

**The teaching and learning of listening and vocabulary in EFL
classes at a Chinese university**

by

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Abstract

Listening is an important skill for second language learners of any language. To develop listening skills effectively, research suggests using a more process-oriented than product-oriented approach to teaching listening. That is, placing greater emphasis on developing learner awareness and strategic competence than on answering listening comprehension questions. The present study investigates how listening is taught by two teachers in the context of Chinese tertiary English foreign language (EFL) classes, where listening tends to be taught as a discreet skill. Another focus of the research is how the relationship between vocabulary and listening is understood and addressed in this context. While it is well known that vocabulary knowledge is needed for and can be learnt through listening, less is known about how the vocabulary support is provided and vocabulary knowledge is gained in such listening classes.

This research involved three main areas of investigation. The first area investigated the teaching of listening. It involved a content analysis of listening materials in the textbook (e.g., listening texts and listening activities), followed by classroom observations of listening instruction practices, and post-lesson interviews with the teachers and their learners about their beliefs about teaching and learning listening. Findings showed that a product-oriented approach dominated the textbook materials, the classroom practices and the beliefs of the teachers and learners.

The second area concerns the vocabulary demands of these listening classes. This involved a corpus-based analysis of the frequency and kinds of vocabulary in the textbook, followed by measurement of the learners' vocabulary size (i.e., the Vocabulary Size Test by Nation & Beglar, 2007) and knowledge (i.e., a recognition task in the Yes/No format). The corpus analyses results showed that: (1) vocabulary knowledge of 3000-word families was required to comprehend the textbook; (2) high frequency vocabulary made up the majority of the words in the textbook. The VST results showed that, on average, the learners' written receptive size ranged from 5000 to 7000-word families. The pre-lesson Yes/No task results showed that the students had difficulty recognizing a substantial number of the words they met in the textbook.

The third area investigated the nature of vocabulary support and vocabulary learning in the listening class. Firstly, an analysis of the teachers' classroom practices from observation data

relating to vocabulary was carried out. Secondly, interview data from the teachers was examined for evidence of their beliefs about vocabulary and listening. Thirdly, post-lesson interview data with learners and data from a post-test repeat of the vocabulary recognition task were examined to find out more about the learners' perceptions of vocabulary in listening class and the vocabulary learning gains they made in these classes. Findings revealed that the learners relied on the glossaries to prepare for listening classes. They also expected vocabulary instruction from the teachers, so long as it did not distract from listening activity completion. Both teachers primarily used translation to provide vocabulary support, but differed markedly in the amount of vocabulary support they provided. In both classes, significant vocabulary gains were found in a comparison of the pre-and-post lesson Yes/No task results. The vocabulary-related episodes in the listening classes were a notable influence on these learning gains.

This research has pedagogical implications for the EFL listening classroom. The findings highlight the mutually reinforcing influences of textbook design and teacher beliefs on how listening is taught. These influences, in turn, shape how learners perceive the process of developing their L2 listening skills. With respect to vocabulary and listening, the findings also suggest that even where the lexical demands of listening appear to be well within the vocabulary level of the learners, there is considerable potential for vocabulary learning from listening classes. Teachers and learners alike are likely to benefit from systematically building on this potential. Future research could further investigate L2 learners' behaviors and perceptions in the listening class, and examine their vocabulary knowledge in the spoken form.

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List of Abbreviations

Abbreviation	Full form
AWL	Coxhead's (2000) Academic Word List
BNC	British National Corpus
COCA	Corpus of Contemporary American-English
EFL	English as a Foreign Language
EGP	English for General Purpose
ELT	English Language Teaching
ESP	English for Specific Purpose
FL	Foreign Language
GSL	West's (1953) General Service List
IELTS	International English Language Testing System
L1	First language
L2	Second language
LRE	Language Related Episode
LVLT	Listening Vocabulary Levels Test (McLean et al., 2015)
NACFLT	National Advisory Committee for Foreign Language Teaching
SD	Standard Deviation
TED Talks	Technology, Entertainment and Design Talks
TEM	Test for English Majors
UVLT	Updated Vocabulary Levels Test (Webb et al., 2017)
VLT	Vocabulary Levels Test (Nation, 1983, 1990; Schmitt et al., 2001)
VRE	Vocabulary Related Episode
VST	Vocabulary Size Test (Nation & Beglar, 2007)

Chapter 1 Introduction

This chapter presents the rationale for investigating teaching and learning of listening and vocabulary in Second Language (L2) listening classes, as well as the rationale for investigating textbooks, teachers and learners. It describes the context in which the present study was situated, including general information about the Chinese university EFL context and my personal teaching experiences which motivated this research. Finally, it introduces the research aims and outlines the organization of the thesis.

1.1 Why investigate L2 listening instruction practices

Compared with the L2 skills of reading, writing and speaking, listening is reported to be the most challenging skill to deal with by teachers and learners (Field, 2008; Siegel, 2014; Vandergrift & Goh, 2012). L2 listening researchers attribute this difficulty to a lack of understanding of the complexities in L2 listening, and its ephemeral and covert nature (Buck, 2001; Field, 2008; Siegel, 2014). In the past two decades, research has shown the benefits of a process-based approach to teaching listening because it makes the nature of listening explicit in classroom teaching (e.g., Cross, 2010; Vandergrift & Tafaghodtari, 2010; Yeldham, 2016; Yeldham & Gruba, 2014). By using this approach, L2 teachers and learners also have the opportunity to discuss the strengths and weaknesses learners may experience during the process of listening (Goh, 2018). Anecdotal accounts suggest that L2 listening instruction is not widely informed by this evidence-based understanding of the process of L2 listening, and a traditional product-based approach with a priority in the outcome of listening comprehension still dominates the teaching of listening in various L2 or EFL contexts (Goh, 2008; Graham & Santos, 2015; Swan & Walter, 2017). However, to the best of my knowledge, there is little empirical classroom-based evidence of this tension between research literature (process-based approach) and anecdotal assumptions (product-based approach) in teaching L2 listening. To date, only two published studies have found that a product-based approach was preferred to a process-based approach in the EFL listening classrooms of Japanese universities (Siegel, 2014) and L2 classrooms in British high schools (Graham & Santos, 2015). Therefore, the first purpose of this research is to add to this body of the literature but in the Chinese EFL university context.

