook, there will be a dictation. Dictation prepares students for TEM-4. The test is an important thing that students must face and the preparation process is also a learning process which should not be separated from each other.

It is surprising to me that teachers do not take examination-oriented materials as their first choice of extracurricular materials for their classroom teaching in the country where supreme importance is given to passing tests by teachers and students. It suggests that EFL listening teachers regard improvement in students' listening ability and proficiency as more important than passing tests.

In brief, teachers' cognitions about teaching materials for EFL listening can be summarized as being slightly divergent on textbooks. The criteria they identify for choosing extracurricular materials include appropriate difficulty level, being realistic and abreast with the times, and being examination-oriented. Their attitudes towards textbooks, and criteria for choosing extracurricular materials, play an important part in their classroom teaching practice of EFL listening.

6.3 REFLECTION ON THE TEACHING OF EFL LISTENING

The concept of reflective thinking was first proposed by Dewey (1993) as "involving not simply a sequence of ideas, but a con-sequence — a consecutive ordering in such a way that each determines the net as its proper outcome, while each outcome in turn leans back on, or refers to, its predecessors" (p. 4, as cited in Hatton & Smith, 1995). It was later extrapolated further as "a special form of problem solving, thinking to resolve an issue which involved active chaining, and a careful ordering of ideas linking each with its predecessors" (Hatton & Smith, 1995, p. 33). Hatton & Smith's understanding of reflection is seminal in that reflective thinking can be taken as an aspiring and purposeful cognitive process which embraces sequences of interconnected ideas guided by underpinning beliefs and knowledge. Reflection in teaching was generally referred to as teachers learning to subject their own beliefs of teaching and learning to a critical analysis, and taking more responsibility for their actions (Korthagen, 1993). In the 1980s Schön started to write about reflective practice in education and research on reflection emerged (Sparks-Langer & Colton, 1991), increasing during this time among teacher educators in the field of teacher education especially EFL/ESL teacher education programmes.

Farrell (2008) posited that reflecting on practice generally refers to teachers thinking about their underpinning beliefs and values about teaching and learning and relating these to classroom practice. Borg (2003) maintained that "teachers are 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). Developing teachers' awareness of reflection on practice is important because it is the beginning of a "process of reducing the discrepancy between what we do and what we think we do" (Knezedivc, 2001, p. 10).

In my study, reflection on teaching refers to teachers' reconsidering or rethinking for a solution to outstanding points in their classroom teaching process, such as difficulties or unexpected occurrences. The teacher participants all accepted their reflection on teaching as a part of their cognitions about EFL listening. This section presents data about teachers' reflection on teaching in terms of its forms, content, and effects.

6.3.1 Tools of Reflection on the Teaching of EFL Listening

Teachers listed four tools by which they reflected on their teaching of EFL listening: Mental rethinking, interaction with experienced others, support through Internet browsing, and efficient implementation. The first tool of teaching reflection is mental rethinking. This form was claimed to be the most common way of reflection adopted by teachers. Ella talked about her experience about reflection on her teaching and her feelings.

(Ella) I have experience of reflection but not in written form. When it happens, it gives my brain a stress stimulation and response, and makes me realize that the occurrence is out of my expectation. It happened several times in my class that students comprehended the material better and faster than I expected. I didn't note it down though.

The second tool of teaching reflection is interaction with experienced others. Daisy and Amy expressed it as a form of their reflection on teaching.

(Daisy) *Sometimes I discuss my reflections with my colleagues.*

(Amy) I reflect on my teaching when encountering problems by consulting experienced colleagues. For example, on how to change students' passive learning into active learning, I remember Mr. J said that students would achieve higher when they did the exercises by themselves than teachers worked very hard on them, and that if teachers could manage to coax students into attentively finishing EFL listening exercises prepared, students would learn well.

Daisy and Amy recounted their experience of consulting experienced colleagues with vivid examples to demonstrate how their cognitions about EFL listening develops in the proximal zone with more capable peers' mediation. Vygotsky's theory of ZPD and mediation can explaining how teacher cognition develops.

The third tool of teaching reflection is support through Internet browsing. Daisy often uses this tool in her reflections.

(Daisy) My tool of reflection is sometimes turning on the computer and searching for solutions from experts and other teachers in their publications or online blogs. I tend to find out relative feasibility of solutions and whether there is some theoretical or scientific foundation for them.

Daisy resorted to the Internet for support from publications and blogs of experts and practitioners in the field who serve as more capable peers to mediate her development cognitions about EFL listening; it is another example that embodies the theory of ZPD and mediation.

The fourth tool of teaching reflection claimed by Daisy is direct implementation.

(Daisy) As a teacher with years of teaching experiences, I will directly implement the thing that I reflect on among students instead of deliberately writing it down.

Daisy has more than twenty years' experiences of teaching EFL courses but only half a year in teaching EFL listening (see Table 4.3). Therefore, her teaching experiences in other EFL courses are an important source of knowledge that underpins her cognitions and teaching practice of EFL listening. Her direct implementation as a form of reflection cannot be separated from her rich teaching experiences which regularly guide her teaching practice in the classroom.

The tools of reflection, as evidenced in the interview data, are mental rethinking, interaction with experienced others, support through Internet browsing, and efficient implementation. The combination of the four tools constitutes a chain of reflective thinking process which promotes the teacher participants' cognitions about EFL listening into a deeper level.

6.3.2 Content of Reflection of the Teaching of EFL Listening

Teachers' reflection covers different aspects and stages of their EFL listening classroom teaching including rethinking of students' current listening abilities and classroom involvement, the changing of teaching materials, and teaching methods.

6.3.2.1 Teachers' reflections about students' current listening abilities and classroom involvement

In this section, data on teachers' reflections about students' current listening abilities and classroom involvement is displayed. Hannah in her interview talked about her reflections about her students' EFL listening abilities. She compared their current learning with her expectations, and compared her reflections about students in EFL listening and reading.

(Hannah) Let me tell you my first reflection. I realized upon the first EFL listening class that their listening abilities were very different from what I expected. I have been teaching Intensive Reading and students have slightly different English levels due to their language cultivation since childhood and personal character. However, students in EFL listening classes were found to be dramatically different in their listening abilities. Students with lowest listening abilities might have many spelling mistakes in dictation practice.

(Hannah) Through the reflection of some students' performance in the repeated dictation practice of the same passage I found that they tend to make the same mistakes and do not achieve a qualitative leap.

Through reflections on her teaching, Hannah had a clearer knowledge of the students' listening abilities and problems that block their improvement in EFL listening. She realized that students tend to make spelling mistakes in dictation practice. Amy and Alfred reflections are about different aspects of teachers and students in the classroom related to teaching and learning of EFL listening.

(Amy) After many years of teaching I gradually find that students, instead of teachers, take the leading role in the classroom. Teachers may help students gain some knowledge through sharing their feelings about certain materials after listening according to their years of experience. But as students' listening ability improvement is the result of their own practice, there will be little effect if students do not actively do listening practice although teachers lecture fantastically and comprehend clearly.

(Alfred) I think that much of teachers' work in classroom teaching is offering guidance; that is, to make students feel stressful about their EFL listening abilities and stimulated to work hard after class.

Amy's and Alfred's reflections are about students' classroom involvement with a common theme being students and teachers roles in the classroom teaching. Amy's view is that teachers share experience and knowledge with students, while to Alfred, teachers put stress on students and stimulate them to work hard through classroom teaching.

6.3.2.2 Teachers' reflections about using teaching materials

Teachers' reflections on using teaching materials in their classroom teaching varies from the addition of materials to the adaptation of materials; comments by Hannah and Amy are representative of each.

(Hannah) I have quite some reflections about the using of listening materials. At the beginning, the textbook was the only material for listening; gradually dictation practice was added, and then IELTS materials. Students were made to listen to different materials in big quantities.

(Amy) I adapt materials. For example, when a festival approaches and students are restless, I would play a movie and make them practice the dialogues from the movie. The dialogues are living language. No matter they were asked to imitate or talk to each other, their interest was aroused.

The two teachers' different ways of handling teaching materials were influenced by and reflect their different stages in teaching EFL listening. Hannah, as a new EFL listening teacher, reflected on the addition of materials and said she increased the variety of materials for students. Amy, as an experienced EFL listening teacher, talked about adapting materials according to students' needs.

6.3.2.3 Teachers' reflections about teaching methods

Reflection on teaching methods was an important part of teachers' reflections on their teaching. This reflection normally results in changes of teaching methods. The interview data of Amy and Ella revealed their thoughts and following adaptation in this respect.

(Amy) I am not sure that paragraphs in the passage were dictated or copied by students, so I test their after-class work by listening to the same passage with some blanks scooped. These blanks are not very difficult; they are to be tested if they have worked on the passage or not. This is an adaptation of teaching method.

(Ella) I once reflected on the methods of teaching news items. I used to adopt the traditional method of simply listening to news items and found the effect not good. Later on I asked colleagues to see how they dealt with news items in classroom teaching. I implemented methods offered by two colleagues, and found they helped achieve better results.

The excerpts show that the adaptation of teaching methods can be a result of teachers' own reflections or their consultation with more capable peers. Amy skilfully tested if students worked on the passage designated by playing it again in class, but with a different task type; Ella asked more experienced colleagues for advice and adapted her teaching methods.

6.3.3 Effect of Reflection on the Teaching of EFL Listening

Teachers thought highly of the effect of their teaching reflection. Ella commented on the improvement in students' enthusiasm for EFL listening learning following her adaptation of teaching methods.

(Ella) The reflection has very good effect. The most obvious change after my adaptation of thinking and method is students' improvement in enthusiasm in EFL listening.

Teachers reported that reflection has a satisfying effect on their teaching. Adaptation of teaching approaches, resulting from reflection, appears to enhance students' enthusiasm for listening in EFL learning.

6.4 CHAPTER SUMMARY

In this chapter, findings from the semi-structured pre-observation interview data concerning the third and fourth categories of teacher cognition were reported, that is, teacher cognition about the teaching and materials of EFL listening, and reflections on the teaching of EFL listening. In the first part, descriptive texts and tables presented teachers' cognitions about the teaching and materials for EFL listening. In this category were themes and subthemes of teacher cognition which included the nature of EFL listening teaching, elements facilitating EFL listening teaching, teacher cognition about the role of EFL listening teachers, teachers' comments on the EFL listening textbooks, and their criteria for choosing extracurricular materials. In the second part of the chapter, findings on teachers' reflections on the teaching of EFL listening which include the tools, content, and effect of the reflection were presented. Examples of teachers' reflections were described such as their reflections on students' listening abilities and classroom involvement, reflections about the changing of teaching materials, and reflections on their teaching methods.

CHAPTER 7 TEACHERS' INSTRUCTIONAL

PRACTICES IN EFL LISTENING

7.1 INTRODUCTION

This chapter reports findings from classroom observation of the teaching practice of the five teachers of EFL listening. The data were observed and categorized according to four major themes: Instructional techniques, procedures for handling listening materials, dynamic decision-making, and after-class homework. The themes were identified through a process of constant comparison within and across cases. First, I explored these themes in observation data from each teacher's class, as presented in Table 7.1. I then compared the results across cases, as shown in Table 7.2. The findings reported in this chapter contributed to answering the second research question: What are teachers' instructional practices in EFL listening in the classroom?

Table 7.1 Comparison Within Each Case

Participants	Themes	Observation 1	Observation 2	Observation n
Alfred/ Amy/	Theme 1	Instructional techniques	Instructional techniques	Instructional techniques
Daisy/	Theme 2	handling a piece of listening	Procedures in handling a piece of listening	handling a piece of listening
Hannah	Theme 3	material Dynamic decision-making	material Dynamic decision-making	material Dynamic decision-making
	Theme 4	After-class homework	After-class homework	After-class homework

Table 7.2 Comparison Across Cases

	Theme 1	Theme 2	Theme 3	Theme 4
Alfred	Finding 1,2,3,n	Finding 1,2,3,n	Finding 1,2,3,n	Finding 1,2,3,n
Amy	Finding 1,2,3,n	Finding 1,2,3,n	Finding 1,2,3,n	Finding 1,2,3,n
Daisy	Finding 1,2,3,n	Finding 1,2,3,n	Finding 1,2,3,n	Finding 1,2,3,n
Ella	Finding 1,2,3,n	Finding 1,2,3,n	Finding 1,2,3,n	Finding 1,2,3,n
Hannah	Finding 1,2,3,n	Finding 1,2,3,n	Finding 1,2,3,n	Finding 1,2,3,n

Table 7.3 presents the four themes and subthemes in teachers' instructional practices in EFL listening that were evident in the classroom observations.

Table 7.3 Themes and Subthemes of Teachers' Instructional practices in EFL Listening

Themes	Subthemes	
Instructional techniques	Dealing with new words,	
	Choosing task types,	
	Delivering EFL listening strategies,	
	Using transcripts of listening materials	
Procedures in handling a piece of	Pre-listening activities,	
listening material	During-listening activities,	
-	Post-listening activities	
Dynamic decision-making	Adaptation of teaching methods,	
	Choice of activities, and correcting	
	students' errors	
After-class homework	Content and form of after-class	
	homework,	
	Checking after-class homework and/or	
	providing corresponding feedbacks	

7.2 INSTRUCTIONAL TECHNIQUES

To improve students' EFL listening proficiency, teachers adopted various teaching techniques in their classroom instruction of EFL listening. The observational data identified some salient features of commonly used instructional techniques that teachers were using. The typical instructional techniques included dealing with new words, choosing task types, delivering EFL listening strategies, and using the transcripts of the listening materials in the EFL listening classroom teaching procedure.

7.2.1 Dealing with New Words

Words are the basic units of sentences that make up paragraphs and texts, the delivery of which in the listening process is linear and cannot be repeated to meet a listener's need (Gilakjani & Ahmadi, 2011). This is especially the case during unidirectional listening where "the listener has no opportunity to interrupt the speaker" (Graham *et al.*, 2014, p. 45). Therefore, the reception and comprehension of words, especially new words, in the listening material influence the extent of listeners' comprehension of the material. An unknown word in the audio material may cause the listeners to "stop and think about the meaning of that word" and thus cause them to "miss the next part of the speech" (Gilakjani & Ahmadi, 2011, p. 981). As teachers considered that the pronunciation and meaning of new words caused difficulties, students' correct pronunciation of new words was greatly valued by teachers; an incorrect pronunciation may lead students astray during listening. The observations showed that teachers dealt with the new words in slightly different ways.

The first difference observed in how teachers dealt with new words was in teaching the pronunciation of new words. Ella was observed to present the list of new words in

listening material, followed by their international phonetic symbols on PowerPoint (PPT) slides, which she required students to read after her. After reading the new words in the list, they started to work on the listening practice. Ella justified her practice by explaining why she asked the students to read new words:

(Ella) Some students cannot read new words correctly. Without the knowledge of correct pronunciation, they mistakenly consider the wrong pronunciation as right, and they can't recognize the right pronunciation when it appears in the listening material.

Hannah, unlike Ella, did not list new words and work on them before listening practice. Instead, she paused the recordings when new words appeared during the listening process and asked students to repeat the words, pronouncing them correctly.

The second difference in teachers' dealing with new words was in the way they taught the meaning of the new words. Ella would explain new words one by one after students read them aloud. The meanings would be explained in English, and sometimes Chinese as well when they were not easy to understand. Sometimes she provided a sentence or two to give a context to help students comprehend the words. Unlike Ella, Daisy left the meaning of new words to students to work out from the context of the listening material offering simple explanations when students could not work it out by themselves during the listening process. Daisy justified her teaching practice by pointing out that in-class exercises should be a close imitation of real-life listening and exams situations where no preparation of new words could be provided.

The techniques used by teachers to teach the pronunciation and meanings of new words suggested different knowledge and perception that teachers had for introducing new words. Ella preferred to work on the pronunciation and meanings of new words prior to actual listening practice; she said she thought students should be better informed about unknown information in the audio listening materials. In contrast, other teachers, such as Hannah and Daisy, preferred to bring students to listening in natural settings and deal with unfamiliar information as it emerges. The excerpt below from the pre-observation interview with Daisy represents the views of all the teachers:

(Daisy) I prefer to deal with new words within the listening process unless they are too difficult. We never have the time and chance to process new words ahead of everyday conversations or examinations. We guess their meanings from contexts. If you provide all information about new words to students, they will form a reliant mind on teachers and refuse to guess on his own.

7.2.2 Choosing Task Types

As illustrated in 5.3.2.3 (Sources of difficulty in EFL listening related to instructional factors), the task type of EFL listening exercises was perceived by teachers as an instructional factor that led to difficulty in listening comprehension. Thus their choices of task types for classroom instruction was a focus for observation.

The most frequent choice of task types observed by teachers was sentence/ passage dictation. Daisy, Ella, and Hannah chose dictation as part of classroom teaching regardless of students' present grades and EFL listening abilities. In stimulated recall post-observation interviews, teachers gave as a reason for choosing dictation was to

prepare students for TEM-4 in which dictation is 15% of the score. In this sense, their choice of dictation is examination-driven. Other reasons they mentioned included that dictation is an important listening skill and dictation can consolidate students' basic knowledge and skill in EFL listening.

The second choice of task types was note-taking and gap-filling. These two task types were classified as one group because at times they were exercises converted from retelling or multiple choices to deepen students' listening practice and enhancing their listening competence. Alfred said in his post-observation interview that in the initial stage of EFL listening, the task type of multiple choice should be avoided so that students do not equate EFL listening with doing multiple choice, which is quite easy.

The third choice of task types was supplementary exercises such as English movie clips or English songs. This usually happened when students got tired during the late stage of an EFL listening class. Amy justified her choice of this task type by saying that imitating dialogue from an English movie clips, or filling blanks in the lines, could revitalize students and make full use of the class time.

A brief summary and inference of this section is that teachers' choices of task types in classroom teaching of EFL listening exercise appeared to be affected by their understanding of students' needs for examination and real-life language use. With whichever teaching technique applied, teachers aim was to cultivate students' deep understanding of new words in listening materials and improve their language competence.

7.2.3 Teaching EFL Listening Strategies

Teachers were observed to teach a range of EFL listening strategies to students during classroom teaching; these included note-taking, prediction, interpretation and inference, listening for gist and details, and forming a text-level structure.

The first EFL listening strategy introduced by teachers was note-taking. Research literature suggests that note-taking has two major benefits: Encoding and external storage (Di Vesta & Gray, 1972; Fisher & Harris, 1973). Encoding refers to the role of note-taking in ensuring that the information input is properly understood and coded into memory, and external storage refers to the role played by the notes to intensify students' short-term memory to help with the retention of information. Hayati and Jalilifar (2009) probed the relationship between note-taking and students' listening comprehension (LC) ability and found that there is a clear link between the two. In the EFL listening classes observed, students first were taught the benefits of note-taking and the criteria of notetaking, and then operational note-taking skills. Students were encouraged to use, selectively, strategic and guided notes such as reoccurring key words, summarizing or structural clues, and key details rather than take down as many words as they could during the fast-paced listening process. Effective note-taking skills observed being taught during included paraphrasing (rephrasing information input into students' own words) and using some shorthand signs like abbreviations. Students were encouraged to take notes during every stage of listening process. Year-One students demonstrated considerable anxiety at the beginning stage of note-taking practice with many questions, such as "What should I take down", "What information have I missed so far", or "Are my notes useful", etc. As time passed in the academic semester, students were observed to become more experienced in note-taking; they appeared to find note-taking beneficial

and became more relaxed, which suggested were feeling more positive about notetaking.

The second EFL listening strategy taught by teachers was prediction. Prediction is a key skill in auditory information processing as listeners combine their perception of key features of context with their existing knowledge of the world to narrow down the possible range of utterances to come (Sheerin, 1987). Gu, Hu and Zhang (2009), examining the use of listening strategies among high-proficiency and low-proficiency Singaporean learners, found that both groups used predication during their listening process and anticipated details of what they thought was going to happen. In my study, students were taught, and encouraged to use, prediction before and during listening process so they did not have to pay attention to, and actively process, every tiny information unit in the auditory material such as phonemes and syllables. They were taught that, instead, their attention was more effective and productive when focused on the information that they had not expected. In this way students' memory load was also reduced. It was observed that teachers suggested that, to enhance their prediction skills, students put themselves in the shoes of the author of the material.

The third EFL listening strategy taught by teachers was interpretation and inference. Interpretation and inference are central to EFL listening skills as they not only promote conceptualization of a situation, or a mental model of a text, but also enhance memory for texts (Lepola, Lynch, Laakkonen, Silvén, & Niemi, 2012). According to Lepola, Lynch, Laakkonen, Silven, and Niemi (2012), auditory information input can be comprehended faster and better within an interpretation and inference model. Interpretation and inference is related to contextualization as well; it is the process

through which the listener attempts to link the new auditory information to a wider context or situation for general interpretation (Goh, 1998). Teachers reminded students to be aware constantly of the need to make interpretations and inferences during listening process, that is being alert to inference questions in the exercises (for example, why-questions) and actively pursuing the answers while listening.

The fourth EFL listening strategy taught by teachers was listening for the gist and details. This was the most frequent listening strategy adopted by teachers and students as most exercises needed students to perform this strategy during listening. In practice, teachers first lectured on definition and conventional practice of listening for the gist and details, then demonstrated with a piece of auditory material, and, finally, students were asked to employ this strategy by themselves.

The last EFL listening strategy taught by teachers was forming a text-level structure. This strategy was employed in the pre-listening or post-listening stage to help students form a structural framework of the discourse as the audio material was written text read aloud. For example, Amy believed that news items have a special structure with the first or second sentence(s) introducing the main message of the news with details following to support and expand the lead. With the text-level structure in mind, students had a clearer purpose when listening to every sentence of the material, and so knew when and where to find specific answers in the exercises.

7.2.4 Using Scripts of Audio Listening Materials

The participants' use of scripts of listening materials as a support varied widely in degrees, from ignoring them to requiring students to recite them. Teachers' different

practices and choices were driven by their different perceptions of the function of scripts. Daisy held that in real-life EFL listening situations no scripts were offered, so in her classroom teaching she just ignored scripts. She played a recording several times and explained it sentence by sentence to students until they grasped important points and fully comprehended them. Ella provided scripts to students after playing the recording several times. Her action was a result of her perception that scripts facilitate students' comprehension during their listening process.

Alfred's perception of scripts differed from that of Daisy and Ella. He said he thought that students checking their writing against scripts is necessary as it helps correct their spelling mistakes made during EFL listening practice. Therefore, he provided scripts to students when they practiced taking down numbers, contractions, and sentences. Amy's attitude towards scripts relied on students' listening performance. First, she checked students' answers after playing a recording several times to locate difficult sentences. Then she gave students a dictation of those sentences. Finally, she gave scripts to students for checking purpose. Amy also asked students to recite some of scripts to deepen their understanding of materials.

In summary, through such typical instructional techniques to deal with new words, choose task types, teach EFL listening skills, and use script of listening materials, teachers efficiently carried out their classroom teaching, continuously developing their teaching methods.

7.3 PROCEDURES FOR HANDLING LISTENING MATERIALS

A piece of listening material in my study refers to the audio clip, a dialogue, a passage, or a news item, used by the participating teachers in their classroom teaching. No visual support or scripts is provided in the listening process. Chang and Read (2006) investigated the effects of listening support in reducing the demands of the task for the EFL learners and found that providing information about the topic and repetition of the input were the top two effective types of support regardless of students' proficiency level. The listening process of the material can be divided into three stages: Pre-listening, during-listening, and post-listening stages (Saricoban, 1999). In my study, in the pre-listening stage, teachers' work is lesson preparation and students' work is warming-up activities; in the during-listening stage, students do most of activities under teachers' guidance; in the post-listening stage, teachers and students work interactively to complete listening tasks.

7.3.1 Pre-Listening Activities

As stated above, pre-listening activities consisted of teachers' lesson preparation and students' warming-up activities. Teachers' lesson preparation included, but was not limited to, familiarizing themselves with the scripts of listening materials and writing lesson plans. Familiarization with scripts was the first step in a teacher's lesson preparation. Alfred provides a typical example in this respect. He did three things at this stage: First, he listed new words and technical terms (if any) and their meanings (the meanings found in the dictionary and contextual meanings); then he spotted language points including grammatical points and sentence patterns in the material; finally he gathered background information. Based on such preparation work, teachers then wrote

lesson plans for the classroom teaching in which content knowledge, teaching goals, and classroom activities were presented in detail.

The time and content of students' warming-up activities were dependent upon the difficulty level of materials: The more difficult the materials were, the more warming-up activities students did. For example, in Daisy's class, the first piece of listening material was very easy (an everyday dialogue), so there were no warming-up activities. Common warming-up exercises were discussing teaching goals (for example, the training focus of listening materials) and working on new words and cultural points. If the listening material was considered to be difficult for students, teachers prepare extra warming-up activities, such as predicting the main idea of materials based on exercises that followed and reminding students of some key points in materials.

The activities carried out by teachers and students in the pre-listening stage benefited the EFL listening classroom teaching. Well prepared teachers were ready to help students with issues emerging in the during-listening stage, and students, after warming-up activities, were more motivated as they turned from being passive receivers of information to active participators in the listening process with a sense of a task to be completed. The benefit was both cognitive (from prior knowledge to new knowledge) and psychological (students would be at a lower anxiety level), which paved the way for smooth operation of the during-listening activities.

7.3.2 During-Listening Activities

During-listening activities are the core of EFL listening classroom teaching and learning process. As stated by teachers, this was the most demanding stage of classroom teaching

as it involved a lot of teaching skills and collaborative interactions between teachers and students. Students were expected to gain the most information and knowledge from the audio material and complete the tasks that followed.

Teachers were observed to play a recording on average 3-5 times but with different time allocation and purpose for each time. For the convenience of description of teaching process observed the times of playing the recordings were divided into three categories: Initial playing, mid-lesson playing, and final playing. The key points of during-listening activities are summarized in Table 7.4 below and explained in the paragraphs that follow.

Table 7.4 During-Listening Activities

	Times of playing	of	With or without pauses	Listening skills trained	Information focus
Initial playing	1		Without pauses	Note-taking	Gist
Mid-lesson playing	2-4		With pauses	Note-taking	Details
Final playing	1		Without pauses	Comprehensive listening skills	Confirmation of gist and details

During the initial playing, the recording was played once from the beginning to the end without a pause to enable students to get the gist of the material. Students were able to get a general impression about the topic and difficulty level of the material in terms of content and language. Students were asked to take notes, constantly comparing their expected content of the listening material with the actual content they heard, trying to reduce the gap between the two. After the initial time of playing, there was a pause for students to read questions that followed and to answer questions about the main idea.

Mid-lesson playing could be split into two parts: The first part for students to note down details and second part for teachers to explain. The number of playing times was dependent on the difficulty level of materials, the exercises and students' needs. The observation of teachers' EFL classroom teaching indicated that the item was played two to four times. In each playing of the first part there were pauses after important information such as topic sentences, sense groups, key information to the exercises. Students noted down as many details from the material as they could during the listening process. After each time the item was played, students were expected to complete exercises on the details, based on the notes they took down. Between the two parts of playing, teachers checked the answers to the exercises with students. During the second part, teachers played materials sentence by sentence, explaining them in detail to help students with their comprehension of the content. The scripts were not provided to students during teachers' explanation. The audio disc would be played for more times if students needed.

The final playing of materials, as for the initial playing, was carried out once, from the beginning to the end without a pause. The purpose was for students to confirm the information they got from the text and the answers to the exercises. At this stage, students' expected content should be consistent with the actual content of the listening material.

7.3.3 Post-Listening Activities

Students completed the major part of listening tasks, working on the exercises and checking their answers in the during-listening stage. The observation of classroom teaching, however, indicated that there was a post-listening stage, during which teachers

and students went back to the listening material and worked again on difficult sentences.

The post-listening activities usually ended with a summary of the main points and reminders for students for their future EFL listening practice.

Activities in post-listening stage were not fixed but designed to meet students' learning needs and/or the difficulty level of materials. Teachers judged students' comprehension level of materials through observing their facial expressions during listening, when students were completing the exercises, or through verbal interactions with students. During one classroom observation, Ella appeared to judge that her students comprehended materials well as the topic was about college life in America, which was close to students' daily life and also aroused their intense interest. Ella was observed to skip the following activities and go to the summarization directly. While in Hannah's class, the observation showed that students could not comprehend a passage well about credit cards, which was not part of their real life experience. Students also had trouble in completing tasks that followed. After communicating with the students about the cause of their comprehension difficulty, Hannah elicited the difficult sentences, and sentences with key information, for further processing, such as repeated listening, sentence dictation, or sentence translation. Hannah said, in her post-observation interview, that if these activities did not help with the students' comprehension needs, she would provide scripts of the difficult sentences for students to work on using techniques for EFL reading comprehension.

The last activity in post-listening stage was offering advice to students for future exercises. Based on listening practice and discussion of difficult points which might be related to pronunciation, grammar, or cultural implications and the like, teachers made

a summary and offered suggestions for students. One outstanding occurrence observed in this stage was that teachers asked students for justifications of incorrect answers to exercises to identify students' learning needs.

Through linked activities in three stages of the listening process, teachers successfully carried out their step-by-step scaffolding practice to assist students' listening comprehension and task completion.

7.4 DYNAMIC DECISION-MAKING

From the mid-1970s to early 1980s, research on teacher cognition, typically focused on teachers' decision-making processes, including such themes as how teachers manage their classrooms, organize activities, allocate time, plan lessons, and judge general student understandings. Teachers' cognitive control and decision-making became viewed as a process that bridges thought and action (Coutlee & Huettel, 2012). Earlier, Jackson (1968) had differentiated pre-active (before teaching) and interactive (during teaching) teaching and explored the decision-making process of teachers' planning and spontaneous decision-making during classroom instructions.

The observation of classroom instruction in my research, reflecting Jackson's (1968) research on teachers' spontaneous decision-making during classroom instructions, showed teachers' dynamic decision-making processes in their adaptation of teaching methods and choice of activities, and through correction of students' errors according to their performance in listening comprehension, their task completion and their reaction to teachers.

7.4.1 Adaptation of Teaching Methods and Choice of Classroom Activities

The adaptation of teaching methods and choice of classroom activities based on teachers' real-time decision-making occurred across all the classroom instructions observed. Many factors influenced classroom teaching so that teachers' carefully planned teaching content and classroom activities might not be consistent with students' learning reality. Subtle changes in the classroom and students' performance during classroom teaching required teachers to react flexibly and make dynamic choices based on real-time situations.

In Ella's class, students comprehended well in the first and second time of listening, which was not what she had expected. She had planned auxiliary material to help students with comprehension and had expected to play the audio material several times. Through her real-time observation of students' notes and performance, however, she made some judgements about their comprehension, and so reduced the times material was played as well as the time explaining extra knowledge for scaffolding purpose; as a result, students performed well enough in completing tasks that followed.

Similar examples were observed in Daisy's classroom; she appeared sensitive to classroom atmosphere and students' performance during listening practice and task completion. She assigned different tasks for students to do after each time of listening. When some students' mistakes were detected, Daisy anticipated the most probable reason, or communicated with the student to establish the actual reason. She then compared those reasons with difficult points she had anticipated during lesson preparation and made instant decisions about how to resolve emerging problems. One time in her class, all students gave wrong answers to a question after the first time of

listening. Daisy was confused because it was an easy question and she had not anticipate that no student would work out the right answer. Consequently, she asked students what happened that caused them to choose the wrong answer; they told her that they did not hear any clue to the question while listening. In the explanation phase, Daisy asked her students to focus on the material sentence by sentence while listening. As a result, students found the clue to the question in the first sentence and the answer became fairly obvious. Therefore Daisy realized that a reason for the students' mistakes could be that they were not mentally ready for the question, it was too early; they needed time to prepare themselves gradually for the question-and-answer stage. Out of her concern for the new situation in her classroom teaching, Daisy advised her students to focus on every sentence when practicing EFL listening.

Hannah's adaptation of teaching content, and choice of classroom activities, was based on her observation of, and communication with, freshmen. Her initial lesson planning, due to her unfamiliarity with students at an early stage, was standardised as stipulated by the curriculum. Then as her classroom interaction with students continued during and after class, she became more familiar with students and their learning styles. She then had a better understanding of what classroom activities were needed to achieve pre-set teaching goals. With her adaptation of teaching content and choice of classroom activities, and inclusion of teaching goals, students' learning outcomes improved.

Amy paid more attention to students' emotional changes during her classroom teaching.

Once in her class she shared with students her understanding about "relationship" after they had listened to two pieces of audio material about this topic. While she was talking, she noticed most students nodding, while two were tittering. In the post-observation

interview, she told me that she was feeling unsure and insecure when she saw the two students tittering. She guessed what the students might have been thinking. She asked herself, "They titter because they don't agree with me? Or they feel my way of expressing the understanding ridiculous? Or for some other reasons?" Unsure of the situation, she made some dynamic decisions about what to say and to do next. Amy stopped sharing her understanding, returned quickly to the exercises, and cancelled her plan to ask students to share their experiences or related understandings.

In summary, teachers' dynamic decision-making in terms of adapting teaching content and choices of classroom activities was influenced by factors such as the mismatch between teachers' anticipation of classroom teaching and students' actual learning state, and class atmosphere including students' mental preparation for exercises, and their emotional changes. Teachers, sensitive to subtle changes in the classroom, made timely and proper adaptations to the teaching content and choice of activities, thus closing the gap between the contextualized classroom teaching reality and their teaching goals while facilitating the students' learning goals.

7.4.2 Correcting Students' Errors

Error correction/error feedback is probably one of the most frequently used forms of teacher-student interaction in foreign language classroom teaching and has thus gained prominence in research. The relationship between errors and foreign language learning was compared to that of sin to virtue: "Like sin, error is to be avoided and its influence overcome, but its presence is to be expected" (Brooks, 1960, p. 58). The approaches to correcting students' errors in foreign language learning range from "error prevention and error correction" or, in other words, from "correcting it at once and repeating the

correct pattern or question for the benefit of the entire class" (Hansen & Wilkins, 1974, p. 17) to "contrastive analysis" by some structural linguists which means "the interference from students' first language caused the errors to occur in their target language learning" (Hendrickson, 1978, p. 388).