1.2 Why investigate vocabulary in listening classes

The relationship between vocabulary and L2 listening that has been established in the research literature warrants investigation in listening classes for two reasons. First, listening

comprehension needs vocabulary knowledge (Nation, 2013). This need can be seen in both the theoretical frameworks that depict the processes of L2 listening and the empirical findings of the positive correlation between vocabulary knowledge and listening comprehension performance. From a theoretical perspective, vocabulary knowledge (especially in the spoken form, such as pronunciation) is an important linguistic knowledge source for L2 listeners to decode and perceive information from spoken input (Anderson, 1995; Vandergrift & Goh, 2012). From an empirical perspective, in the past decade, research has examined the extent to which vocabulary is needed in L2 listening. Their findings show that: (1) L2 learners need to have an adequate vocabulary size in general to reach a listening comprehension threshold for spoken input (van Zeeland & Schmitt, 2013a), (2) the more vocabulary knowledge L2 learners have, the better they perform in listening comprehension (e.g., Bonk, 2000; Stæhr, 2009), and (3) specifically, vocabulary knowledge in the spoken form p (i.e., phonological vocabulary knowledge) is a powerful predictive factor in listening comprehension which is closely related to L2 learners' abilities to recognize words in a connected speech (Cheng & Matthews, 2018; Matthews, 2018; Matthews & Cheng, 2015). In sum, these theoretical features and empirical findings indicate a need to understand the extent to which the vocabulary demands of listening are adequately addressed in classroom teaching.

This question has not, to date, been adequately answered in research. Research into L2 listening classroom practices in teaching vocabulary is surprisingly rare. Most studies focused on the effectiveness of providing vocabulary support prior to listening activities (e.g., Chang, 2007; Chang & Read, 2006; Pan et al., 2018). Less is known about when, how, and why L2 teachers incorporate vocabulary support or instruction into the process of listening instruction. Dealing with vocabulary in classroom has largely been explored through language-related episodes (LREs), which examine the extent to which linguistic elements (e.g., grammar, vocabulary) receive attention in L2 classrooms from teacher or learner-initiated exchanges (e.g., Basturkmen & Shackleford, 2015; Hong & Basturkmen, 2020; McLaughlin & Parkinson, 2018). A small case study by Folse (2010) investigated the vocabulary focus in several different types of L2 classrooms (e.g., grammar, reading, composition) and found that the lesson objective, characteristics of teaching materials and individual teacher's awareness and abilities play crucial roles in the frequency of LREs. To date, the frequency and nature of vocabulary-related episodes (VREs) in L2 listening classes is still unclear. This is another main issue this research attempts to address.

Secondly, vocabulary can be learnt in listening classes through both explicit vocabulary instruction and incidental vocabulary learning opportunities. The aforementioned empirical studies found that after receiving vocabulary support prior to listening, L2 learners may not necessarily improve their listening comprehension. However, they could improve vocabulary knowledge due to the pre-teaching of vocabulary (Chang, 2007; Pan et al., 2018).

Furthermore, classroom interactions between teachers and learners regarding aspects of vocabulary knowledge (such as form, meaning and use, see Nation, 2013), as well as various instructional approaches to providing vocabulary support were found to have a positive role in L2 learners' vocabulary learning outcomes (Dobinson, 2001; Tian & Macaro, 2012; Zhang & Graham, 2019, 2020). Previous research findings also suggest that vocabulary can be acquired incidentally through exposure to L2 spoken input, such as through listening only, listening-while-reading, or viewing (e.g., Brown et al., 2008; Feng & Webb, 2019; Vidal, 2003, 2011). In the L2 listening classroom, teachers deal with vocabulary either prior to, during or after listening, and learners are exposed to spoken input of various modes (e.g., listening to spoken input; viewing videotapes). Therefore, it is worth investigating the vocabulary learning potential of classroom-based listening.

1.3 Why investigate textbooks, teachers and learners

In L2 listening classrooms, teaching materials (usually in the form of a textbook), teachers and learners are three important factors in how listening is taught and how vocabulary is dealt with. Firstly, L2 listening classrooms are quite likely to be textbook-based (Hill & Tomlinson, 2003), and L2 teachers are expected to follow the textbooks to implement their teaching practices (Siegel, 2014). Nevertheless, while research shows that a product-based approach is the primary focus of L2 listening textbooks used either in the global or local market (Ableeva & Stranks, 2013; Graham & Santos, 2015; Santos, 2015), little is known about how teachers use textbooks in their classroom teaching. Graham and Santos (2015) conducted a comprehensive analysis of the listening sections of 17 foreign language textbooks which were widely used in British high school foreign language classrooms. Then the researchers observed the listening activities taught by the teachers at these high schools. Notably, while the textbooks were not mandatory in the listening classes they observed, the results showed that 74% of the teaching materials used in the lessons were from the textbooks. Therefore, further research on the impact of mandatory textbooks in listening classrooms is warranted.

Vocabulary in listening textbooks also needs investigation. Given a certain vocabulary size is needed to reach an acceptable comprehension level, research efforts have been made to examine the lexical coverage of L2 input either in written or spoken discourse. Lexical coverage refers to the percentage of known words in L2 input (Nation, 2006). It is commonly agreed that 95% coverage means acceptable comprehension and 98% coverage means good comprehension (Hu & Nation, 2000; Laufer & Ravenhorst-Kalovski, 2010; Nation, 2006). L2 input in different modalities (written or spoken) and different genres (news or TV show scripts) requires different sizes of vocabulary knowledge to reach 95% and 98% coverage (Nation, 2006; van Zeeland & Schmitt, 2013; Webb & Rodgers, 2009a, 2009b). Compared with textbooks used in EFL reading classes or integrated language classes (e.g., Coxhead et al., 2020; Hsu, 2009; Sun & Dang, 2020; Yang & Coxhead, 2020), the vocabulary demand and vocabulary profile of EFL listening textbooks have not been widely researched. Part of the current study attempts to address this gap.

Teacher cognition research in L2 language teaching has been rarely focused on listening or vocabulary teaching (Borg, 2003). To date, what we do know about listening teaching beliefs is that L2 listening teachers may view effective listening development as successfully completing listening tasks. This belief in turn influences their classroom practices (Graham & Santos, 2015; Graham et al., 2014). Teachers' cognition in relation to vocabulary teaching and learning has been found to be influenced by factors such as their vocabulary learning experiences (Gao & Ma, 2011), teaching experience (Macalister, 2012) and personality (Nural, 2014). Based on classroom observations, Folse (2010) reported that vocabulary was ignored by the English teachers in an intensive English program of a North American university to different extents, but he did not explore the teachers' reasons for their actions. A study conducted in mainland Chinese universities by Xie (2013) involved observing and recording isolated vocabulary teaching in integrated reading classes for English-major students. Xie (2013) identified a sequential model of vocabulary explanation used by teacher, meaning they followed a fixed sequence to explain each word. This model included both compulsory and optional steps. After the observation, Xie re-played the recordings and invited the teachers to provide verbal reports to explain their behaviors. Results revealed the way in which teachers believe about vocabulary teaching shaped their classroom practices. More research is needed to understand teacher cognition in relation to listening and vocabulary.