These approaches incurred criticism when cognitive psychology contributed to a trend of foreign language learning toward more humanistic than mechanistic. Responding to this trend, foreign language teachers began to emphasize the use of target language in communication. The following comments were typical in this respect: "More important than error-free speech is the creation of an atmosphere in which students want to talk" (Chastain, 1971, p. 249). According to Burt (1975), no standards have been found regarding whether, when, which, or how students errors should be corrected or who should correct them.

The classic literature on error correction was confirmed and extended by more recent experimental studies. For example, Lee (2004; 2005) conducted error correction research in L2 secondary writing classrooms and investigated the L2 writing teachers' perceptions and practices as well as students' belief and attitudes regarding error feedback. The findings of her research revealed that both teachers and students preferred comprehensive error feedback, students were reliant on teachers for error correction, and that the significance of error feedback in the long term was not realized by teachers. Sheen and Ellis (2011) define corrective feedback as "the feedback that learners receive on the linguistic errors they make in their oral or written production in a second language (L2)" (p. 593). They classify corrective feedback into oral and written forms, and offer corresponding strategies.

The error correction or corrective feedback involved in my study refers to teachers' oral correction of students' linguistic errors or incorrect answers to exercises. According to Sheen and Ellis (2011), oral corrective feedback contains *on-line attempts* (the feedback is given immediately following the utterance) and *off-line attempts* (the feedback is not provided until the communicative task is completed) to remind learners of the error they have made in their utterance; oral corrective feedback can be *input-providing* (the learner is provided with the correct form) or *output-prompting* (the learner is expected to work out a correction from by himself/herself with teachers' help). The different types of oral corrective feedback with suggestions for strategies are illustrated in Table 7.2.

Table 7.5 A Taxonomy of Oral Corrective Feedback Strategies (Sheen & Ellis, 2011, p. 594)

	Implicit	Explicit
Input-providing	Conversational recasts (i.e., the correction consists of a reformulation of a student utterance in the attempt to resolve a communication problem; such recasts often take the form confirmation checks where the reformulation is followed by a question tad as in "Oh, so you were sick, were you?").	Didactic recasts (i.e., the correction takes the form of a reformulation of a student utterance even though no communication problem has arisen). Explicit correction only (i.e., the correction takes the form of a direct signal that an error has been committed and the correct form is supplied). Explicit correction with metalinguistic explanation (i.e., in addition to signalling an error has been committed and providing the correct form, there is also a metalinguistic comment).
Output-prompting	Repetition (i.e., the learner's erroneous	Metalinguistic clue (i.e., a brief metalinguistic

utterance is repeated without any intonational highlighting of the error).

statement aimed at eliciting a correction from the learner).

Elicitation (i.e., an attempt is made to verbally elicit the correct form from the learner by, for example, a prompting question).

Clarification requests (i.e., attention is drawn to a problem utterance by the speaker indicating he/she has not understood it).

Paralinguistic signal (i.e., an attempt is made to non-verbally elicit the correct form from the learner).

Participating teachers were observed to orally correct students' errors in pronunciation, incorrect answers to exercises, or errors of other types during their classroom teaching. Students were individually asked to provide their answers to exercises as a demonstration for the whole class after listening. When they gave incorrect answers, or pronounced a word incorrectly, teachers were observed to take three major forms to correct students' errors: On-site verbal error correction, deliberate silence, and comprehensive correction. Alfred was a typical example of the first form of correcting students' errors. He verbally corrected students' errors on site. Once in class Alfred and students were working on listening exercises about phone numbers and addresses. The materials were short and simple statements. Alfred questioned students individually for their answers to exercises. A female student pronounced a word in her answer incorrectly; Alfred reread the word in its correct pronunciation and let the student sit down. However, when the same thing happened to a male student, Alfred used a different strategy. He asked the male student to read his answer again and stopped him at the incorrectly pronounced word. The male student was asked to pronounce the word several times. The class chuckled when the student repeated his funny pronunciation. Alfred then corrected the boy's incorrect pronunciation and let him sit down.

In the post-observation interview after that class, Alfred justified his decision about error correction during his classroom teaching. He mentioned that before he corrected the errors, he first made initial judgements about the students who committed the error in their utterances to see if they could accept correction in front of the whole class. The initial judgement was based on their gender, character, and real-time performance. In the interview, Alfred also justified his choice of students for error correction. Firstly, he felt more like to correct male students' errors than female students' errors because he thought that females, especially in the first year of their university, tended to be shy and afraid of being questioned and sharing their ideas in front of the whole class. Second, students who were extroverted and easy-going by character would be favoured for error correction. The third factor was students' real-time performance. They would not be corrected in front of the class if they appeared sensitive and refused to be corrected at the moment. As well as factors related to students, the nature of the errors also had an impact on Alfred's decision for error correction. Those errors that most students in the class made were chosen by Alfred with a high probability. The correction process was also dynamic; that is, Alfred judged from the real-time situation and decided to make an in-depth correction, or to cease to correct at a proper time.

The second form of error correction is teachers' deliberate silence. Nonverbal responses on teachers' part was also commonplace in error correction. The usual teacher-student interaction following a question during classroom teaching was a student's answer followed by teachers' positive confirmation or negative comments. If teachers did not provide verbal feedback after the answer, their deliberate silence served as a negation indicating the answer was incorrect. This structural silence meant much in teacher-student interaction during classroom teaching. The student, sensing the deliberate

silence on teachers' part, immediately realized that there must have been something wrong in his or her answer and tried to think of a better one.

The third form of error correction was comprehensive and flexible in accordance with incorrect answers given by students during their listening comprehension. The observation of Daisy's class provided an example. The class first listened to a piece of news about an earthquake. One of the follow-up exercises was a *True or False* question "More than 200 people died in the earthquake". The answer was *True* as the sentence in the news was "202 people died in the earthquake", while most students gave the answer of False. Daisy was surprised as she did not anticipate this to happen. After talking with the students, she learnt the reason was that, as answers to the previous questions were very accurate, students expected the number in this question to be 202 sharp. Then she gave the right answer, explaining that the reason was that 202 was definitely more than 200. Daisy also comforted students by telling them that negative transfer was very normal and it happened to every foreign language learner. She also encouraged students to do more exercises of this kind in their spare time. Daisy corrected students' error through this comprehensive form of error correction, explaining in detail the reason why their answer was wrong. Her approach enhanced students' listening skills by encouraging them to do more similar exercises.

In brief, error correction, which frequently happened with teacher-student interactions in EFL listening classroom teaching, is demanding for teachers as it involves many factors, as was shown in the observation of classroom teaching. It is a dynamic decision made by teachers under specific classroom teaching contexts.

7.5 AFTER-CLASS HOMEWORK

Assigning and checking after-class homework was also an important part of classroom teaching practice for EFL listening. After-class homework was usually assigned at the end of the classroom teaching, and its content was usually an extension of classroom teaching and learning, as students were asked to do EFL-listening-related activities in their spare time. This section presents data on the content and forms of after-class homework, checking after-class homework and providing feedback on homework.

7.5.1 Content and Forms of After-Class Homework

The assigned after-class homework that was observed took various forms. Homework could be categorized into two main types based on whether it was related or unrelated to the teaching content. The two types of homework were both routine choices of teachers who either chose one type or the other, or even combined them. The following section presents data related to these two subcategories.

7.5.1.1 Homework relevant to teaching content

Six forms of homework that were frequently assigned can be listed according to the extent to which they are related to the teaching content of EFL listening. They are presented here and listed in Table 7.6 in descending of their relationship: Repeated listening to difficult materials till complete comprehension, dictating difficult news items or passages, reading scripts and memorizing new words and cultural points inside, collecting and memorizing them technical terms appearing in materials, doing extending listening or reading exercises with relevant topics (without specified materials recommended), and finishing listening exercises unattended in classroom learning (usually *Section Four: Supplementary Exercises* in the textbook).

Table 7.6 Six Frequently Assigned Homework and Their Main Functions

Homework	Main function
Repeated listening to difficult materials	Deepening students' knowledge and quickening their acquisition of EFL listening proficiency
Dictating news items or passages	Grasping accurate information and getting a better holistic and detailed understanding of the material
Reading scripts and memorizing new words and cultural points	Adding to their accumulation of new words and cultural points
Collecting and memorizing technical terms	Enlarging students' vocabulary and widening their mastery of knowledge
Doing extending listening or reading exercises	Deepening students' impression of related topics
Finishing listening exercises unattended in classroom learning	Strengthening students' grasp of listening skills trained in class

The homework most closely related to classroom teaching content was repeated listening to difficult materials until complete comprehension is reached. It was the most frequently assigned homework as teachers could not play materials sufficiently to cater to every student's needs due to the limited time of classroom teaching. The process of reviewing and practicing difficult materials deepened students' knowledge and enhanced their acquisition of EFL listening proficiency. Conscientious completion of this kind of homework helped students comprehend materials used for classroom teaching more thoroughly, thus preparing them better academically and psychologically.

Dictating difficult news items or passages, an enhanced and intensified form of reviewing what had been learnt in classroom teaching, was the second form of homework most closely related to classroom teaching content. Through writing down every word of news items or passages students grasped accurate information conveyed in materials and thus had a more holistic, and detailed, understanding of materials. Accuracy in every detail of the news item or passage, including spelling of every word and even punctuation, helped students review the material dealt with during classroom teaching with a greater understanding and better language proficiency.

Third place on the ladder of relatedness was reading scripts and memorizing new words and cultural points, as it was suitable for nearly every kind of listening material. Through this homework, students gradually accumulated new words and cultural points which could lead to further improvement in EFL listening.

Collecting and memorizing technical terms related to the listening topics is fourth in the list. This form of homework was observed to be assigned only when a piece of listening material was difficult in terms of technical specialization; that is, the reason students did not understand the material well enough was not because of insufficient language proficiency, but because of their lack of knowledge in a particular technical field. Teachers asked students to collect more technical terms in that field and to memorize them. This kind of homework enlarged students' vocabulary and widened their mastery of knowledge in various technical fields.

The fifth one on the ladder of relatedness was doing extending listening or reading exercises. It was often assigned to accompany the fourth form of homework, collecting and memorizing technical terms. Its purpose was to intensify the effect or to further familiarize students with background knowledge of materials used in classroom

teaching. The completion of this kind of homework extended students' knowledge of related topics, and ways of thinking and using expressions in English.

The last one on the ladder of relatedness was finishing listening exercises not addressed in classroom learning (usually *Section Four: Supplementary Exercises* in the textbook). Like the first kind of homework mentioned above, it was an extension of class time as not all EFL listening exercises could be attended to by teachers. The untouched exercises in the textbook were of the same type and focus as the ones that had been dealt with in the classroom. Effort spent on them, therefore, strengthened students' grasp of listening skills trained in class.

7.5.1.2 Homework irrelevant to teaching content

The homework unrelated to teaching content, which was assigned by teachers, was sorted in the order of the frequency of being assigned: Dictation of specified materials (outside of textbooks), extensive listening to live radio broadcasts like VOA or BBC programmes, doing some TEM-4-related listening exercises, and learning to sing English songs or reciting English poems.

The first frequently assigned form of homework unrelated to teaching content was dictation of specified materials (outside of textbooks). It was often chosen by teachers who thought students should make some effort to improve the language skills which they did not grasp well. Dictation of materials outside textbooks was viewed as a listening skill to be trained instead of reviewing teaching content. Materials for dictation practice preferred by teachers of freshmen was *New Concept English (Book Two)*. For sophomores, dictation materials were often TEM-4 type materials designed with

structured pauses and reading times. The advantages of dictation were generally believed to be that it helps students diagnose and correct grammatical mistakes, ensures attentive listening and trains students to distinguish sounds, helps the learning of punctuation and develops aural comprehension (Kavaliauskienė & Darginavičienė, 2009). Dictation also develops short-term memory and fosters unconscious thinking in the new language by students (Montalvan, 1990).

The second most assigned homework unrelated to teaching content was extensive listening to live radio broadcasts like VOA or BBC programmes. Radio programmes, which offered authentic and interesting content for EFL listening practice, were considered as a valuable source of input and highly relevant to language acquisition in EFL settings (Bedjou, 2006). As well as current news reports, radio programmes covered every aspect of life, and so are suitable and useful for EFL listening acquisition. Furthermore, thanks to high-tech nowadays, scripts for radio programmes can be downloaded from online to accurately check the content. For students of low or intermediate EFL listening competence, VOA Special English programmes, especially, live news broadcasts or interviews at standard speed, were chosen often for students with intermediate and advanced EFL listening competence.

The third homework form, unrelated to teaching content, which is often assigned, is doing some TEM-4-related listening exercises. This caters to students' need to pass TEM-4, the basic requirement for students' graduation and their Bachelor's Degree. In homework, besides dictation as discussed above, listening to long conversations and passages constitutes a major form of homework. With EFL listening skills learnt and

practiced in class, it helps students better familiarize themselves with the type and characteristics of TEM-4 questions and strengthens their mastery of the skills learnt.

The last frequently assigned homework unrelated to teaching content is learning to sing English songs or reciting English poems. This kind of homework was peculiar to Daisy who used it to train students' pronunciation and intonation. Daisy justified her practice by explaining that the special form of songs and poems with beautiful rhymes cultivated students' appreciation for English language. Their inspiring content would also encourage students to perform better in language learning and motivate them to pursue higher objectives.

7.5.2 Checking After-Class Homework and/or Providing Corresponding

Feedbacks

Teachers checked forms of after-class homework in different ways. Methods of checking homework could be roughly divided into two types according to whether the checking was visible or invisible.

Visible checking was for homework with written outcomes, such as dictation of specified materials, listening exercises, and reciting new words and technical terms. The visible checking took various forms such as grading of written homework, dictation of new words, and checking answers to listening exercises. Feedback was provided in the form of written comments within or following written homework, or face-to-face communication with students.

Invisible checking was for homework without written outcomes, such as reviewing listening materials in classroom teaching, extensive listening or reading exercises, learning to sing English songs or reciting English poems. Invisible checking was often in the form of observing students' performance and English proficiency improvement during classroom teaching. Based on students' performance and the quality of their completion of homework, teachers made further decisions about teaching focus of the following classroom instructions and the type of future homework.

In a brief summary, teachers took homework of EFL listening as a reliable source of knowledge about students' current language proficiency level and future learning needs. By checking homework and providing corresponding feedback, teachers created effective interactions with students resulting in improvement of their EFL listening abilities. The gap between teaching and learning EFL listening was partially reduced through the bridge of homework.

7.6 Chapter Summary

This chapter presented data about teachers' teaching practice of EFL listening within four major categories: Instructional techniques, procedures in handling listening materials, dynamic decision-making, and after-class homework. The frequently-used instructional techniques as observed included dealing with new words, choosing task types, delivering EFL listening skills, and using scripts. The procedures in handling a piece of listening material consisted of three stages: Pre-listening, during-listening, and post- listening stages. The dynamic decision-making process was imbedded in teachers' adaptation of teaching methods and choice of activities, as well as correcting students' errors according to their performance in listening comprehension and task completion

and their reaction to teachers. The last part of this chapter was about ten forms of homework frequently assigned to students and their corresponding checking methods and feedback.

CHAPTER 8 DISCUSSION

8.1 INTRODUCTION

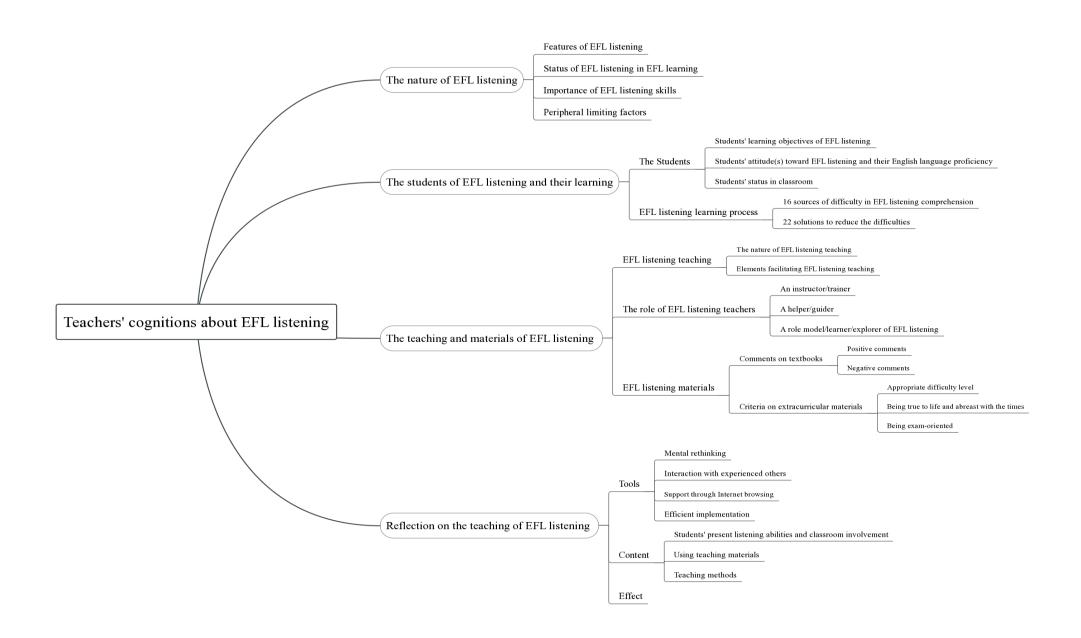
The preceding five chapters (Chapters Three to Seven) presented data analysis procedures and results related to EFL listening teachers' cognitions and instructional practices, which answered the first two research questions: 1) What are Chinese university teachers' cognitions about EFL listening, and 2) what are teachers' instructional practices of EFL listening in the classroom?