Finally, L2 learners have largely been overlooked in both listening pedagogy and vocabulary research. Compared to research on learners' listening difficulties (Goh, 2000; Graham, 2006), less research has looked into learner perceptions of the instruction they receive in listening classes. Furthermore, we lack classroom-based evidence of L2 learners' attitudes and behaviors in dealing with vocabulary and vocabulary learning opportunities in listening classes. Folse (2010) and Moir and Nation (2002) found that EFL learners from various L1 backgrounds were aware of their lexical gaps yet rarely took specific action to address these gaps. One reason for this may lie in learners' cultural background, such as the Confucian cultural tradition among the Asian learners (Gan, 2009). More research is needed to explore learners' perceptions of learning and vocabulary in the context of listening classes.

Taken together, more research on how L2 listening is taught and how the complex interplay between vocabulary and listening is approached in the classroom context is needed. More importantly, the reasons behind the pedagogical decisions in classrooms are worth further investigation. The current research chose the context of two Chinese EFL university classrooms to provide such empirical data. In the next section, I will describe this context in more detail.

1.4 Context of the present study

The current research was carried out in a university in Southeast China, which is where I have worked as an English language lecturer for over 10 years. Like most Chinese universities, this university follows the National College Teaching Syllabus for English majors to provide a 4-year curriculum to undergraduates who are majoring in English Language and Literature (Jin & Fan, 2011). The four English language skills (i.e., reading, listening, speaking and writing) constitute the main focus of the first- and second-year courses. At the end of the second-year, all English major students are required to pass a high-stakes examination called the Test for English Majors (TEM) Band 4, which is administered by the National Advisory Committee for Foreign Language Teaching (NACFLT) (Jin & Fan, 2011, p. 589). This test aims to assess English major students' language proficiency in reading, listening, writing and speaking. The listening skill is the first part of the test paper and it involves a variety of conventional listening test items, such as multiple choice, short-answer questions, note-taking and gap-filling (Jin & Fan, 2011, p. 591). When students enter their third and fourth year, they can choose to attend optional courses such as English

Literature, English-Chinese Translation and Business English. At the end of the fourth year, students can choose to take a higher level of TEM test (Band 8).

This research was motivated by my personal experience of teaching listening courses to first- and second-year English major students at this Chinese university. In this local context, a series of mandatory textbooks is used in the listening classes and class sizes are large. The classrooms are dominated by unidirectional listening rather than interactive listening. Most of the time, students sit in the classroom and listen to audio or video resources from a textbook, without any opportunity to interact in a way that they might when listening and speaking in actual communication. It should be noted that, at least at this Chinese university, the listening course is not designed as a test preparation course for the TEM 4. The main lesson objectives specified in the university syllabus highlight the need to equip learners with abilities to communicate in an authentic English language context, rather than to improve their TEM test strategies. Nevertheless, my personal observation and informal conversations with learners prior to undertaking the current research suggested that while most learners were able to pass TEM 4 and complete the listening part with good grades at the end of the second year, they still felt that they struggled with using listening skills in an authentic communication context. For example, they still had difficulties in listening to English podcasts or watching English TV shows or movies without captions in their first language (i.e., Chinese/Mandarin). Or, when they are involved in conversations with native speakers of English, they felt it was difficult to follow what speakers were saying and respond to them. When I provided explicit vocabulary instruction in listening classes and a vocabulary-oriented dictation task at the end of each listening unit, I found that their performance was not promising. For example, they could not write the vocabulary correctly after receiving explicit instruction (e.g., L1 translation, L2 explanation, sample sentence providing) from me. These conversations with the learners and teaching experiences/reflections indicate that neither listening skills nor vocabulary knowledge have been adequately catered for in the listening classrooms for this context. This is why I decided to undertake research in my own environment in vocabulary and listening.

1.5 Research aims and outline

To address the gaps identified above, this research investigates teaching and learning in Chinese EFL listening classrooms at university level, with a focus on the interplay between listening and vocabulary. There are three research aims. The first aim is to explore listening

instructional practices and the reasons behind pedagogical decisions in this particular context. This requires analyzing the listening content of the mandated textbook, observing listening lessons and interviewing teachers and learners regarding their beliefs and perceptions of teaching and learning listening. The second aim is to examine the vocabulary demands of the listening classes. This aim requires a corpus analysis of the textbook and assessment of the vocabulary knowledge of the learners who attend the classes. The third research aim is to explore how the complex and dynamic interplay between L2 listening and vocabulary is approached and addressed in listening classes. This requires observing the vocabulary-related practices in listening lessons, as well as interviewing teachers and learners about their perceptions of vocabulary teaching and learning in listening classes. In sum, this research provides a comprehensive picture of the teaching and learning of L2 listening and vocabulary in this classroom context, covering the textbook materials, classroom practices, as well as teacher cognition and learner perceptions.

1.6 Organization of the thesis

This thesis is comprised of eight chapters. After the Literature Review (Chapter 2) and Methodology (Chapter 3), the thesis is organized around the three research aims listed in Section 1.5. Chapter 4 presents the findings concerning teaching and learning of listening in two EFL listening classes. This chapter starts with the listening textbook content analysis results, and reports the classroom observation data of the listening teaching practices based on the textbook. The teachers' and learners' beliefs, assumptions and knowledge of classroom-based listening are also reported. Chapter 5 focuses on the findings from the textbook corpus analysis, including its vocabulary demand and vocabulary profiles. The chapter also presents the results of the VST and of the analysis of pre-lesson Yes/No vocabulary recognition tasks. Chapter 6 focuses on vocabulary in the listening class, including vocabulary-related classroom practices, the learners' vocabulary gains from the listening class based on the pre-and-post Yes/No data, as well as the teachers' and learners' cognition and perceptions of teaching and learning vocabulary in the listening classes. Chapter 7 discusses the combined findings concerning the three topics. Chapter 8 concludes with a summary of major findings, contributions to the field, as well as pedagogical implications and the limitations of the current research.

Chapter 2 Literature Review

2.1 Introduction

This chapter begins with a description of what L2 listening entails from a theoretical perspective. It then provides an overview of instructional approaches to L2 listening, based on the theories outlined earlier. Section 2.2 concludes with a review of investigations of L2 listening in actual classrooms in different contexts, including textbook development, classroom practices, as well as teacher cognition and learner perceptions. Within the theoretical models of L2 listening comprehension, vocabulary knowledge is an important type of linguistic knowledge which helps to support cognitive processes in L2 listening. Section 2.3 reviews research on the relationship between vocabulary and L2 listening. The research suggests a two-fold relationship: L2 learners' vocabulary knowledge is an important predictor in listening comprehension success while vocabulary knowledge can also be acquired through L2 listening. Section 2.4 focuses on previous research on vocabulary in L2 classrooms, including vocabulary in L2 teaching materials and vocabulary-related practices in L2 classrooms. The chapter concludes with a listing of research gaps identified in the review, as well as the research questions which are raised to fill these gaps.

2.2 L2 listening

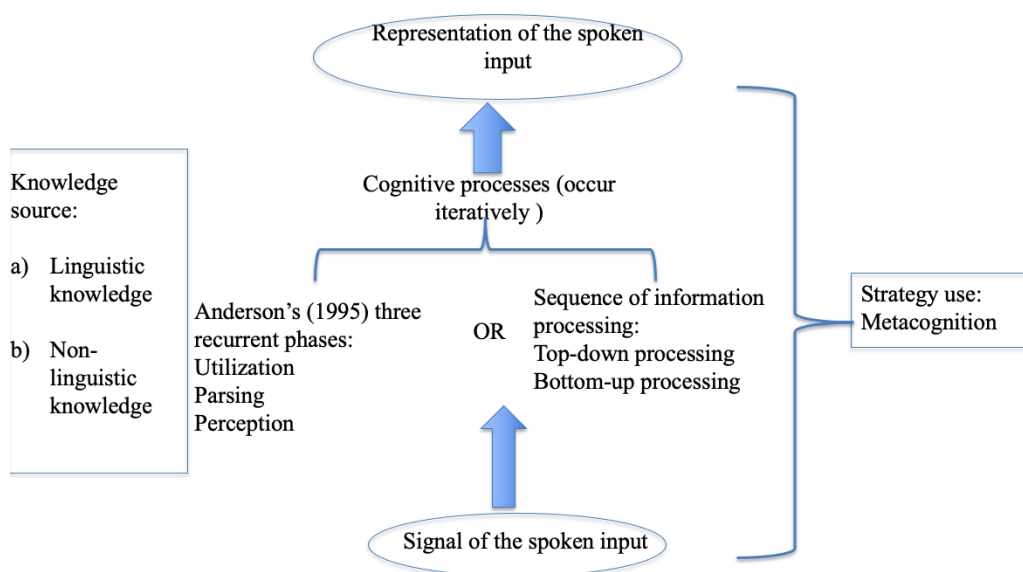
2.2.1 Theoretical models of L2 listening

Listening is defined as a collection of “overlapping types of processing” (Rost, 2011, p. 9) that a listener may experience when encountering spoken language. Over the past three decades, various models have been proposed to depict the process of listening. Anderson's (1995) cognitive framework describes the process of listening comprehension from the perspective of cognitive psychology. This framework involves three recurrent phases: perception, parsing and utilization. Different types of knowledge are used when listeners experience different phases to comprehend spoken language. In the perception phase, listeners employ their phonological knowledge to decode the speech stream. In the parsing phase, they rely on vocabulary or grammar knowledge to generate concrete meaning pertaining to the information. In other words, linguistic knowledge is mainly adopted to perceive and parse the information in the speech stream. In the utilization phase, listeners use non-linguistic knowledge (e.g., world knowledge) to process the perceived and parsed information, including drawing inferences as to implied meaning and the speaker's intention or attitude. In processing spoken input, a listener usually experiences the three phases in a recursive and simultaneous manner, until they complete processing the spoken input and

complete the comprehension process (Vandergrift & Goh, 2018).

Several models for L2 listening comprehension evolved based on Anderson's (1995) framework. Of them, the most well-known are the bottom-up and top-down models (Buck, 2001; Flowerdew & Miller, 2005). When processing the information in a bottom-up manner, L2 listeners start with recognizing smaller linguistic components (e.g., phonemes, individual words) to larger chunks of information with meaning (e.g., sentences, discourse). Bottom-up processing is equivalent to the perception phase and most of the parsing phase in Anderson's (1995) framework; therefore, it requires listeners' linguistic knowledge (e.g., the knowledge of pronunciation or intonation, vocabulary, and grammar) to recognize the linguistic components first and then to construct the meaning of the information. Top-down processing operates the other way around. It starts with activating the knowledge stored in long-term memory (e.g., world knowledge or personal experience) or making use of context (e.g., topic or types of texts) to establish expectations of the incoming information. In listening, these are usually overlapping and interactive (Flowerdew & Miller, 2005; Vandergrift & Goh, 2012). Vandergrift and Goh (2012) synthesized these models into the framework shown in Figure 2.1.

Figure 2.1 *A synthesized framework of the listening comprehension process (adapted from Vandergrift & Goh, 2012, p.27)*



As shown in the figure, cognitive processes play a key role between the listener receiving the signal in the speech stream and achieving comprehension of the spoken input. This process is

described by either Anderson's (1995) three-recurrent-phase model or the interactive top-down and bottom-up processing model. Another two contributing elements are the listener's knowledge source and strategy use. This framework applies to both L1 and L2 listeners, and the cognitive processes it describes work together rapidly and recurrently in proficient, fluent listening. However, L2 learners do not have access to the same highly automatized processes as their L1 counterparts, especially when they are perceiving or parsing the speech (Vandergrift & Goh, 2012). One option to help bridge this gap is to develop strategic competence. Vandergrift and Goh (2012) propose using the concept of metacognition to help L2 listeners take better control of these sub-cognitive processes and their knowledge sources. Metacognition refers to a kind of awareness which clarifies what cognitive processes occur as well as how they are related to learning goals (Flavell, 1979). Metacognitive strategies in L2 listening include the behaviors of planning, monitoring and evaluating (Goh, 2008). These strategies emphasize developing L2 listeners' abilities of self-regulation of listening strategies, as they require the learners to plan, monitor and evaluate their process of listening development (Goh, 2008).

The theoretical models reviewed in this section show that the L2 listening process contains a set of complex and dynamic components. To achieve successful listening comprehension, L2 listeners not only need to engage with a set of cognitive processes but also need linguistic and non-linguistic knowledge when processing the information from the spoken input in another language. Next, we move on to the application of these theoretical constructs to L2 listening pedagogy.

2.2.2 Research on teaching L2 listening

Given the theoretical frameworks reviewed above, L2 listening researchers call for a process-based instructional orientation to teaching listening. Process-oriented instruction is distinguished from product-oriented instruction (also known as the *comprehension-based approach* conceptualized by Field, 2008) in three ways: (1) the main focus and ultimate goal; (2) pedagogical activities and teaching sequences; and (3) the skills and strategies that can be developed. This section presents these three distinctions by reviewing research related to each instructional orientation.