This chapter interprets the findings to answer the questions through integrating the data with the previous research literature and the theoretical frameworks. The findings were first synthesized and reported briefly. This is followed by an interpretation of the results, with reference to the previous studies reviewed in Chapter Two. In the second section, Borg's model of language teacher cognition was applied as a framework to discuss the sources of teachers' cognition, while the theoretical framework of Vygotsky's ZPD and mediation provided a base for deepening my understanding of the development of teacher cognition and related or unrelated practices. In the third section, the findings regarding EFL listening teachers' cognitions and instructional practices were synthesized to establish their relationship to answer the third research question: What are the relationships between teachers' cognitions about EFL listening and their instructional practices? In the fourth section, the factors that mediated the relationships between teachers' cognitions and instructional practices of EFL listening were explored fully, contributing to answering the fourth research question: What factors influence the congruence, or incongruence, between teachers' cognitions about EFL listening and their instructional practices? Finally, a brief summary completes the chapter.

8.2 TEACHERS' COGNITIONS ABOUT EFL LISTENING

As elaborated in Chapters Five and Six, the cognitions about EFL listening of the participating Chinese university teachers were grouped into four categories: The nature of EFL listening, students of EFL listening and their learning, the teaching and the materials of EFL listening, and EFL listening teachers' reflections. The findings in the four major categories were summarized and presented in Fig 8.1. In the following section, the findings in each category are summarized with the sources and the developmental process of teachers' cognitions about EFL listening described in relation to theoretical frameworks of Borg's (2015) model of language teacher cognition and Vygotsky's ZPD and mediation (Vygotsky & Cole, 1978).

Figure 8.1 Teachers' Cognitions about EFL Listening



Results for the participating teachers' cognitions about EFL listening are grouped into four categories: The nature of EFL listening, the students of EFL listening and their learning, the teaching and materials of EFL listening, and EFL listening teachers' reflections. The concept map as shown in Fig 8.1 is consistent with Borg's (2015) framework to study language teacher cognition which emphasized that the content of teacher cognition contains "teaching, teachers, learners, learning, subject matter, materials, ..." (S. Borg, 2015, p. 333). The results also confirm the findings of a number of previous studies on teachers' cognitions in various curricular areas of foreign language teaching (for example, see Kagan, 1992; Meijer et al., 1999; Phipps & Borg, 2009; Zhao et al., 2016). According to Kagan, teacher belief is broadly defined as "tacit, often unconsciously held assumptions about students, classrooms, and the academic material to be taught" (Kagan, 1992, p. 65). Meijer et al. (1999) investigated teachers' shared practical knowledge about teaching reading comprehension and found three types of practical knowledge: Subject matter knowledge, student knowledge, and knowledge of student learning and understanding. Zhao et al. (2016) examined the knowledge of the subject matter and skills of basic language constructs among elementary school teachers in China, which is an aspect of teacher knowledge and cognition. What Zhao et al. reported findings of these studies, which are consistent with my research.

The outcome of these teachers' cognitions about EFL listening in four aspects is not surprising considering their previous learning experience, knowledge about the subject, years of teaching experience, and the ongoing interaction with students. The justifications of teachers' cognitions in these categories are provided in the following sections which describe the sources and the features of teachers' cognitions.

8.2.1 Sources of Teacher cognition about EFL Listening

In my study, the teachers of EFL listening were sampled from a university in northern China. They work in Chinese university settings with Chinese university students, and can therefore be regarded as a representative sample of Chinese university teachers for this research. To gain a better understanding of Chinese university teachers' cognitions about EFL listening in general, I investigated the sources of the participating teachers' cognitions. The findings regarding sources and the developmental process of teacher cognition about EFL listening are discussed fully in this chapter. According to the analysis of verbal data elicited from semi-structured interviews with the participants, and the observational data in their classroom teaching, three major elements contributed to teachers' cognitions of EFL listening: Experience in learning EFL listening, inservice professional development, and classroom teaching practice. Borg's (2015) model of factors which may affect language teacher cognition was used to frame the discussion in this section. Vygotsky's theory of ZPD and mediation (Vygotsky & Cole, 1978) guided the discussion of in-service professional development as a source of teachers' cognitions in 8.2.1.2.

8.2.1.1 Experience of learning EFL listening as a source of teacher cognition

The participating teachers' knowledge, perception, and understanding of EFL listening established through their own schooling and higher education, and from observing their own teachers' instructional practices when they were students, appeared to contribute to the formation of their current cognitions about EFL listening as EFL listening teachers. Their perceptions of these experiences may have been the basis of the on-going development of their cognitions about EFL listening. From the interviews, three subthemes of the influence of their personal learning experiences emerged: Their

teachers of English, their experiences of learning in the classroom, and their selfreflection on their learning of EFL listening. These are illustrated in Table 8.1.

Table 8.1 Sources of Teacher cognition about EFL Listening Regarding Learning Experience

Subthemes in learning experience	Influence on their cognitions
	Knowledge of English, English proficiency, beautiful bearing and voice fascinate students.
Classroom learning experience	Good classroom facilities, proper materials chosen for EFL listening classroom teaching, and effective listening techniques could boost students' interest in EFL listening and their learning outcome.
Self-reflection	Interest is the best teacher; recognitions of the existence and value of EFL listening; EFL listening is closely connected to pronunciation.

This results support and expand the first element in Borg's (2015) model of language teacher cognition. Borg claims that influences on teachers' cognitions include, "teachers' personal history and specific experience of classrooms which define preconceptions of education (i.e. teachers, teaching)" (S. Borg, 2015, p. 333). Furthermore, data from this study showed that, "teachers' experiences as learners can inform cognitions about teaching and learning" (S. Borg, 2015, p. 334). The findings are also consistent with those from a number of studies that teacher cognition is generally derived from teachers' prior language learning experiences (for example, see Bao, 2017; E. M. Ellis, 2006; Farrell, 1999a; Golombek, 1998; Hayes, 2005; Holt-Reynolds, 1992; Lortie, 1977; Pajares, 1992; Q. Sun, 2017; Velez-Rendon, 2006). The findings of some of these studies are particularly close to mine. For example, Holt-Reynolds (1992) and Lortie (1977) found that teachers' beliefs about teaching and learning may be powerfully

influenced (positively or negatively) by teachers' own experiences as learners and are well established by the time teachers go to university. Similarly, Golombek's (1998) study of language teachers' personal practical knowledge found that teachers' experiences as learners was a source of teachers' practical knowledge. Likewise, Farrell (1999a) investigated pre-service English teachers' beliefs about grammar teaching and found that past experiences of language learning contributed to teachers' beliefs about grammar teaching. Another study, Hayes (2005) explored the lives of non-native speaking English educators in Sri Lanka and found that teacher role models, and the ways they taught, influenced educators' cognitions about English learning and teaching. Finally, Bao (2017) and Sun (2017), in their PhD theses investigating the beliefs and practices of teachers of Chinese to speakers of other languages (TCSOL) and EFL teachers, also confirmed teachers' personal experience of language learning as one of the main contributing sources of teacher cognition.

It is surprising to note that few of my participants mentioned practicum as one element contributing to their cognitions about EFL listening given the significance of curriculum in pre-service and in-service teacher education (Nunan & Richards, 2015). Teachers, however, explained that they were not graduates from teachers' college so there was no practicum arranged for them before they started their teaching career.

8.2.1.2 In-service professional development as a source of teacher cognition

Teachers' in-service professional development provided timely support and assistance to solve the problems arising from classroom teaching of EFL listening and thus constituted a prime source of teacher cognition about EFL listening. According to Berliner's (1994) five-stage model of teacher development which provided a framework

and a continuum of the features of teachers at different stages (Andrews, 2008; Berliner, 1994), the participants were at various stages of professional development, which influenced the choices of tools and mode of their in-service professional development. In this section, both Borg's (2015) model of language teacher cognition and Vygotsky's theory of ZPD and mediation (Vygotsky & Cole, 1978) guide the discussion.

Two participants provide an example of ZPD and mediation in discussion. Daisy, a novice teacher of EFL listening, solved the problems encountered in her classroom teaching of EFL listening by searching for relevant information online to learn from experts in the field of EFL listening. In this way, Daisy demonstrated her metacognitive strategies in managing her own professional development: By planning, monitoring, and evaluating her own forms of self-improvement. Daisy's action is an example of Vygotsky's theory of ZPD and mediation (Vygotsky & Cole, 1978). Based on her "actual development level as determined by independent problem solving" (Vygotsky & Cole, 1978, p. 86) (her actual teaching abilities of EFL listening in her case) and with the mediation of "physical tool or symbols created through human history and culture" (Vygotsky & Cole, 1978, p. 86) (related knowledge and experience shared by experts online in her case), through which she achieved "the level of potential development as determined through problem solving" (Vygotsky & Cole, 1978, p. 86) (effectively overcoming the obstacles and problems arising from her classroom teaching of EFL listening in her case). The related knowledge and experience shared by experts online could also be aptly regarded as "(under) adult guidance" or "(in collaboration with) more capable peers", which explains the development of Daisy's cognitions about EFL listening within her ZPD. Ella's development of cognitions about teaching by reading related literature and attending academic lectures with related topics is another example

which reflects Vygotsky's theory of ZPD and mediation. Her extended cognitions (the level of potential development as determined through problem solving) was achieved through reading related literature and attending public academic lectures with related topics (more capable peers).

The findings reflect the second factor, that is, professional coursework, in Borg's (2015) model of language teacher cognition. Moreover, the development process of teachers' cognitions about EFL listening is consistent with research on the ZPD and mediation in the field of language instructional practices (Donato, 1994; Mason, 2000). In other words, teachers' in-service professional development can be explained within Vygotsky's theory of ZPD and mediation. I decided to combine Borg's (2015) model of language teacher cognition and Vygotsky's theory as the theoretical frameworks that guide the discussion, because such a combination has not been documented in the literature. It would appear an innovative way of understanding such a cognitively complex enterprise as teacher cognition and practice when both theories are utilized to serve a common purpose.

8.2.1.3 Classroom teaching practice as a source of teacher cognition

In addition to the learning experience of EFL listening and in-service professional development, classroom teaching practice of EFL listening and other EFL courses was also a major source of teachers' cognitions about EFL listening. Teachers explained that classroom teaching expanded their knowledge. Classroom teaching added to their cognitions about teaching experience in terms of classroom management and teacher-student interactional activities, enhanced their understanding of students and their learning needs, and shed light on their comprehension of assessment of students'

learning in classroom. Each of these aspects will be addressed in the following discussion.

First, classroom teaching practice of EFL listening expanded teachers' knowledge of EFL listening. The interview data and observation data showed that most of the activities and teaching objectives, designed by teachers during lesson preparation, were achieved through their classroom teaching process; and thus strengthened their cognitions about EFL listening. Second, classroom teaching practice of EFL listening added to teachers' cognitions about teaching experience in terms of classroom management and teacherstudent interactional activities. Effective classroom management ensured the efficient operation of teaching activities and teacher-student interactions within teachers' teaching plan. Third, classroom teaching practice enhanced teachers' understanding of students and their learning needs. Through listening activities organized and carried out in classroom teaching, teachers knew more about students' strengths and weaknesses in learning EFL listening and the difficulties they faced during listening practice. The enhanced understanding of students increased teachers' ability to meet students' learning needs and prepared teachers better for the future teaching of EFL listening.

The findings support the third category of elements in Borg's model of language teacher cognition in that classroom practice "influences cognitions unconsciously and/or through conscious reflection" (S. Borg, 2015, p. 333), and "teacher cognition and practices are mutually informing, with contextual factors playing an important role in mediating the extent to which teachers are able to implement instruction congruent with their cognitions" (S. Borg, 2015, p. 334). The findings also confirm teaching practice as a source of teacher cognition as identified in previous studies (for example, Basturkmen

et al., 2004; Burns, 1992; Johnson, 1992; Popko, 2005; Richards & Lockhart, 1996; Richardson, 1996; Woods, 1996; H. Zheng, 2013). Basturkmen et al. (2004) investigated the relationships between three teachers' stated beliefs about and practice in intermediate level ESL communicative lessons and argued that teachers derive practical knowledge from "experiences of teaching" (p. 247). Burns' (1992) study of the beliefs of six teachers about the use of written language in teaching beginning-level students encouraged teachers to reflect on their lessons and personalize theories. Johnson (1992), through examining the relationships between 30 ESL teachers' theoretical beliefs about second language learning and teaching and their practices, suggested that teachers may benefit from "in-service opportunities which allow them to re-evaluate their own theoretical beliefs" (p. 94). Zheng (2013) explored the features of teachers' beliefs through complexity theory with a case study of a language teacher in a Chinese secondary school and claimed that Li's views about EFL teaching were based on "her language teaching experience" (p. 335).

In summary, the findings from my study are consistent with previous research in that teacher cognition develops from early teaching experiences (Popko, 2005), and teachers' beliefs about teaching and learning interact bi-directionally with experience; that is, beliefs influence practices and practices lead to changes in beliefs (Richardson, 1996).

8.2.2 Developmental Appropriateness of Teacher cognition about EFL Listening

Derived from and influenced by their learning experiences of EFL listening, in-service professional development, and classroom teaching practice, the participating teachers' cognitions about EFL listening were a developmentally appropriate process during which teachers adapted their cognitions to the changing situations and contexts. In other

words, teachers' cognitions about EFL listening were situated and contextualized in its developmental process, which falls into the framework of Vygotsky's (Vygotsky & Cole, 1978) theory of ZPD and mediation.

In the first source of learning experience of EFL listening, teachers' cognitions were generated initially and developed from their teachers' classroom teaching practice of English language and their reflections about their EFL listening learning experiences. Experiences of learning and observing during their schooling stage were the basis of cognitions that guided their later teaching careers as EFL listening teachers. In the second source of in-service professional development, teachers' cognitions were developed through adapting to the dynamic needs of classroom teaching. The data suggested the participants developed their teaching efficiency and their cognitions through ways available and suitable for them. Each teacher had his or her own contexts in which to get access to related resources, determined largely by their situated development of cognitions about EFL listening. In the third source of classroom teaching practice, teachers' cognitions were situated in the interactive teaching-learning settings in the classroom. The classroom teaching and learning, due to its on-going dynamic and instantaneous nature, was influenced by combination of factors.

The findings indicate that teachers' cognitions develop from their present level to the potential maturity and stability from the three major sources, with the mediation of capable peers or external support. The developmental process of teacher cognition involves teachers' on-going attempts to adapt themselves to the changing situations and contexts. It has, therefore, a feature of developmental appropriateness under the influence of the combination of various factors. The findings concerning the dynamic

nature of teacher cognition development echo previous research in this field (for example, Feryok, 2010; Kubanyiova & Feryok, 2015; J. Li, 2015; Zembylas, 2005). Substantial evidence indicated that teachers' cognitions are "complex, dynamic, contextualized, and systematic" (S. Borg, 2006, p. 272). Feryok (2010) also argues that teacher cognition is "dynamic, changing over time and under different influences" (p. 272). Li (2015) emphasized the dynamic feature of teacher cognition under the influence of context. To Kubanyiova and Feryok (2015), "complex inner dynamics" underlie language teachers' work, which denotes the dynamic nature of language teacher cognition. The dynamic nature of teacher cognition is also be represented in a number of metaphorical representations in research on teachers, such as gestalt (Korthagen, Kessels, Koster, Lagerwerf, & Wubbels, 2001), situational representations (Clarà, 2014), and patterns of participation (Skott, 2015). My study not only suggests the dynamic nature of teacher cognition, but also its developmental appropriateness in its longitudinal development.

8.3 RELATIONSHIPS BETWEEN TEACHER COGNITION AND PRACTICE

The relationships between teachers' cognitions and their practices were examined through constant comparison and contrast of the data elicited from the interviews and classroom observation. My study found that teachers' cognitions were to a great extent congruent with their instructional practices. However, while the participants' instructional practices mainly reflected and actualized their cognitions about EFL listening, contradictions existed between teachers' cognitions and practices. In other words, the essential aspect of the relationship was the consistency between teachers' cognitions and their practice, but there was also some inconsistency between the two.