The instructional focus and aim is reflected in the names of these two approaches. The product-based approach aims for listening comprehension outcomes whereas the process-

based approach focuses on the listening process. The major goal of the product-based approach is to obtain correct answers to comprehension questions or complete comprehension activities (Goh, 2018). If L2 learners can provide the correct answers, they are considered to successfully comprehend the spoken input. This instructional approach dates back to the 1960s, when the *text comprehension approach* dominated L2 listening classroom teaching (Brown, 1987). The main goal of obtaining correct answers of listening activities did not change when the L2 listening instruction method evolved to *communicative-oriented instruction* during the 1970s and 1980s, due to the influence of Communicative Language Teaching methodology (Goh, 2018). The process-based approach, on the other hand, encourages L2 listening teachers to make the cognitive processes underpinning L2 listening more explicit to learners. By using this approach, L2 learners' difficulties and problems during the process of listening, such as inability to recognize word boundaries in the speech stream (Field, 2003; Goh, 2000), or failure to obtain the meaning representation of spoken input (Field, 2008), may also be effectively addressed. This learner-oriented process approach became popular in the 1990s (Goh, 2018; Vandergrift & Goh, 2012), and remains the central focus of L2 listening pedagogy research today.

The pedagogical activities and teaching sequences are different across the two approaches. Following the product-based approach in L2 listening classrooms, the teaching sequence can simply be a *play, listen and check* pattern, by which the teacher plays the audio or visual recordings of the spoken input and learners complete various comprehension activities after listening (a number of times). The comprehension activities usually take the form of gap fillings (e.g., fill in sentences or charts), short-answer questions or multiple choice (Vandergrift & Goh, 2018). Finally, teachers conclude by checking the answers with learners. A major risk of implementing the product-based approach in classroom teaching is the possibility of L2 listening teaching becoming a disguised form of testing (Vandergrift & Goh, 2012).

Given the main goal of revealing the cognitive processes of L2 listening, the process-based approach tends to include pedagogical activities that focus on top-down and/or bottom-up processing. The top-down activities aim to activate L2 learners' prior knowledge (schematic knowledge) to compensate for insufficient linguistic knowledge (Vandergrift, 2004). For this purpose, vocabulary pre-teaching and questions or sentence previewing, termed as advance organizers (Jafari & Hashim, 2012), are usually incorporated into L2 listening teaching as a

lead-in pedagogical activity. Activities towards learners' strategy use and metacognitive awareness have been introduced to strengthen the top-down approach (e.g., Cross, 2010; Goh & Taib, 2006; Graham & Macaro, 2008; Graham et al., 2010, 2011; Vandergrift & Tafaghodtari, 2010). When L2 learners use the strategies of predicting or inferencing/guessing (Yeldham & Gruba, 2016), they are more likely to predict or guess the general content rather than individual lexical items in the spoken input. To incorporate metacognitive awareness into the listening classrooms, a pedagogical cycle was proposed to encourage metacognitive instruction, involving a sequence of "prediction, verification, evaluation and post-listening reflection or discussion" (Vandergrift, 2004, p. 11). Pedagogical activities in favor of bottom-up processing emphasize the linguistic elements required by the listening process. L2 learners are guided to pay more attention to the key words, and the phonological features of the words (e.g., stress) when they engage in bottom-up activities. In doing so, L2 learners can develop skills such as phonetic perception, word recognition, and lexical segmentation, while also improving their perceptual and speech parsing abilities (Cauldwell, 1996, 2000; Field, 2003; Kissling, 2014, 2018; Wilson, 2003).

Considering the simultaneous and recursive working pattern of the cognitive processes within the theoretical models for listening comprehension, activities which combine both top-down and bottom-up processes in a more balanced manner are proposed for teaching L2 listening (Vandergrift, 2004; Yeldham, 2016; Yeldham & Gruba, 2014). Vandergrift (2004) rationalizes this integration by pointing out that adequate bottom-up skills may enable L2 learners to identify a mismatch between the activation of prior knowledge and the spoken input. In other words, if L2 learners lack sufficient bottom-up skills such as word recognition ability, they are likely to make incorrect connections between prior knowledge and the input. This would lead to a failure of top-down processing.

In terms of skill development, the process-based approach develops listening skills and sub-skills whereas the product-based approach seems to benefit testing strategies. The term *sub-skills* is used, as listening itself is a language skill which is equivalent to the skills of reading, writing and speaking (e.g., Buck, 2001; Field, 2008; Richards, 1983; Vandergrift & Goh, 2012). Goh (2014) defines sub-skills in L2 listening as the learners' abilities. This means she believes these skills can be acquired over time. Once learners obtain these skills they can listen to L2 spoken language in a more automatic way. These skills involve decoding skills for bottom-up processing and inferencing skills for top-down processing. For example, L2

learners are expected to develop *decoding skills* or the skills of *segmenting speech stream* in order to accomplish bottom-up processing (Field, 2003), and to gain skills of *listening for gist* or *listening for global understanding* to cope with top-down processing (Vandergrift & Goh, 2012). Table 2.1 summarizes the distinction between the product-based and process-based approach of teaching listening, covering the main points the above review highlights.

Table 2.1 *Summary of the differences between product-based and process-based approach*

Aspects of L2 listening instruction	Product-based approach	Process-based approach
Main goal/focus	To complete listening comprehension activities with correct answers	To understand what L2 listening entails To reflect on problems during the L2 listening process
Pedagogical activities (examples)	Gap-filling; Multiple choices; Short-answer questions	Interactive processing activities (Yeldham & Gruba, 2016) Top-down activities (e.g., infer the content by means of listening topic) Bottom-up activities (e.g., identify the stressed words or syllabus for comprehension)
Pedagogical sequence (examples)	Three-phase teaching format (Field, 2008): Pre-listening: pre-teach vocabulary During-listening: play and listen Post-listening: check answers	Pedagogical cycle (Vandergrift, 2004): Predication before listening Verification after listening Evaluation of listening problems Post-listening reflection and discussion
Development of skills and strategies (examples)	Testing skills (e.g., question preview; guessing the meaning from the multiple-choice items)	Top-down or bottom-up skills (e.g., listen for global understanding, lexical segmentation) Strategies or metacognitive strategies that manage or reflect the listening experiences (e.g., planning, monitoring, evaluating)

Overlaps may exist in pedagogical activities or pedagogical sequences across these two approaches. For example, in a process-based classroom, listening activities involving multiple choice or form completion can also be used. Activity outcomes are diagnostic because listening teachers can use them to guide learners to evaluate, discuss and reflect on

any possible problems if wrong answers are provided (Field, 2008). On the other hand, in a product-based classroom, pre-listening activities such as providing background knowledge can be quite common, as teachers use them to ensure successful completion of listening comprehension activities. Therefore, the key distinction between process and product orientations may lie in the purpose of the pedagogical decisions, as shown in the first row of Table 2.1 above. Most L2 listening researchers prefer the process-based approach to the product-based approach because they expect that listening can be taught rather than just being tested (e.g., Graham & Santos, 2015; Vandergrift & Goh, 2012). Next, we will investigate the application of these two instructional approaches in listening classrooms.

2.2.3 Investigations of L2 listening classrooms in the real world

Studies on how listening is taught in the classroom are much fewer than studies on how to teach listening effectively, as reviewed in the previous section. Thus, what is going on when L2 listening is taught in different classroom contexts is an underexplored area. This section reviews the few existing studies on this topic by covering three key aspects of L2 listening classrooms: teaching materials, classroom practices, and the views of teachers and learners.

2.2.3.1 Listening textbook analyses. Only a handful of studies have examined listening teaching materials in textbooks. One of them explores the suitability of a listening textbook in the same series as the one the current research focuses on¹ (Zhang, 2020). This textbook analysis, however, focused on the alignment between the listening materials (i.e., listening texts and tasks) in the textbook and the requirements in the Syllabus, rather than investigating the representations of L2 listening instructional approaches in the textbook. Other studies examining the instructional orientation represented in listening materials of textbooks shared a common finding that these materials tend to reflect a product-based instructional approach to teaching L2 listening. This is seen in activities such as answering comprehension questions or obtaining specific information from the listening texts (Ableeva & Stranks, 2013; Graham & Santos, 2015; Hill & Tomlinson, 2003; Santos, 2015). Furthermore, these studies found that little attention was paid to listening skills, strategy development and metacognitive strategy in the textbook materials (Graham & Santos, 2015; Santos, 2015). The main features of these studies are presented in Table 2.2, including the

¹ Zhang analyzed Volume I of A Listening Course, and the current study analyses Volume II. More information is provided in Chapter 3, see Section 3.3.

types of listening materials and their target audience in the textbooks that have been analyzed.

Table 2.2 *Analyses of listening textbook materials*

Listening textbook analyses	Information about the textbooks	Target audience/context	Focus of the content analyses
Hill and Tomlinson (2003)	Three EFL textbooks	For intermediate level learners	Types of listening activities
Ableeva and Stranks (2013)	Four ELT textbooks	For beginners and intermediate to upper intermediate learners	Listening activities; genres of spoken input (briefly)
Santos (2015)	First and second edition of an EFL textbook series	Brazilian high schools	Listening passages (e.g., genres, lengths) Listening task types
Graham and Santos (2015)	17 volumes of Foreign Language (e.g., French, German) textbooks	For beginner learners at high schools in England	Listening passages (e.g., genres, lengths) Listening task types

Varied focuses in the last column result from different research goals. Hill and Tomlinson (2003) exclusively examined types of listening activities because they attempted to find out whether a set of listening skills and subskills can be developed by these activities. Ableeva and Stranks (2013) included both spoken input and listening activities because their research compared associations between listening activities and listening texts. The analytical framework developed by Graham and Santos (2015) and Santos (2015) is more comprehensive, covering a wide range of the major elements, from the characteristics of the listening passages (e.g. genres, lengths) to the orientation towards the strategy instruction in the teachers' notes. Their major goal was to examine whether there is a "gulf" between L2 listening pedagogy research literature and the design of the listening teaching materials (Graham & Santos, 2015, p.96).

Among these studies, Graham and Santos (2015) explicitly focused on the product of the textbooks, as opposed to Santos (2015) who focused on the process by comparing the changes throughout the two editions of a series of textbooks from the perspective of a textbook writer. The listening processing model (e.g., top-down or bottom-up) was examined in terms of both spoken input and listening activities within the analytical framework adopted

by Graham and Santos (2015). For the spoken input, they examined the different listening passage genres (e.g. short sentences, dialogues, monologues), and found that “smaller chunks of language” which can facilitate bottom-up processing was ignored in the textbooks (p.108). Graham and Santos then calculated the word count, duration time and speech rate and found that these listening passages were not necessarily present in real-life situations. For listening activities, they relied on a coding system which draws on the previously listed taxonomies of listening skills (Goh, 2014) to categorize listening task types in their chosen textbooks. As a result, skills for obtaining factual information were heavily emphasized by these listening tasks, while listening skills requiring global understanding were absent. This indication was further confirmed by their findings that cognitive and metacognitive strategy development were rare among these listening tasks. Finally, Graham and Santos (2015) examined the notes for the teachers for the occurrences of the suggestions in developing listening strategies and raising metacognitive awareness. Again, they did not identify adequate listening strategy and metacognitive strategies development among these teachers’ notes, and only “few references” (Graham & Santos, 2015, p. 116) relating to listening strategy were provided in the teacher’s book, such as predicting the content and making references in the context of spoken input.

To sum up, only Graham and Santos’ (2015) research includes both textbook analyses and an investigation of teaching practices. However, their teacher participants could choose other teaching materials in addition to the textbooks which were analyzed when implementing teaching practices. Thus, we lack evidence regarding the impact of mandatory textbooks on L2 listening instruction. The current study aims to fill this gap. We will next examine how teachers teach listening in classrooms.

2.2.3.2 L2 listening classroom practices. To date, only two published studies and one unpublished PhD project have been carried out specifically to capture the nature of L2 listening instruction in specific learning contexts. One of the published studies was conducted in EFL listening classrooms at Japanese universities (Siegel, 2014), and the other focused on foreign language classrooms in middle schools in England (Graham & Santos, 2015). The unpublished thesis investigated listening lessons of an academic English program at a New Zealand university (Madarbakus, 2021). The findings of these studies show that the process-based approach was rarely used.

Siegel (2014) audio-recorded 30 listening lessons taught by ten EFL teachers from five

Japanese universities. He analyzed the recorded data of the teachers' utterance by means of a pre-developed outline which categorized a number of listening "teaching techniques" (p.24). He developed these techniques based on the L2 listening research literature and included both the product-based and process-based approach (e.g., *bottom-up activities*, *metacognitive listening strategies*, *teaching modelling*, etc.). The results show that all these techniques were mentioned in the recorded data (see details in Table 1, Siegel, 2014, p.26), which indicated that a range of instructional approaches were adopted by Japanese listening teachers at university level. Still, an imbalance was identified in the distribution of these instructional approaches. The *comprehension approach* (Field, 2008) assumed a predominant position, which was followed by *bottom-up activities*. Teaching techniques which emphasize *metacognitive strategies* or *teacher modelling* were rare in the dataset. Similar results were identified in Madarbakus' (2021) classroom observations: teachers in her study spent most of the classroom time in academic listening lessons guiding learners to answer listening comprehension questions. While Siegel's (2014) study provided empirical evidence in the L2 listening instructional orientation in Japanese university classrooms, it did not explore the reasons behind this instruction orientation. In addition, only the teachers' verbal accounts were analyzed. Teachers' classroom behaviors such as writing on the board, as well as interactional exchanges between teachers and learners in the classroom may also provide evidence of L2 listening instructional practices.