The analysis of the data on the relationships between teachers' cognitions and practices supports the widely acknowledged opinion that the relationship is complex and interactive. A number of studies have argued that a teacher's "beliefs motivates instructional practices" in the classroom (Burns, 1992, p.58); teachers' beliefs tend to shape instructional practices (Johnson, 1992); beliefs guide teachers' thought and behaviour (M. Borg, 2001); teachers' cognitions have an impact and play a guiding role in teachers' decision making (Arnett & Turnbull, 2007; Isikoglu, Basturk, & Karaca, 2009); and teachers' cognitions underpin teaching practice (S. Borg, 2011). Language teachers' teaching experience and reflections on their practice can lead to adjustment in or additions to cognitions itself (Breen et al., 2001; Sato & Kleinsasser, 2004). Other research findings however, suggest that there is little correspondence between teacher cognition and teaching practice. In other words, teacher cognition and teaching practice are not necessarily correlated. The relationships between teacher cognition and instructional practices in this study were complex, which confirmed the widespread opinion held by the research in this field (for example, Basturkmen, 2012; Z. Fang, 1996; Q. Sun, 2017; H. Zheng, 2013). The following sections discuss the relationships in terms of consistency and inconsistency.

8.3.1 The Consistency between Teacher cognition about and Instructional practices in EFL Listening

My research found that consistency was the mainstream of the relationship between the participating teachers' cognitions about EFL listening and their instructional practices. Teacher cognition guides the instructional practices and is actualized through their instructional practices. In my study, the consistency between teacher cognition and practice includes two situations: Positive statement with manifested practice, and

negative statement with avoided practice. These two terms were adopted to demonstrate the action-speech congruence described by Tian (2014) in her research on Chinese EFL teachers' beliefs about English.

Positive statement and manifested practice

The five teachers all had *positive statement and manifested practice*: Positive statement are statements expressed in positive terms in the interview which teachers were observed to action in their instructional practices. All the teachers stated in their interviews that background knowledge and cultural points were essential for students' understanding of listening materials, and the lack of these might hinder their comprehension. In their teaching practices, they were observed to provide background and cultural knowledge in the pre-listening stage to prepare students to comprehend the material. The cognitions about EFL listening shared by teachers were the significance of TEM-4 for students. Teachers were observed to select TEM-4-oriented listening materials for students to work on and spent a considerable amount of time helping students improve their skills to complete TEM-4 type of tasks. Teachers also had their personal understandings of EFL listening which correlated with their practice. Amy thought that EFL listening was a matter of memorization, so in her classroom teaching practice, she required students to take notes which could assist with their short-term memorization of the listening material. Hannah, guided by her cognitions that interest was essential to engage students, introduced fun learning resources of EFL listening to students such as English movies or TV series (*Friends*, for example). Daisy, motivated by her perception that correct pronunciation and intonation was very important for the improvement of EFL listening abilities, asked students to recite English poems and sing English songs and cultivated their sense of the English language.

Negative statement and avoided practice

Negative statement and avoided practice refers to the situation where teachers expressed a cognition in negative terms and also intentionally avoided related practice. For example, Daisy thought that teacher-student interactional activities should not take over students' time of listening practice (see 6.2.1.1 "EFL listening teaching and students"). In her classroom teaching practice, she avoided initiating too many interactional activities with students. Alfred held that the EFL listening comprehension meant more than working out the correct answers to the exercises, and that students should not equate EFL listening to doing multiple choices; so he avoided the task type of multiple choices for the first year students in his classroom instructional practices.

This finding suggests that teachers have some cognitions in common which guide their classroom practice and guarantee the consistency and quality of EFL listening teaching to improve students' language proficiency and performance in tests. Teachers' individual understandings of EFL listening and their correlated practice show that their cognitions come from different sources which results in the unique characteristics of their practice. It also suggests that teachers intentionally avoid certain instructional practices in relation to their cognitions of what is inappropriate in language teaching. Teachers' emphasis on students' improvement in language proficiency and passing the TEM-4 shows a shift from traditional teacher-centred and textbook-based teaching approaches to CLT which caters to students' needs. This is consistent with Chen's (2017) finding in her study on Chinese university EFL teachers' beliefs, practices and identities.

The findings in the present research, which highlight the consistency between language teacher cognition and instructional practices, confirm previous studies that argue for consistency (Burns, 1992; M. Borg, 2001; Arnett & Turnbull, 2007; Isikoglu et al., 2009; S. Borg, 1998a, 1999a, 2001a, 2001b, 2009, 2011b, 2015, 2018; Farrell & Ives, 2015). In these studies, the language teachers' classroom teaching behaviour is consistent with and guided by their cognitions, principles or knowledge about language instruction. Borg's series of research on language teacher cognition in recent years suggested that teachers' stated cognitions is generally congruent with their reported or observed instructional practices and plays a guiding role in the classroom teaching practice. Such results were also confirmed by scholars based in Asia (e.g., L. Li, 2013; Min, 2013). Mangubhai, Marland, Dashwood, & Son (2005) suggest that teachers have a broad abstract understanding of teaching and learning, but also have a personal practical understanding based on their teaching experiences. In this sense, teachers deliver their lessons to students based on their abstract understanding and/or their experience-based personal understanding about how to teach. Six of the studies reviewed by Basturkmen (2012) emphasize the correspondences between teacher cognition and practice by suggesting that the consistency between teacher cognition and practice exists mainly in the cases of experienced teachers and aspects of teaching like planned task design (Kim, 2006) and teaching orientations (Tam, 2006). Addressing the problem of widespread usage of Singapore Colloquial English (Singlish) in Singaporean education under the government-launched policy of "Speak Good English Movement (SGEM)", Farrell and Kun (2007) found a strong link from language policy to teacher cognition, and then to the teaching practice of three primary school teachers in the use of Singlish in their classroom. In recent research on intercultural language teaching and learning in a New Zealand secondary school context, Feryok and Oranje (2015) reported that evidence from classroom observation reflects teachers' stated beliefs about culture in language teaching. The findings from my study echo these studies' results as well.

8.3.2 The Inconsistency between Teacher cognition about and Instructional practices in EFL Listening

This study revealed that there was some inconsistency between teacher cognition about and practice in EFL listening. Inconsistency between teacher cognition and practice in my study was discovered to take three types: Stated cognitions and missing practice, absence of stated cognitions and observed practice, and incompatible cognitions and practice concerning the same issue.

Stated cognitions and missing practice

The first type of inconsistency between teachers' cognitions about EFL listening and their instructional practices was that between stated cognitions and lack of evidence in practice. In other words, the expected practice related to a cognitions expressed by a participating teacher in the interview data was not observed during his or her classroom teaching. For example, when talking about the nature of EFL listening, Amy mentioned that EFL listening was related to real-life environments, whereas she seldom used listening materials related to real-life situations in her observed classroom teaching practice. In the post-observation interview she explained she avoided using such materials because she was aware of students' specific practical learning needs. She claimed the materials she did use were to help students in their preparation for the tests or improvement of EFL listening skills.

Absence of stated cognitions and observed practice

The second type of inconsistency between teachers' cognitions about EFL listening and their instructional practices was the absence of stated cognitions of an observed practice.

That is, the observed teaching practice was not indicated by any statement about a related cognition. Some of the participating teachers' observed teaching practices, possibly due to its spontaneous implementation as well as the unpredictable and dynamic classroom environment, was not evident in their stated cognition. The teaching practice in this category could be explained through the subconscious cognitions or hidden cognitions formed from teachers' learning experience in their culturally-specific context.

Incompatible cognitions and practice concerning the same issue

The third type of inconsistency between teachers' cognitions about EFL listening and their instructional practices was incompatible cognitions and practice concerning the same issue. In other words, the cognitions expressed in the interview data of a participant about an issue differed from the observed teaching practice related to the observed issue during classroom teaching. For example, all the five participating teachers agreed that students' individual learning needs should be considered in the classroom teaching, whereas in their observed instructional practices, they controlled the class time to implement the schedule stipulated in the syllabus. As a result, they attended to the learning needs of the majority of students while advising students with special learning needs to do further work on the same listening materials by themselves after class.

As Gross (2015) points out, the expectation of the consistency between stated beliefs and enacted beliefs is naive because inconsistency between what people say and do is regarded as normal in critical social psychology. Research on the relationships between language teacher cognition and practice is inconclusive in a number of areas (J. C. Richards, 1998) in mainstream education (Z. Fang, 1996), literacy education (Cummins

et al., 2004), language teaching (Feryok, 2008; Xiang & Borg, 2014), and the teaching of various curricular fields of English as a foreign language such as grammar (Graus & Coppen, 2016; A. M. Watson, 2015), writing (Yigitoglu & Belcher, 2014; L. J. Zhang, 2013, 2017), reading (Vaish, 2012), vocabulary (Gerami & Noordin, 2013), speaking (Baleghizadeh & Shahri, 2014), and pronunciation (Buss, 2016). Lee (2008) investigated teachers' beliefs about written feedback and the extent to which the beliefs influenced their practice, and found ten salient mismatches between teacher beliefs and practice in written feedback. Hos and Kekec (2014) also investigated the mismatches between language instructors' beliefs and practices regarding grammar teaching through a qualitative questionnaire and classroom observation, and found that teachers who favoured CLT did not make use of it in their classrooms. Recent PhD research by Sun (2017) on Chinese EFL teachers' cognitions and practice about grammar teaching in university English classrooms reported a mismatch between teacher cognition and practice. In Sun's (2017) study, although teachers acknowledged that the focus on form and grammar teaching should be completed in a communicative context so that students knew how to use grammar in their speaking and writing activities, they still adopted the focus on forms in their instructional practices of grammar. The findings of my study align with these studies on the incongruence between teacher cognition and practice, including the types of the incongruence. These findings, therefore, extends the literature to a fuller picture.

It is thought-provoking that among the abundant research on the relationships between teacher cognition and practice, few studies have investigated the contextual factors which may limit teachers from fully implementing their cognition. For example, Basturkmen *et al.* (2004), investigating the relationships between three teachers' stated

beliefs about and practices of *focus on form* in ESL communicative lessons at intermediate level, found a tenuous relationship existed; that is, in only some respects teachers' *focus on form* practice in the Prisoner Task reflected their stated beliefs. When exploring why teachers' practices contravened their stated beliefs, Basturkmen *et al.* (2004) said that teachers did not mention situational constraints or factors that limited them from actualizing their cognitions about ideal teaching. They explained that this might be because the prompts in the interviews did not ask teachers about contextual factors influencing their online decision-making during teaching. They also suggested that teachers may have been able to recall contextual factors if the stimulated recall episodes had been video-recorded rather than audio-taped.

As Borg (2018) noted, contextual factors make the disjunction between teacher cognition and practice very likely. They act as centrifugal forces hindering the translation of teacher cognition into actual classroom practice. The factors that contribute to inconsistency are to be reported and discussed in the following section.

8.4 FACTORS LEADING TO THE INCONSISTENCY BETWEEN TEACHER COGNITION ABOUT AND INSTRUCTIONAL PRACTICES IN EFL

LISTENING

Stimulated recall interviews were conducted with teachers after each classroom observation to explore the divergence between teachers' cognitions and practices. The results indicated that the relationships between teachers' stated cognitions and their instructional practices were mediated by contextual factors. These factors can be classified into subjective factors related to teachers and students, and the objective

institutional factors such as teaching materials, insufficient class time, pressure from tests, and technical reasons.

8.4.1 Constraints on Teachers

Although teachers play a prominent role in classroom teaching, they experience subjective constraints which can result in a mismatch between their cognitions and teaching practice. The constraints on teachers, as the data from in-depth interviews and classroom observation suggest, mainly include the traditional Chinese philosophies about education, and the lack of systematic access to modern theories of EFL listening. In the following sections the two major constraints on teachers will be elaborated separately.

8.4.1.1 Influence of traditional Chinese philosophies about education

Growing up and educated in Confucian-heritage cultures (CHCs) as introduced in Chapter 1 Introduction, the participating teachers' cognitions about teaching and learning were inevitably shaped and guided by the traditional Chinese philosophies about education. Their cognitions about teaching and learning regarding the three features mentioned above, with an emphasis on personal effort, content of knowledge, and the hierarchical status of teacher-student relationship, was first acquired from their teachers and then reinforced by their teaching of EFL listening.

The three features of teaching and learning influenced by CHCs, however, are not suitable for EFL listening classroom instruction in that EFL listening is not content-oriented but skill-oriented. This characteristic of EFL listening firstly requires teachers to engage students in more intense practice for better outcomes, and not to focus too

much on the transmission of content of knowledge. It also calls for a different teacher-student relationship in the classroom than the traditional one. Teachers, rather than taking the leading role in the classroom, should develop an equal and interactive relationship during the teaching and learning process, acting as activity organizers and guiders assisting and facilitating students with the listening exercises. Therefore, the EFL listening teachers' deep-rooted cognitions about teaching and learning influenced by traditional Chinese philosophies of education, to some extent hinders the implementation of their cognitions about EFL listening.

This finding aligns with previous studies on culture and cognition. From the perspective of situated cognition, how one thinks, what one thinks about, and feels is not an autonomous and invariant function free of context, but a dynamic construction, scaffolded by accessible knowledge (Fiske, 1992; Förster *et al.*, 2008). Culture has a potential impact on cognitive processes (Nisbett & Norenzayan, 2002), and social contexts impact on thinking and action (Smith& Collins, 2010; Smith & Semin, 2004; 2007; Smith & Conrey, 2010). In my research, as the teachers were born, bred and educated in Chinese culture, their cognitions has been influenced by the Chinese philosophies about teaching and learning.

8.4.1.2 Insufficient knowledge about EFL listening

Teachers' lack of systematic access to current theories of EFL listening constrained them from fully applying their cognitions into teaching practice. Based on the data collected and analysed from the interviews, teachers appeared to lack theoretical and content knowledge about the three facets of EFL listening, that is systematic planning

for EFL listening teaching and learning in the classroom, classroom methods to engage students, and effective EFL listening strategies.

Compared with other EFL courses, EFL listening classroom activities are fairly independent of each other and fragmentary as the exercises are based on isolated audio materials. Therefore classroom teaching of EFL listening is apt to fall into disconnected details without systematic planning at the macro level about the teaching and learning goals for the whole course, the choice of suitable audio materials, and appropriate classroom activities. Theories and knowledge about systematic planning for EFL listening teaching and learning provide teachers with a holistic view of the course to guide their teaching practice. Without a coherent approach teachers can confront difficulties that arise from implementing disconnected and trivial listening activities during the classroom teaching and learning process.

The second are classroom methods to engage students. They include methods to liven up the classroom atmosphere, arouse students' interests, and reduce their anxiety during EFL listening process. Repeated listening to non-native language audio materials with unfamiliar topics is challenging and demanding, and can cause anxiety in students, or make them lose enthusiasm in the listening tasks. Enhancing teachers' mastery and application of the methods, for sources such as books, research papers, or collaboration with colleagues, could increase the interactivity of the classroom and arouse students' interest in EFL listening.

The third is increasing students' effective EFL listening strategies; without appropriate EFL listening strategies students can feel frustrated when tackling challenging and

demanding EFL listening tasks. The application of effective EFL listening strategies by students could not only help bring about better learning outcomes, but also increase students' confidence and interest in EFL listening. As Vandergrift and Goh (2012) pointed out, language teachers should "have a clear understanding of the process involved in listening and in particular how strategies can be used to manage comprehension efforts" (p. 4).

This finding is consistent with previous research on the constraints experienced by teachers which can lead to inconsistency between teacher cognition and practice (for example, Cornett, 1990; Deng & Carless, 2010; Duffy & Anderson, 1986; R. Ellis, 2012; Z. Fang, 1996; Junqueira & Payant, 2015; Lampert, 1985; Pinnegar & Carter, 1990; Roothooft, 2014; A. M. Watson, 2015; Woods & Çakır, 2011). These studies have reported that teachers, under pressure from situational constraints, can feel unable to put their beliefs into practice. The constraints identified have included teacher-reported need to cover the prescribed curriculum (Sinprajakpol, 2004), and teaching constraints (Lee, 2008). As well as identifying teaching constraints as a situational factor that resulted in the differences between teacher cognition and practice, Lee (2008) questioned the existence of real explanations for the differences. When explaining the divergence of teacher cognition and practice, Sun (2017) suggested that teachers' inadequate knowledge of grammar was a constraint preventing teachers from fully actualizing their beliefs.

8.4.2 Constraints on Students

Students' improvement and development in language competence and proficiency is the ultimate main goal of teaching, therefore students' role is a factor affecting teachers'

decision-making in the classroom teaching. The analysis of interview and observation data showed that students' uneven English proficiency levels, various learning needs, and low initiative in EFL listening during classroom teaching were factors that resulted in the mismatch between teacher cognition and practice. Teachers mentioned the needs to use both Chinese and English to explain key terms and instructions in EFL listening, and they were also observed as doing so during classroom teaching. Amy justified her cognitions and practice by stating that students in her class had uneven English levels and some students could not understand English terms and instructions. Hannah and Daisy were slightly disappointed when they asked students for answers or volunteering modelling but received silence.

This finding corroborates previous studies on the influence of students' role on teachers' online decision-making (for example, Nishino, 2012; Phipps & Borg, 2009). Nishino (2012) investigated the relationship among Japanese high school teachers' beliefs, practices, and socio-educational factors regarding CLT and found that teachers take students' English proficiency into consideration when implementing CLT activities in classroom teaching. Phipps and Borg (2009) pointed out that in classroom teaching, students' expectations outweighed teachers' cognitions about grammar teaching. In classroom teaching, teachers are sensitive towards students' language difficulty (Derwing & Munro, 2005; McNeill, 2005). McNeill (2005) examined teachers' sensitivity to students' language difficulties on vocabulary as revealed in their ability to tackle the problems when exposed to particular texts. Sensing students' language difficulties and learning needs, teachers adapt their teaching practice since teachers are thinking beings, not slaves to their course books; they are able to adapt their teaching practice for different purposes (Foster & Hunter, 2016; Tomlinson, 2016).