A more complete picture of L2 listening teaching is provided by Graham and Santos' (2015) classroom observations in England. They invited 13 foreign language listening teachers from nine high schools to attend classroom observations. Graham and Santos' (2015) observation data collection is more comprehensive than Siegel's (2014) because they aimed to study both what teachers say and do in the classrooms. Furthermore, they included the researchers' thoughts and an observation checklist containing 12 items covering their special interest (e.g., dealing with unknown words before and after listening; prediction before and after listening) in the data collection (see Graham & Santos, 2015, pp.64-65). They observed 24 classes (approximately two classes per teacher), and categorized any observed event which involved using listening texts and carrying out listening comprehension tasks as a listening event. In total, 55 listening events were identified in their observation data. The analysis of these events focused on two major aspects: what teaching materials and listening tasks were used in observed classes, and the teachers' pre- and post-listening practices. Results showed that doing listening rather than teaching listening was prioritized. Most listening activities aimed

for successful task completion after learners listened to the listening passages and required the learners to provide answers by, for example, filling in a chart with information from listening. Graham and Santos (2015) suggest that while these activities might enable L2 learners to develop listening sub-skills such as listening for the gist or listening for specific information, they give learners few opportunities to understand the process of listening and potential problems they may face.

Another significant finding of Graham and Santos' (2015) study is that teachers provided pre-listening activities to help achieve successful task completion. For instance, most teachers helped learners clarify the task requirement before listening, or guided the learners to focus on key words which could enable them to obtain correct answers. Teacher-related behaviors of developing listening strategies, such as prediction of the content in the spoken input and subsequent verification or metacognitive strategies, seemed to be very weak according to the observation data. Such an emphasis on task completion also featured in the way in which teachers gave feedback after listening in their observed lessons, as most feedback was provided by checking answers of listening activities "in a test-like manner"(p.77). Teachers rarely discussed with the learners about listening task difficulty or the problems which might cause the failure of task completion. Development of listening strategy use was not evident in observed feedback either.

In a recent review, Graham (2017) indicates that one of the possible reasons why L2 listening research has been either lacking in representation or over-applied in actual classrooms lies in teachers lacking research knowledge about teaching listening. This concern is confirmed by practitioners' reported teaching practices across various teaching contexts (Haslett, 2020; McAndrews, 2020; Simpson, 2021). Teacher's knowledge is a key part of teacher cognition, a concept which has been developed since the mid-1990s (Borg, 2003, 2019). The next section turns to research on teacher cognition related to L2 listening instruction, and then to learners' perception of the same topic.

2.2.3.3 Teacher cognition and learner perception of L2 listening instruction.

Teacher cognition refers to "what teachers think, know and believe" (Borg, 2003, p. 81). Several studies have investigated what L2 listening teachers believe in, assume, and know about listening comprehension and instruction. A standout study by Graham et al. (2014) involved a survey of 115 teachers who taught foreign language listening in high schools in

England. In order to compare their stated beliefs and stated practices, the teacher participants were asked to provide not only what they knew about “effective listening” but also “the most important teaching procedures” they usually adopt in daily teaching practices (see the detailed questionnaire design in Graham et al., 2014, pp.54-57). As a result, a divergence between beliefs and stated practices was identified. The most important reason behind this divergence was that the teacher participants conceptualized *effective listening* as *successful listening activity completion*. Hence, the most important teaching procedures in their eyes were geared towards achieving this goal rather than developing learners’ listening strategies for more knowledge of the listening comprehension process.

The divergence between the research-recommended teaching practices and L2 listening teachers’ cognition was further confirmed in a follow-up study carried out by Graham and Santos (2015). As reviewed earlier, this study observed the teachers’ teaching practices. The teacher participants in the classroom observations were sampled from the questionnaire respondents in Graham et al. (2014). After classroom observations, Graham and Santos (2015) interviewed the teachers to further investigate their views about the nature and purpose of L2 listening, as well as to discover their justifications for the observed teaching practices. Interview responses confirmed the incorrect concept of *effective listening teaching* identified in Graham et al.’s (2014) questionnaire. In the teachers’ eyes, listening is “a task to be completed” (Graham & Santos, 2015, p. 84). No evidence in the interview data showed that the teachers were aware of incorporating listening strategies or metacognitive strategies into their L2 listening teaching. Instead, some teachers chose to reduce the task difficulty to cope with the listening challenges in their classrooms. This implementation also indicates that the teachers lacked information regarding the research literature, considering that adopting listening strategies or metacognitive strategies may help with confidence building and anxiety reduction.

L2 learners’ perceptions of listening instructional approaches have also rarely been explored. Most previous empirical research tended to report L2 listeners’ difficulties and problems in listening comprehension (Goh, 2000; Graham, 2006; Hasan, 2010). These studies gathered learners’ self-report data from learner diaries, questionnaires, or group interviews, and found that L2 learners not only felt compromised due to the delivery speed or task demand (Hasan, 2010), but also showed deficiencies in employing either bottom-up skills, such as recognizing words from the connected speech, or top-down skills, such as building meaning

representation (Goh, 2000; Graham, 2006). L2 learners tend to attribute these self-reported listening difficulties or problems to their own inadequate abilities or demanding listening texts and tasks, rather than the insufficient deployment of listening strategies or metacognitive strategies (Graham, 2006).

Siegel's (2013) investigation of L2 learners' views on strategy instruction was the only study which explored the perception in relation to listening pedagogy from the learners' perspective. He found that while learners were positive about receiving strategy instruction, they "lacked confidence" in deploying listening strategies and placed great emphasis on the product of listening comprehension (p.12). Siegel's (2013) questionnaire data provided a general descriptive overview of beliefs and perceptions related to listening instruction, while the interview data offered more in-depth explanatory information. However, little is known about L2 listeners' perceptions of other instructional approaches which have been reviewed in Section 2.3.1 or the instructional practices identified in Siegel's (2014), Graham and Santos' (2015) and Madarbakus' (2021) classroom observations.

Thus far, this chapter has reviewed the theoretical frameworks for L2 listening comprehension, as well as the empirical research exploring how L2 listening is taught in classrooms across various L2 or EFL contexts. In addition to the cognitive processes, the knowledge source is an indispensable element for L2 learners to engage with the listening process. The next section reviews the existing research on the relationships between vocabulary knowledge, as a key linguistics knowledge source, and listening comprehension.