8.4.3 Institutional Constraints

Along with the subjective factors of teachers and students, there were also some objective factors that contributed to rationalizing the tension between teacher cognition and practice. As the occurrence of every event cannot stay isolated of the context, it is also true of the classroom instruction of EFL listening which happens with certain people (teachers and students, as elaborated above), with certain teaching materials, within certain time span (class time), and under certain circumstances (class size, pressure from tests, and the technical constraints). These factors affect the ongoing of the instruction in various ways. Outstanding from the factors in my study were teaching materials, insufficient class time, large class sizes, pressure from tests, and technical reasons.

Teaching materials

Teachers in this study held negative opinions of the textbooks stipulated by the syllabus in terms of the structure, content, pronunciation of the reader in the audio recordings attached to the textbooks, and the difficulty level (See 6.2.3 About EFL listening materials). The textbooks confined teachers into rigid choices of teaching methods. The syllabus strictly stipulated the teaching hours and teaching progress based on the textbook every semester, which was inspected irregularly by the supervision commission of the teaching experts from the university level. Teachers had to design classroom activities according to the requirements of the instruction of the textbook instead of students' learning needs. The improper textbook in some way became central to classroom teaching, which was a big obstacle stopping teachers from actualizing their cognitions about EFL listening.

Insufficient class time

Insufficient class time contributed to the mismatch between teachers' cognitions about EFL listening and their classroom instructional practices. Teachers were supposed to cover the designated textbook(s) instead of designing appropriate listening activities to achieve the pre-set goals of teaching. For example, Ella in her class did not allow students enough time to work on the outline of a piece of listening material and discover the hidden rules about how the material was organized; instead she directly provided the answers to the exercises. Insufficient class time undoubtedly deprived Ella of in-depth and more effective instructions as she planned, which led to her inability to implement her desirable pedagogical approaches. This finding was consistent with previous studies in this field (for example, S. Chen, 2017; Q. Sun, 2017).

Large class sizes

Class size was an institutional factor that led to the incongruence between teachers' cognitions about EFL listening and their classroom practices. A big number of students in the classroom made it impossible for the teachers to give every student in the classroom a chance to express themselves individually, which they believed was good practice. As an alternative, Alfred was observed to choose students individually to model for the rest of class and provided comments.

Pressure from tests

The fourth institutional factor mentioned by teachers that negatively affected their actualization of their cognitions about EFL listening was pressure from tests. Students in their classes faced an important exam in which listening test took a considerable

proportion — TEM-4. As was illustrated in 5.3.1.1 students' learning objective of EFL listening, if students couldn't pass TEM-4, they would not be eligible for the Bachelor's Degree in the university where the project was carried out. Some students in their classes also wanted to attend CET-4 or CET-6 (Zheng & Cheng, 2008) which would benefit their job hunting after graduation in one way or another. With the massive significance to students, these tests were like invisible hands that pushed teachers to familiarize students with and get skilful for the task types in the tests. This constrained teachers from fully actualizing their cognition.

Technical constraints in the language lab

In this study, EFL listening lessons were conducted in standard language laboratories which were equipped with a digital audio-visual system. Teachers controlled the system at the master console which was electrically connected to a number of rows of student booths. They could listen to and manage students' audio via a hard-wired analogue-deck-based systems with "sound booths" in fixed locations typically containing a student screen and a headset with a boom arm microphone. Teachers' console was fitted with a master playback source equipment, to monitor each booth in the class via teachers' headset with an intercom facility two-way communication between teachers and students. Students sat at their separate sound booths attending to the system through headsets with a microphone attached; they operated their consoles and used the EFL listening materials at their own pace. By pressing the record key in the booth, students could simultaneously hear the playback of the programme while using the microphones to record their own voices in the pauses. In the laboratories there were large databases and libraries of EFL listening audio and video materials for teachers to choose. If the computer in the console station had access to Internet, unlimited resources of EFL

listening materials could be accessed and downloaded. As well as the digital lesson software, the equipment enabled teachers to create audio clips, edit texts, and multimedia courseware. Students could get efficient systematic EFL listening training and correct their pronunciation through recording and following along.

The modern and advanced equipment in the language lab was a double-edged sword for the teaching of EFL listening as the equipment has both advantages and disadvantages. On the one hand, the equipment provided teachers and students with flexible ways for teaching and students' learning; on the other hand, it structured and constrained the EFL listening teaching. In other words, the teaching procedures relied heavily on the equipment. If teachers were not familiar with the installed software, or when technical problems happened, the teaching procedures were severely interrupted or curtailed.

Institutional constraints, together with teachers' and students' constraints, led to the inconsistency between teachers' cognitions about EFL listening and their instructional practices, which confirmed the literature about the contextual factors that influence the relationships between teacher cognition and teaching practice (S. Borg, 2009; S. Chen, 2017; Hos & Kekec, 2014; Kaymakamoglu, 2018; Lee, 2008; Nishino, 2012; Q. Sun, 2017; Xiang & Borg, 2014; H. Zheng, 2013). Borg (2009) identified six issues about teacher cognition, among which the significance of institutional factors were emphasized, as they appeared to constrain the way in which teachers work and lead to conflicts with espoused beliefs and experiences. Hos and Kekec (2014) investigated the mismatches between language instructors' beliefs and practices regarding grammar teaching through a qualitative questionnaire and classroom observation. They found that grammar was taught in isolation due to contextual factors such as "students'

expectations, time limit and catching up with the curriculum, or washback effect" (p. 85). Xiang & Borg (2014) examined the beliefs, held by a group of Chinese College English teachers, about effective language teaching which emphasized teacher factors, such as a lack of training and heavy workload, student factors, and institutional factors, which constrained teachers' work. Zheng (2013) explored the features of teachers' beliefs through complexity theory with a case study of a language teacher in a Chinese secondary school and found that teachers adopted an eclectic way of teaching when encountering unfavourable contextual factors.

8.5 CHAPTER SUMMARY

This chapter summarized the results regarding teachers' cognitions about EFL listening, discussed the relationships between teacher cognition and practice, and examined and reported on the contextual factors that appeared to lead to the inconsistency between the two. The sources of the participating teachers' cognitions about EFL listening were also traced and discussed. The description and interpretation of the data concerning teacher cognition about and practice in EFL listening teaching enriches our understanding of L2 instruction.

CHAPTER 9 CONCLUSION, IMPLICATIONS,

LIMITATIONS AND RECOMMENDATIONS FOR

FUTURE RESEARCH

9.1 INTRODUCTION

The concluding chapter starts with a summary of the key findings of my study in response to the research questions. Following the summary is an outline of the contribution of the study to existing theory and research in the field of language teacher cognition, and the implications of the study for EFL listening teachers' professional development, EFL listening teaching at the tertiary level, and teacher education and professional development programmes. Finally, the chapter addresses the limitations of the study and provides suggestions for future research in relevant fields.

9.2 SUMMARY OF MAJOR FINDINGS

This section summarises the major findings of my study concerning teachers' cognitions about EFL listening, their classroom teaching practices, the relationships between teachers' cognitions and their teaching practices, and the contextual constraints that contribute to the mismatches between teachers' cognitions and their teaching practices.

Research question 1: What are Chinese university teachers' cognitions about EFL listening?

In my study, as reported in 8.2.1, teacher cognition about EFL listening consists of four major categories: Cognitions about the nature of EFL listening, cognitions about

students of EFL listening and their learning process, cognitions about EFL listening teaching and the materials, and cognitions about EFL listening teaching reflection.

In the first category of teachers' cognitions, the 19 major statements elicited from preobservation interviews with the participants were classified into four subcategories: Features of EFL listening, status of EFL listening in EFL learning, importance of EFL listening skills, and peripheral limiting factors. In the second category of teachers' cognitions about students of EFL listening and their learning, the data included three aspects: Students' learning objectives for EFL listening, students' attitude(s) toward EFL listening and their English language proficiency, and students' status in classroom. In relation to students' learning of EFL listening, participants identified 16 sources of difficulty in EFL listening comprehension and described 22 effective solutions, including input, process, instructional, and personal factors, they applied to solve the problems. The third category was teachers' cognitions about the teaching and materials of EFL listening, in which there were three themes: EFL listening teaching, the role of EFL listening teachers, and EFL listening materials. Teachers' cognitions about EFL listening teaching included cognitions about the nature of EFL listening teaching, and the elements which influence EFL listening classroom teaching. Teachers' cognitions about their role of EFL listening teachers were that their roles included being an instructor or trainer, a helper or guide, a role model for students and a learner or explorer of EFL listening. Teachers' cognitions about EFL listening materials included their comments on the textbooks, and criteria for choosing extracurricular materials. These criteria were that material should be at an appropriate difficulty level for the students; be realistic and abreast with the times, and be examination-oriented. The fourth category was teachers' reflection on their EFL listening teaching, which included the tools of reflection (mental rethinking, interaction with experienced others, support through Internet browsing, and efficient implementation), the content of reflecting (rethinking of students' current listening abilities and classroom involvement, the using of teaching materials, and the teaching methods), and the effect of reflection.

Research question 2: What are teachers' instructional practices of EFL listening in the classroom?

Chapter Seven probed into teachers' instructional practices of EFL listening in the classroom through analysing data from interviews and classroom observations. Participants' teaching practices were categorized according to the four themes that emerged: Instructional techniques, procedures for handling listening materials, dynamic decision-making, and after-class homework. The first category, instructional techniques, contained four subthemes: Dealing with new words (their pronunciation and meanings); choosing task types, such as dictation, note-taking and gap-filling, and some supplementary exercises of EFL listening; teaching EFL listening strategies, such as note-taking, prediction, interpretation and inference, listening for general meaning and details, and forming a text-level structure; and using the scripts of the listening materials in the EFL listening classroom teaching procedure. The second category, procedures for handling listening materials, was divided into three stages according to the actual listening process: Pre-listening, during-listening, and post-listening stages. The prelistening activities included teachers' lesson preparation and students' warming-up activities. The during-listening activities were grouped according to whether the disc was played at the initial, middle or final part of the lesson. During these three times of playing, students completed various tasks to achieve corresponding learning goals. During the post-listening stage, teachers and students go back to the listening materials

and work on difficult sentences. The third category, dynamic decision-making, was reflected in teachers' adaptation of teaching methods and choice of activities. It also included correcting students' errors according to their performance in listening comprehension and task completion, as well as their reaction to teachers during classroom instructional practices. The fourth category, after-class homework, was described in terms of its content and forms, that is, whether it was relevant or irrelevant to classroom teaching content, and how teachers checked after-class homework, and whether they provided feedback on the homework.

Research question 3: What are the relationships between teachers' cognitions about EFL listening and their instructional practices?

The review of the relevant literature on teacher cognition noted that relationships between teachers' cognitions and their instructional practices have been reported to be complex and interactive. In my study, the data identified that, while the relationship between teachers' cognitions and their instructional practices of EFL listening was generally consistent, mismatches existed. Consistency appeared to result from the influence of the teachers' cognitions on their instructional practices, that is, how the teachers actualized their cognitions through their instructional practices. Evidence of consistency includes positive statement with manifested practice, and negative statement with avoided practice. Three forms of inconsistency between teachers' cognitions and their instructional practices were reported; these were stated cognitions and missing practice, absent cognitions and observed practice, and the incompatibly of cognitions and practice concerning the same issue.

Research question 4: What factors influence the congruence, or incongruence, between teachers' cognitions about EFL listening and their instructional practices?

Factors in my study which appeared to account for inconsistencies between teachers' cognitions about EFL listening and their instructional practices were grouped into subjective factors and objective factors. Subjective factors refer to constraints due to teachers' and students' personal issues; objective factors refer to institutional constraints.

Subjective factors

Constraints on teachers mainly included the influence of traditional Chinese philosophies about education, and insufficient knowledge about EFL listening. Firstly, teachers' cognitions were mediated by the traditional Chinese philosophy of *Tai Chi* and CHCs, within whose macro framework there is an emphasis on students' personal endeavour in achieving success, the teaching content, and a hierarchy in teacher-student relationship. Secondly, teachers lacked knowledge of theories about three facets of EFL listening: Systematic planning of EFL listening teaching and learning, classroom methods to engage students, and effective EFL listening strategies. Subjective constraints also included students' uneven English proficiency levels, various learning needs, and low initiative in EFL listening during classroom teaching.

Objective factors

The objective factors are institutional constraints that contribute to tensions for teachers when implementing their cognitions in their practice. Institutional constraints included the teaching materials, insufficient class time, large class sizes, pressure from tests, and technical problems in the language laboratory. Teachers commented negatively on the EFL listening textbooks and audio materials in terms of their structure, content,

pronunciation and difficulty level. Insufficient class time and large class sizes impacted on teachers' inability fully implement their pedagogical approaches, while pressure from tests and the need to prepare for TEM-4 was a constraint for both teachers and students. As EFL listening classes were highly dependent on audio materials, problems with equipment was a further constraint.

9.3 CONCLUSIONS

The study aimed to provide insight into Chinese university teachers' cognitions about EFL listening, their classroom instructional practices, the relationships between their cognitions and practice, and the factors that mediate those relationship. The research yielded a substantial amount of information on teacher cognition about EFL listening, instructional practices, and the interconnections between them. Based on the findings, it can be concluded that

- (a) Teachers had identifiable cognitions about EFL listening in four categories: the nature of EFL listening, students of EFL listening and their learning processes, the teaching and materials of EFL listening, and their reflections on EFL listening teaching.

 (b) There are three major elements that contributed to Chinese university teachers' cognitions about EFL listening and underpinned their classroom teaching. These were their learning experiences of EFL listening, their in-service professional development, and their classroom teaching practice. Their in-service professional development included attendance at academic seminars, peer feedback and support, research articles, overseas academic visiting experience, and their understanding of students' needs.
- (c) Teachers, in most cases, were able to realize their cognitions about EFL listening into their classroom instruction. There was some inconsistency, however, between their

cognitions and practice which appeared to be due to subjective and institutional constraints.

These findings in my study that teachers have identifiable cognitions about the courses they teach; that there are three major sources of teacher cognition; that teaching practice is not always congruent with teacher cognition; and that incongruence between the two exists are consistent with earlier studies in the field of language teacher cognition.

9.4 IMPLICATIONS

The present research has implications for and contribution to the existing theory and research on teacher cognition and the Vygotskian framework for human learning and development, that is meditation and ZPD. It also has practical implications and recommendations for classroom instructional practices for teachers of listening for EFL in Chinese universities.

9.3.1 Theoretical Implications

My study confirms and extends our understanding of three main strands in the field of teacher cognition research: The elements that influence teacher cognition (S. Borg, 2015); the relationships between teachers' cognitions and their instructional practices (Farrell & Ives, 2015); and the factors that mediate the consistency level between teachers' cognitions and their instructional practices (Barnard & Viet, 2010; Q. Sun, 2017). Borg's model (2015, p. 333) was found appropriate for my study to probe into the sources of teacher cognition; in return, my study provided further evidence for the effectiveness of the model and to enhance its usefulness for similar circumstances.

My study also explores the application of the Vygotskian framework about human learning and development, that is, mediation and ZPD, in the field of second and foreign language teacher cognition and practice. It was found that the theories of mediation and ZPD could be used to explain the developmental process of teachers' cognitions about EFL listening. This would appear to be one of the first studies to apply Vygotskian theories of mediation and ZPD to teacher cognition in the field of EFL listening.

9.3.2 Practical Implications

My study also had practical implications for teacher cognition research and for EFL listening teaching for English majors in Chinese universities.

9.3.2.1 Implications for teacher cognition research

My study provides contextualized understanding of teacher cognition about and practice in EFL listening; the rich data and findings add to the current knowledge about language teacher cognition especially EFL listening teacher cognition in Chinese contexts. The data from my study revealed the importance of probing further into EFL teachers' cognitions and practice of the course they teach. This should include their cognitions about aspects as the nature of the course, their students, teaching methods, teaching materials, and how teachers actualise their cognitions in their instructional practices in their classroom teaching. In my study, teachers' knowledge of teacher cognition, instructional practices, and the factors that mediate the interrelationship between cognitions and practice was limited, and not all of the teachers could explain the reasons for their decisions for classroom teaching clearly enough. Further research into teachers' teaching beliefs, teaching principles, and teaching philosophies that inform their foreign

language teaching is needed to enhance teachers' instructional practices. It has reference value to the research on teacher cognition and practice under contexts similar to China.

9.3.2.2 Implications for EFL listening teaching in Chinese universities

The following are implications for EFL listening teaching in Chinese universities, especially for teacher educators, teaching institutions, and teachers.

Implications for teacher educators

The up-to-date data and knowledge collected of cognitions held by frontier EFL listening teachers in Chinese university classrooms in my study offers some insight for language teacher educators. It can be a starting point to design teacher training or professional development programmes for language teachers to address the challenges specific to teachers' working environment.

All the teachers have Bachelor's or Master's Degree of Arts (English language) but not all their qualifications are closely related to language teaching. Some teachers had had little exposure to language teaching methodologies, which may have disadvantaged their classroom teaching practice. An introductory programme of language teaching methodologies may have facilitated them to become better language teachers from the outset of their EFL teaching career. The participating teachers' data also implied that professional development is on-going (Johnson & Golombek, 2011). An implication for teacher educators that arises from this research is the need for introductory courses for the novice teachers, with on-going professional support in various forms for all teachers.

Implications for teaching institutions

There were contextual factors that mediated the relationships between teacher cognition and practice identified by teachers and observed in classroom teaching in my study. These included teachers' and students' subjective constraints, as well as institutional constraints. An implication from this study, therefore, is that the teaching institutions, Chinese universities, need to ensure teachers are stronger in their practice, and to improve their working environments to benefit, ultimately, students' language competence.

Firstly, teaching institutions should provide "weekly collegiate sharing, biweekly faculty meetings, or annual teaching development workshops or seminars" (S. Chen, 2017, p. 230) for teachers to improve their professional skills. In the regular collegiate or faculty meetings, teachers are encouraged to raise their context-specific concerns and doubts, tell their stories and feelings related to language teaching and learning, or recount the obstacles they meet in classroom instructions. Teachers, in sharing their experiences and concerns, can benefit from supportive advice from more experienced teachers or experts in the field of language teaching and learning, so that pressure on teachers' may be partially relieved through discussion and emotional support from colleagues or experts. Teaching institutions should also organize professional development workshops or seminars for teachers to improve, systematically, their theoretical knowledge about curriculum and pedagogy. Teachers in this study reported that they benefited from workshops or seminars in the form of classroom teaching and discussion, online training, coursework, recommended lists of books and articles, or the combination of these forms. In addition, the teaching institutions could arrange intercollegiate academic visits for teachers to observe and learn from the experts in top universities at home or abroad. Through the continual support from the institution, teachers can become stronger and better supported.

Second, to overcome the range of English proficiency levels and various learning needs, as well as low motivation for EFL listening, teaching institutions could organize rich language learning environments to motivate and engage students. The activities can focus on the improvement of students' English language competence in listening, speaking, reading, writing, and translating as well as awareness of culture and customs of the English-speaking countries. The activities could take various forms such as watching English movies, English corners for practicing oral English, speech and reading contests, writing to foreign friends, English culture weeks, English poem recitation, English plays. The aim of these activities would be to expose students to a richer environment in which to use English, and to activate an enthusiasm for English learning and cooperation with teachers in classroom teaching and learning.

Third, to overcome institutional constraints imposed by teaching materials, insufficient class time, large class sizes, pressure from tests, and technical constraints in the language laboratory, teaching institutions could implement measures to counter the effect of these limiting factors. Teaching institutions could authorise teachers to choose more appropriate textbooks and extracurricular exercise materials to facilitate better learning outcomes for students. The constraining effect of insufficient class time could be solved by institutions in two ways: Class time for EFL listening could be increased thus allowing teachers more time to work with students; Teachers could be encouraged to undertake basic empirical research with EFL listening teaching in their own classroom to increase the effectiveness of their classroom teaching. In other words, teaching

institutions could encourage and train teachers in some research skills as "research derives from teaching, and teaching contributes to research: They are closely intertwined" (Q. Sun, 2017, p 216). With basic researching skills, such as keeping regular teaching journals and reflecting on their practice, teachers could identify their shortcomings in teaching and update their teaching approaches. To counter the constraints associated with large class sizes, collaborative learning groups of students could be organized according to their English language proficiency levels. Students would work collaboratively in these groups with the support of the teachers thus optimizing the time teachers spent interacting with students. Teaching institutions could provide, in addition, timely and efficient technical support for teachers to ameliorate technical problems in the language laboratories during EFL listening class-time.

Implications for teachers

My study has identified the importance of teachers' self-awareness of their cognition, their beliefs, roles, and reasons for classroom teaching decisions. Teachers will not automatically become aware of their cognitions; facilitation of the process needs to be engendered by the institution or teacher training programmes to enable teachers to gain competency, achieve goals, and live and work their lives to the fullest potential (Drago-Severson, 2011).

Teachers come to teaching with their own personal histories and learning experience which provide the base for developing beliefs and conceptions of EFL listening. As teaching practice is a highly situated activity, when they enter specific teaching contexts with contextual factors such as students, curriculum and institutional contexts, teachers are faced with a complex system. They have to take each of the factors into consideration,

which further enriches and consolidates, and sometimes challenges, their cognitions about EFL listening. During the complex process, teachers need to equip themselves with a powerful inner self (cognition) for better teaching performance (instructional practices). When encountering difficulties or obstacles, teachers with less experience will turn to teachers with more experience or other related personnel for support and guidance. Through such mediation teachers may confirm or enhance their cognitions and more effectively actualize their cognitions in their practice.

Therefore, teachers should be updating themselves with pedagogical skills by attending teacher training programmes, or academic conferences, home and abroad, to enhance their educational degrees, and pursue opportunities to scholastic visit other universities, overseas or domestic. Teachers need to be proficient or at least familiar with basic research skills. They should be encouraged to as keep regular teaching journals; read relevant books and papers on methodology; and reflect on what happens in their classroom, to enrich their knowledge of the essence and nature of teaching and learning. Teachers in this study claimed that they lack theoretical knowledge about EFL listening teaching.

9.4 LIMITATIONS OF THE RESEARCH

A 3-stage qualitative research design was adopted to explore five EFL listening teachers' cognitions and practices in a Chinese university over a 16-week academic semester. Although the study was well-planned and carefully carried out, three limitations need to be taken into account in interpreting and generalizing the conclusions. These are small sample size, short length of data collection, and lack of data from students.

Firstly, whereas a sample of five EFL listening teachers from one Chinese university is appropriate for qualitative research, a larger sample size from different universities or provinces would ensure greater representativeness and so generalizability of the research. Secondly, as teacher cognition is dynamic and developing, longitudinal data would be more apt. The data collection for my study was conducted in one semester only and therefore about teacher cognition and practice at one point in time, and not the development of teachers' cognitions and practices. A longitudinal study can provide data about how teacher cognition develops under mediation of certain factors and provide teaching institutions with better recommendations to facilitate teachers' practices and enhance students' learning outcomes. Thirdly, as there was limited time, the data were collected about cognitions and practice from only teachers' perspectives. Data on students 'perspectives, such as their learning outcomes and their classroom learning collected as supplementary evidence, may have enabled a more holistic study.

9.5 SUGGESTIONS FOR FUTURE RESEARCH

This study explores teacher cognition about EFL listening and investigates factors that mediate the relationships between teacher cognition about practice in EFL listening. In accordance with the limitations noted above, there are some suggestions and recommendations for future research into teacher cognition about EFL listening.

Firstly, in future research the sample size should be improved in terms of both number of the participants and the scope from which the participants were chosen for greater generalization. EFL listening teachers can be markedly diverse in every aspect, such as their birthplaces (city or countryside, or different regions of China), educational background (different academic majors and degrees), working experiences, and

professional development. Each of these aspects may lead to marked differences in teacher cognition about teaching and learning EFL listening. For example, the place where teachers were born and raised can have a great impact on the development of his or her perception about life and learning. The coastal cities in the Eastern and Southern parts of China and the rural mountainous regions in the Western and Northern parts are profoundly different in terms of economy, culture, and schooling. Therefore the people born and brought up in these places are bound to see and understand the world from different perspectives which result in diverse views and opinions. Future studies should include teachers from different parts of China, a range of educational levels and years of teaching, with different experiences of professional development, so that the research findings and results will be more comprehensive and representative.

Secondly, future research should conduct a longitudinal study to probe into the dynamic changes and development of teacher cognition about EFL listening over time. As teachers attend teacher training programmes, extend their teaching experience, or experience changes in their personal life, their knowledge and insight into teaching and learning EFL listening may change. A longitudinal study will present a clearer picture of how, and why, teacher cognition develops and predict developmental trends.

Thirdly, it is advisable for future research to include data on students' learning outcomes in EFL listening programmes and perceptions of their classroom learning. Students' cognitions about their teachers' cognitions about and practices in the teaching of EFL listening would provide an innovative perspective on the relationship between teacher cognition and teaching practice. The evidence of students' perspectives of teachers'

practices, and the purposes of listening instruction approaches, would provide feedback to teachers and lead potentially to enhance listening teaching in EFL classrooms.

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APPENDICES

Appendix A: Letter to the Dean

Dear Dean,

My name is Xingzhen Gao, a PhD candidate in the School of Curriculum and Pedagogy under the supervision of Professor Lawrence Jun Zhang and Dr. Marek Tesar, Faculty of Education and Social Work, The University of Auckland. I am conducting research on Chinese university EFL teacher cognition about and practice in

listening instruction.

My research tends to help solve the problem generated from EFL listening procedures by looking into the Chinese university EFL listening teachers' cognitions about effective listening teaching and the effective ways of teaching EFL listening, trying to find the relationship between EFL listening teachers' cognitions and pedagogical practices based on the analysis of the

qualitative data collected from interview and classroom observation.

I would be grateful if you would read the attached Participant Information Sheet which will tell you more about my research and what your involvement would mean for you. If you are willing to take part, please complete the attached Consent Form and email it back to me. If you have any questions, please do not hesitate to contact me at l.gao@auckland.ac.nz.

Thank you.

Yours Sincerely,

Xingzhen Gao

Appendix B: Participant Information Sheet (Dean)

Project Title: Chinese University EFL Teacher cognition about and Practice in Listening

Instruction

Researcher: Xingzhen Gao

Researcher introduction

My name is Xingzhen Gao, a PhD candidate in the School of Curriculum and Pedagogy under

the supervision of Professor Lawrence Jun Zhang and Dr. Marek Tesar, Faculty of Education

and Social Work, The University of Auckland. I am conducting research on Chinese university

EFL teacher cognition about and practice in listening instruction.

Project description

The present research intends to address the problem generated from EFL listening procedures.

This project will investigate the Chinese university EFL listening teachers' knowledge about

effective listening teaching and explore the effective ways of teaching EFL listening. It will also

try to find the relationship between EFL listening teachers' cognitions and pedagogical practices

based on the analysis of the qualitative data collected from interview and classroom observation.

This research will involve five university EFL listening teachers. Data will be

collected over the academic semester from September 2015 to January 2016. The data

collection consists of three phases:

1. The pre-observation interview will take about 50 minutes. The interview with each of

the five sampled EFL listening teachers is designed to elicit the participants' individual

responses to questions concerning their understanding of effective EFL listening and

effective ways of teaching EFL listening. Participants' responses will be transcribed and

analysed. This information will be used to develop the focus for the subsequent

classroom observations.

2. During classroom observations, the researcher, as a non-participant, will take field notes

and audio or video record the instructional practices of the teacher without interactions

or interruptions to the lesson.

3. The post-observation interviews will take about one hour. These will be held with the

teacher participants after the classroom observation where they will be asked to recall

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aspects of the lesson related to their thinking, decision-making and instructional practices that had been observed.

I would like to invite five EFL listening teachers in your college to participate in a multiple case study as part of this project. I seek your permission to contact them and distribute relevant information to them.

College involvement

Your permission and cooperation are prerequisites for conducting this project. If you agree to participate, I will then contact your Administrative Secretary to arrange for the distribution of the information about my research among the teaching staff in your college. The decision as to how the teachers are informed will be left with the Secretary. He/she can circulate my advertisement for recruiting participants via email among the teaching staff with Participant Information Sheet (PIS), and Consent Form (CF) attached, or post the advertisement for recruiting participants on the noticeboard. Teachers who see the advertisement and are willing to participate in this research will find some copies of the Participant Information Sheet and Consent Form in the Secretary's office and sign them.

With your permission, I will set up a box for teachers to drop in their signed forms near the Secretary's office. I will return and collect the signed forms after a period of one to two weeks. The Secretary will be asked to assign a code to each name of the teachers who have agreed to take part in the research. From these I will draw randomly five codes representing the five participants for the case study. Then I will contact the five teachers directly and talk with them about the details of the research. Also, your assurance is sought that the participation or non-participation of the teachers will not affect their careers, full employment, or employment evaluation at any level.

Teacher involvement

This research will involve the five teachers who agreed to participate in the three phases, and whose names were drawn. Pre-observation one-to-one interviews with the teachers will be conducted at the time and place the teachers have agreed to. Each interview will last about 50 minutes and will be audio recorded and transcribed by the researcher. The teachers will be informed in advance about the recording, transcription, and their right not to answer the questions as well as the right to ask for the recorder to be turned off at any time during the interview. They will receive the transcripts of their interview for review and can return these

within a week with amendments. Once the transcriptions have been confirmed, the researcher will retain the transcripts for data analysis.

During classroom observation, the teachers' actual instructional practices in class will be video-taped or audio-taped with field notes taken when necessary. The classroom observation for each teacher will be conducted for two consecutive hours each week during the academic semester to collect the teachers' demonstrations on a reliable basis. Following each classroom observation will be the an-hour-long post-interviews with each teacher participant. The questions in the post-interviews will be based on the teachers' instructional practices in the classroom.

Your permission is sought to allow the researcher to be present in the classroom of each teacher participant during the observed lessons where the actual instructional activities occur. Being aware that the teacher and students may be affected in some way by the researcher's presence, the researcher will limit the days and hours of their attendance and try to minimize the impact by following the class rules and policies and not interrupting the teaching and learning interactions. The details about the classroom observations, and the time and days I would like to attend the classroom will be subject to your approval.

Each teacher participant will be given a 300 RMB local supermarket voucher in recognitions of their time and participation.

Student involvement

Although the classroom observation in this research focuses on the teacher participants' instructional practices, students cannot be excluded from the classroom activities and their voice will also be audio or video recorded. Therefore, I will also provide Consent Forms for the students to sign. It will be appreciated if you or your teaching staff can help me circulate the CFs among relevant students. I will not observe or document students for the purpose of this research. For those students who do not consent to the classroom observation, a make-up lesson will be arranged for them in order not to disadvantage them. Students will also be offered some snacks.

Data management

Hard copy data will be securely stored in a locked cabinet at the University of Auckland, and electronic data will be stored in a password-protected file on the University of Auckland server. After six years, all hard copy data will be shredded and the electronic data will be deleted. The data collected from the research will be used for the researcher's PhD thesis at the University of Auckland, and may be used for the researcher's academic publications or conference presentations.

If any participant would like to have a copy of the research findings, he/she can indicate this in the Consent Form, and a summary will be sent to them.

Right to withdraw from participation

During the research procedures, the participants are entitled to withdraw at any time or request the return or deletion of any data provided by them at any time without having to give a reason. They have the right not to answer any specific question/s in the interviews and have the recorder turned off at any stage of the interview. The Dean will be required to give an assurance that participation or withdrawal will not affect their careers, full employment, or employment evaluation at any level.

Anonymity and confidentiality

In this research, confidentiality is assured. Information about the university and the college will be disguised. When the information provided by participants is reported or published, pseudonyms will be used to protect their identities. The teachers who participate in this research will also be asked to keep their participation confidential. Anonymity in the interview with the teacher participants cannot be guaranteed due to the nature of interview. However, participants will be interviewed individually with the researcher, so their identities will only be known to the researcher. No identifying information will be disclosed to a third party.

Thank you for taking the time to read this information sheet. If you have any queries or questions, please feel free to contact me or my supervisors.

Yours sincerely,

Xingzhen Gao

Contact details

Researcher	Main supervisor	Co-supervisor
Xingzhen Gao	Professor Lawrence Jun	Dr. Marek Tesar
Calcada Coming and an and	Zhang	School of Learning,
School of Curriculum and		Development and
Pedagogy,	Associate Dean	Professional Practice,
Faculty of Education,	(International Partnership),	Faculty of Education and
		Social Work,

The University of Auckland	School of Curriculum and	The University of Auckland
Gate 3, 74 Epsom Ave, Auckland l.gao@auckland.ac.nz Ph: +64 9 623 8899 ext.	Pedagogy, Faculty of Education and Social Work, The University of Auckland	Gate 3, 74 Epsom Ave, Auckland. m.tesar@auckland.ac.nz Ph: +64 9 373 7599 ext. 46375
48406	Gate 3, 74 Epsom Ave,	
Local contact in China	Auckland	
Ph:+86 13485338655	lj.zhang@auckland.ac.nz Ph: +64 9 6238899 ext:	
	48750	

You may also contact the head of the School of Curriculum and Pedagogy, Professor Helen Hedges at h.hedges@aucklan.ac.nz or +64 9 373 7599 ext. 48606.

For any queries regarding ethical concerns, you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland, 1142. Telephone: 09 373-7599 ext. 83711. Email: ro-ethics@auckland.ac.nz.

Appendix C: Consent Form (Dean)

Project title: Chinese University EFL Teacher cognition about and Practice in Listening Instruction

Researcher: Xingzhen Gao

I have read the Participant Information Sheet, and understand the nature of the research and why I have been asked for consent. I have had the opportunity to ask questions and have them answered satisfactorily.

- I agree to provide research sites.
- I agree to allow the researcher to join a college meeting to explain the research.
- I agree to distribute the research information to administrative staff or secretary.
- I agree to allow administrative staff or secretary to help with this research.
- I understand that teachers' participation is voluntary.
- I assure that participation, non-participation or withdrawal will not affect teachers' careers, full employment, or employment evaluation at any level.
- I understand that audio or video recordings will be made of participants in the case study, but only with their consent.
- I understand that participants' recordings may be transcribed by the researcher, but the recordings and the transcriptions will only be accessible to the researcher and will not be disclosed to any third party.
- I understand that hard copies and digital data will be stored separately and securely for six years and then destroyed.
- I understand that the data collected from the research will be used for the researcher's PhD thesis at the University of Auckland, and may be used for the researcher's academic publications, and conference presentations.
- I understand that if the information provided by participants is reported or published, anonymity is assured and pseudonyms will be used to protect their identity.
- I understand that the information about the university and college will be disguised.
- I understand that no identifying information will be disclosed to a third party or the public.

•	I	wish	to	receive	a	copy	of	the	research	findings	by	email
						(]	If not,	keep	it blank.)			

Name
Signature
Email address:
Date

Appendix D: Participant Information Sheet (Teacher)

Project Title: Chinese University EFL Teacher cognition about and Practice in Listening

Instruction

Researcher: Xingzhen Gao

Researcher introduction

My name is Xingzhen Gao, a PhD candidate in the School of Curriculum and Pedagogy under

the supervision of Professor Lawrence Jun Zhang and Dr. Marek Tesar, Faculty of Education

and Social Work, The University of Auckland. I am conducting research on Chinese university

EFL teacher cognition about and practice in listening instruction.

Project description

The present research intends to address the problem generated from EFL listening

procedures. This project will investigate the Chinese university EFL listening teachers'

knowledge about effective listening teaching and explore the effective ways of

teaching EFL listening. It will also try to find the relationship between EFL listening

teachers' cognitions and pedagogical practices based on the analysis of the qualitative

data collected from interview and classroom observation.

This research will involve five university EFL listening teachers. Data will be

collected over the academic semester from September 2015 to January 2016. The data

collection consists of three phases:

1. The pre-observation interview will take about 50 minutes. The interview with each of

the five sampled EFL listening teachers is designed to elicit the participants' individual

responses to questions concerning their understanding of effective EFL listening and

effective ways of teaching EFL listening. Participants' responses will be transcribed and

analysed. This information will be used to develop the focus for the subsequent

classroom observations.

2. During classroom observations, the researcher, as a non-participant, will take field notes

and audio or video record the instructional practices of the teacher without interactions

or interruptions to the lesson.

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3. The post-observation interviews will take about one hour. These will be held with the teacher participants after the classroom observation where they will be asked to recall aspects of the lesson related to their thinking, decision-making and instructional practices that had been observed.

Teacher involvement

This research will involve you in the three phases as described above. Pre-observation one-to-one interviews with you will be conducted at the time and place you have agreed to. Each interview will last about 50 minutes and will be audio recorded and transcribed by the researcher. You will be informed in advance about the recording, transcription, and your right not to answer the questions as well as your right to ask for the recorder to be turned off at any time during the interview. You will receive the transcripts of your interview for review and can return these within a week with amendments. Once the transcriptions have been confirmed, the researcher will retain the transcripts for data analysis.

During classroom observation, your actual instructional practices in class will be audio or video recorded with field notes taken when necessary. I will talk with you about the suitable days and time that fit your teaching schedule and when you feel comfortable to have me come and observe in your class. The classroom observation for you will be conducted for two consecutive hours each week during the academic semester to observe your demonstrations on a regular basis. As I want to see you teaching in a natural setting, I will not ask you to conduct any special classroom activities. As a non-participant observer, I will not interrupt any of your teaching activities or interactions with the students. My observation is not evaluative and will not affect your career or employment at any level as I have sought assurance from the Dean.

Since the observation will also involve students, who are an essential part of the classroom dynamics, I would like to ask you to explain the purpose and nature of my observation and distribute the PISs and CFs to the students. The letter makes it explicit that the focus of the observation is the teacher. Students who do not feel comfortable with an observer in the classroom can be arranged to have a make-up class at a later time. Following each classroom observation an-hour-long post-observation interview with you will take place at the college. The questions in the post-observation interviews will be based on your instructional practices as observed in the classroom.

Data management

Hard copy data will be securely stored in a locked cabinet at the University of Auckland, and electronic data will be stored in a password-protected file on the University of Auckland server. After six years, all hard copy data will be shredded and the electronic data will be deleted. The data collected from the research will be used for the researcher's PhD thesis at the University of Auckland, and may be used for the researcher's academic publications or conference presentations. If any participant would like to have a copy of the research findings, he/she can indicate this in the Consent Form, and a summary will be sent to them.

Right to withdraw from participation

During the research procedures, as a participant, you are entitled to withdraw at any time or request the return or deletion of your data at any time without having to give a reason. You have the right not to answer any specific question/s in the interviews and have the recorder turned off at any stage of the interview. The Dean has given an assurance that participation or withdrawal will not affect your career, full employment, or employment evaluation at any level.

Anonymity and confidentiality

In this research, confidentiality is assured. Information about the university and the college will be disguised. When the information provided by you is reported or published, pseudonyms will be used to protect your identity. You will also be asked to keep your participation confidential. While anonymity in the interview with you cannot be guaranteed due to the nature of interview, you will be interviewed individually with the researcher, so your identity will only be known to the researcher. No identifying information will be disclosed to a third party.

Thank you for taking the time to read this information sheet. If you have any queries or questions, please feel free to contact me or my supervisors.

Yours sincerely,

Xingzhen Gao

Contact details

Researcher	Main supervisor	Co-supervisor

You may also contact the head of the School of Curriculum and Pedagogy, Professor Helen Hedges at h.hedges@aucklan.ac.nz or +64 9 373 7599 ext. 48606.

For any queries regarding ethical concerns, you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland, 1142. Telephone: 09 373-7599 ext. 83711. Email: ro-ethics@auckland.ac.nz.

Appendix E: Consent Form (Teacher)

Project title: Chinese University EFL Teacher cognition about and Practice in Listening Instruction

Researcher: Xingzhen Gao

I have read the Participant Information Sheet, and understand the nature of the research and why I have been asked for consent. I have had the opportunity to ask questions and have them answered satisfactorily.

- I agree to participate in the interviews.
- I agree that the researcher may observe my classroom teaching.
- I agree that students will be informed of the nature and purpose of the observation.
- I agree that the researcher may audio or video record the interviews and classroom teaching.
- I agree not to disclose anything discussed in the interviews to a third party.
- I understand that participation is voluntary.
- I understand the Dean has assured that my decision to participate or not will have no impact on my employment.
- I may withdraw myself and any data I have contributed at any time up until January 1st 2016 without giving a reason.
- I will not be identified by name, and the researcher will make every effort to conceal the identity of the university, and of the identity of myself.
- I understand that participants' recordings may be transcribed by the researcher, but the recordings and the transcriptions will only be accessible to the researcher and will not be disclosed to any third party.
- I understand that hard copies and digital data will be stored separately and securely for six years and then will be destroyed.
- I understand that the data collected from the research will be used for the researcher's PhD thesis at the University of Auckland, and may be used for academic publications, and conference presentations.
- I understand that if the information provided by me is reported or published, my anonymity is assured and pseudonyms will be used to protect my identity.

•	I	wish	to	receive	a	copy	of	the	research	findings	by	email
						(]	If not,	keep	it blank.)			

Name	 	
Signature	 	
Email address:	 	
Date		

Appendix F: Participant Information Sheet (Students)

Project Title: Chinese University EFL Teacher cognition about and Practice in Listening

Instruction

Researcher: Xingzhen Gao

Researcher introduction

My name is Xingzhen Gao, a PhD candidate in the School of Curriculum and Pedagogy under

the supervision of Professor Lawrence Jun Zhang and Dr. Marek Tesar, Faculty of Education

and Social Work, The University of Auckland. I am conducting research on Chinese university

EFL teacher cognition about and practice in listening instruction.

Project description

The present research intends to address the problem generated from EFL listening

procedures. This project will investigate the Chinese university EFL listening teachers'

knowledge about effective listening teaching and explore the effective ways of

teaching EFL listening. It will also try to find the relationship between EFL listening

teachers' cognitions and pedagogical practices based on the analysis of the qualitative

data collected from interview and classroom observation.

This research will involve five university EFL listening teachers. Data will be collected over the

academic semester from September 2015 to January 2016. The data collection consists of three

phases:

1. The pre-observation interview will take about 50 minutes. The interview with each of

the five sampled EFL listening teachers is designed to elicit the participants' individual

responses to questions concerning their understanding of effective EFL listening and

effective ways of teaching EFL listening. Participants' responses will be transcribed and

analysed. This information will be used to develop the focus for the subsequent

classroom observations.

2. During classroom observations, the researcher, as a non-participant, will take field notes

and audio or video record the instructional practices of the teacher without interactions

or interruptions to the lesson.

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3. The post-observation interviews will take about one hour. These will be held with the teacher participants after the classroom observation where they will be asked to recall aspects of the lesson related to their thinking, decision-making and instructional practices that had been observed.

Student involvement

Although the classroom observation in this research focuses on the teacher participants' instructional practices, you, as students, cannot be excluded from the classroom activities, so your voice when interacting with the teacher will also be audio or video recorded. I will be observing your class for two consecutive hours each week during the academic semester. During the observation, the audio or video recorder will be placed on the teacher's desk, and I will be sitting in a corner at the back of the classroom taking field notes of the teacher's instructional practices. I will not interrupt the instruction or participate in any kind of classroom teaching or learning activities. The audio or video recordings of the instructional practices in your class are used for subsequent interviews with your teacher.

If you agree to participate, please indicate it on the Consent Form. Participation is voluntary and the Dean and your teacher have assured that your decision to participate or not will have no impact on your grades or your relationship with the university. The data I collect will be analysed and will then form the basis of my PhD thesis. I may use the data for future academic publications or conference presentations. Under no circumstance will I identify either you or your university by name.

For those of you who do not consent to the classroom observation, a make-up lesson will be arranged for you in order not to disadvantage your learning.

Data management

Hard copy data will be securely stored in a locked cabinet at the University of Auckland, and electronic data will be stored in a password-protected file on the University of Auckland server. After six years, all hard copy data will be shredded and the electronic data will be deleted. The data collected from the research will be used for the researcher's PhD thesis at the University of Auckland, and may be used for the researcher's academic publications or conference presentations.

Right to withdraw from participation

During the class observations, you are entitled to withdraw from the room. If you do so, you will be offered a make-up lesson at a later date.

Anonymity and confidentiality

In this research, confidentiality is assured. Information about the university and the college will be disguised. No identifying information will be disclosed to a third party.

Thank you for taking the time to read this information sheet. If you have any queries or questions, please feel free to contact me or my supervisors.

Yours sincerely,

Xingzhen Gao

Contact details

Researcher	Main supervisor	Co-supervisor
Xingzhen Gao	Professor Lawrence Jun Zhang	Dr. Marek Tesar
School of Curriculum and Pedagogy, Faculty of Education, The University of Auckland	Associate Dean (International Partnership), School of Curriculum and Pedagogy,	School of Learning, Development and Professional Practice, Faculty of Education and Social Work, The University of Auckland Gate 3, 74 Epsom Ave, Auckland.
Gate 3, 74 Epsom Ave, Auckland	Faculty of Education and Social Work,	m.tesar@auckland.ac.nz Ph: +64 9 373 7599 ext. 46375
l.gao@auckland.ac.nz	The University of Auckland	
Ph: +64 9 623 8899 ext. 48406	Gate 3, 74 Epsom Ave, Auckland	
Local contact in China	lj.zhang@auckland.ac.nz	
Ph:+86 13485338655	Ph: +64 9 6238899 ext: 48750	

You may also contact the head of the School of Curriculum and Pedagogy, Professor Helen Hedges at h.hedges@aucklan.ac.nz or +64 9 373 7599 ext. 48606.

For any queries regarding ethical concerns, you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland, 1142. Telephone: 09 373-7599 ext. 83711. Email: roethics@auckland.ac.nz.

Appendix G: Consent Form (Students)

Project title: Chinese University EFL Teacher cognition about and Practice in Listening Instruction

Researcher: Xingzhen Gao

I have read the Participant Information Sheet, and understand the nature of the research and why I have been asked for consent. I have had the opportunity to ask questions and have them answered satisfactorily.

- I agree that the researcher may be observing the class I am in.
- I agree to be audio or video recorded as part of the classroom observation of my teacher's instructional practices.
- I understand that the contents of classroom observation will not be disclosed to me.
- I understand that make-up lessons are available to me should I withdraw my presence from the observed lessons.
- I understand that data will be kept for six years, after which they will be destroyed.
- I understand that the findings from this study will be used in a PhD thesis, and to support future publications as well as conference presentations.

Name	 	
Signature		
Email address:	 	
Date		

Appendix H: Interview Protocol for Pre-Observation Interviews

Warm-up questions:

- 1. Can you introduce yourself briefly?
 - a. Where are you from?
 - b. What is your first language?
 - c. How long have you been teaching EFL listening in the university?
- 2. Can you introduce the EFL listening class you are teaching briefly?
 - a. Who are your students?
 - b. What are their goals?
 - c. Is this the first time you teach this class?

Questions concerning teachers' EFL listening learning experience

- 3. Can you share your language learning experience with me? What languages did you learn as (a) foreign and/or a second language(s)?
- 4. Among the five basic language skills (listening, speaking, reading, writing, and translation) of the foreign and/or second language, which one do you think is easy/hard to learn?
- 5. Do you think that classroom is the place where EFL listening can be effectively learned (or primarily there)?
- 6. What instructional practices in EFL listening do you, as a language learner, find beneficial and not beneficial at all to your language learning?
- 7. Are there any activities outside of the classroom that help improve your EFL listening abilities as a learner of EFL listening?

Questions concerning teachers' cognitions about EFL listening:

- 8. What elements do you think should be included in effective EFL listening? What listening outcomes or abilities should be covered when students are tested of EFL listening?
- 9. Can you name some of the factors that affect EFL listening abilities or the successful output of EFL listening? Can you elaborate on each of them briefly?

Questions concerning teachers' instructional practices in EFL listening classroom:

- 10. What do you think is the purpose of teaching EFL listening?
- 11. How do you define effective EFL listening?
- 12. Can you give me a brief list of the effective ways of teaching EFL listening in the classroom?
- 13. What do you believe is your role as an EFL listening teacher? (e.g. tape/disc player, role model, helper, instructor, etc.)
- 14. In the preparation process for EFL listening instruction, what kind of teaching objectives and teaching plans do you have in mind? Please tell me briefly what you usually include in the teaching material.
- 15. During the EFL listening instructions in classroom, what are the main procedures you usually take from the beginning of class to the end?

- 16. How do you deal with the factors that affect the successful EFL listening instruction? What do you usually do to reduce the difficulty level of the listening materials when students claim they cannot understand the meaning of them and fail to do the follow-up exercises?
- 17. Do you regard it as a natural part of EFL listening learning and improvement process when students make mistakes during the time when they do the follow-up exercises? What should the EFL teacher react when students make mistakes?
- 18. Can you share with me a successful EFL listening instructional activity you've recently done in the classroom? Why was it successful?
- 19. Can you share with me an EFL listening instructional activity you've recently done in the classroom that you felt not so successful?
- 20. What activities outside the classroom in the students' part do you think can help improve their EFL listening abilities? What kind of homework do you usually leave for the students to do after class?
- 21. Do you usually give comments on students' homework if they hand it in to you?
- 22. Is there anything I did not ask but you would like to add?

Yours sincerely,

Xingzhen Gao

Contact details

Researcher	Main supervisor	Co-supervisor		
Xingzhen Gao	Professor Lawrence Jun	Dr. Marek Tesar		
School of Curriculum and	Zhang	School of Learning, Development and		
Pedagogy,	Associate Dean	Professional Practice,		
Faculty of Education,	(International Partnership),	Faculty of Education and		
The University of Avaldond	School of Curriculum and	Social Work,		
The University of Auckland	Pedagogy,	The University of Auckland		
Gate 3, 74 Epsom Ave, Auckland l.gao@auckland.ac.nz Ph: +64 9 623 8899 ext.	Faculty of Education and Social Work, The University of Auckland	Gate 3, 74 Epsom Ave, Auckland. m.tesar@auckland.ac.nz Ph: +64 9 373 7599 ext. 46375		
48406	Gate 3, 74 Epsom Ave, Auckland	10070		
Local contact in China				

Ph:+86 13485338655	lj.zhang@auckland.ac.nz	
	Ph: +64 9 6238899 ext:	
	48750	

You may also contact the head of the School of Curriculum and Pedagogy, Professor Helen Hedges at h.hedges@aucklan.ac.nz or +64 9 373 7599 ext. 48606.

For any queries regarding ethical concerns, you may contact the Chair, The University of Auckland Human Participants Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland, 1142. Telephone: 09 373-7599 ext. 83711. Email: ro-ethics@auckland.ac.nz.