2.3 Vocabulary and L2 listening

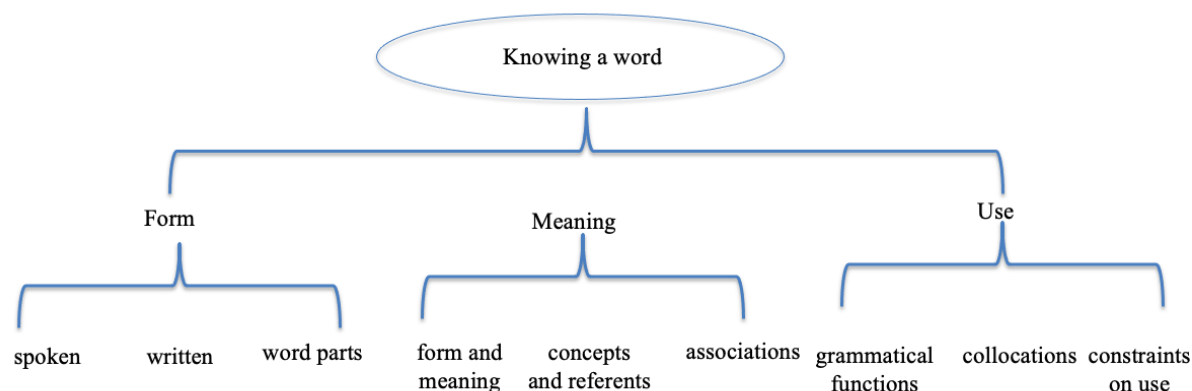
The relationship between vocabulary and L2 listening is twofold. First, previous research has found that for L2 learners, vocabulary knowledge is an important factor in determining their success in listening comprehension (e.g., Goh, 2000; Graham, 2006; Stæhr, 2009; Vandergrift & Baker, 2015; Wallace, 2020). For example, one of the major problems that L2 learners of English face is that they could not "recognize words they know" (Goh, 2002, p.59). Graham (2006) found that L2 learners of French had difficulties in "making sense of the words identified or understood" (p.178). These reported problems reinforced the critical role played by vocabulary knowledge when L2 learners experience the cognitive processes of perceiving and parsing phases outlined in Anderson's (1995) cognitive framework. L2 learners need sufficient vocabulary knowledge to complete the bottom-up processes of word recognition

and lexical segmentation when they encounter a piece of spoken language (Field, 2003). In other words, how well a L2 learner knows a word is crucial for listening? The question then arises: what does ‘knowing a word’ mean?

2.3.1 The construct of vocabulary knowledge

Nation (2013) divides the construct of vocabulary knowledge into three major dimensions: form, meaning and use. Each dimension can be further divided into sub-aspects. According to Nation, the distinction between receptive and productive knowledge which resembles the receptive and productive language skills (e.g., listening vs. speaking) applies to each aspect of word knowledge. Receptive vocabulary knowledge involves being able to recognize the form of an individual word (e.g., the sound of the words, the spelling of the words) and to retrieve its meaning (e.g., form and meaning connection). Productive vocabulary knowledge involves the ability to use the appropriate word and word forms (e.g., grammatical functions) to express meaning. These aspects of vocabulary are shown in Figure 2.2.

Figure 2.2 *The aspects of vocabulary knowledge outlined by Nation (adapted from Nation, 2013, p.49)*



In the past two decades, a growing body of empirical research has explored the association between these aspects of vocabulary knowledge and L2 listening comprehension. This research reveals that a dual relationship exists between these two constructs. On the one hand, L2 vocabulary knowledge contributes to listening comprehension. On the other hand, vocabulary knowledge can be gained through L2 listening. The next two sections (2.3.2 and 2.3.3) will review the relevant research for each side of this relationship.

2.3.2 Vocabulary knowledge for L2 listening

2.3.2.1 Vocabulary demands of L2 spoken input. The value of L2 vocabulary knowledge for listening comprehension relates to two aspects: the percentage of known words in L2 texts and the correlation between L2 learners' vocabulary knowledge and their listening comprehension performance. Research on the first aspect is known as lexical coverage research (Nation, 2006). This line of research focuses on the percentage of known words (in this case, word families – see below) in L2 written texts (e.g., Hu & Nation, 2000; Laufer, 1989; Laufer & Ravenhorst-Kalovski, 2010; Schmitt et al., 2011). These researchers found that if 98% of the words in a written text are known to L2 learners, this text can be comprehended without any assistance, and a 95% coverage figure (95 out of 100 words) can lead to adequate reading comprehension with assistance.

Considering the distinct vocabulary requirement by the two modalities of reading and listening (Mecartty, 2000; Stæhr, 2008), van Zeeland and Schmitt (2013a) followed Hu and Nation's (2000) approach to explore lexical coverage for spoken texts. First, they chose four stories as the listening materials, and then replaced the low-frequency words (in their study, this refers to the words beyond the most 2000 frequent words) with non-words to create four coverage levels: 100% (zero non-words), 98% (2 non-words in 100 words); 95% (5 non-words) and 90% (10 non-words). Both native (L1 learners) and non-native speakers (L2 learners) of English participated in this study. To make sure all the participants obtained the mastery of the words within the 2000 level, their vocabulary knowledge was assessed using the Vocabulary Level Test (Nation, 1983; Schmitt et al., 2001). Participants then took a listening comprehension test in the form of multiple-choice items after listening to these stories twice. By comparing scores from the listening comprehension tests and the four coverage levels, van Zeeland and Schmitt (2013a) found that the 95% coverage figure was a more realistic and reasonable threshold than the 98% figure to indicate relatively good listening comprehension.

Since the 95% and 98% lexical coverage figures are considered as important comprehension thresholds, they are used to identify vocabulary size targets for L2 input. Vocabulary size can be counted by word family. A word family includes “a headword, its inflected forms and its closely related derived forms” (Nation, 2013, p. 11). The underlying rationale is that if a learner (either L1 or L2) has the knowledge of any members within the family (e.g., the headword), it is easier for them to obtain the meaning of other members from the same

family. This applies to receptive vocabulary knowledge used for listening or reading comprehension (Nation, 2006). Bauer and Nation (1993) divided the construct of word family into seven levels according to the features of inflections and affixes, and the word family at Level 6² which contains “inflections and over 80 derivational affixes” is widely used to calculate the number of word-families in the corpus-based approach (Nation, 2006, p. 66).

The corpus-based approach involves using large corpora to determine frequency-based word-family lists, and then to use the lists to analyze the vocabulary demands of various texts. For example, Nation (2006) developed fourteen 1,000 word-family lists from the British National Corpus, a collection of texts with 100 million words, to investigate the vocabulary size targets to reach the 98% figure in various texts in English, including a novel, newspapers, a movie and daily conversations. The findings showed that 8,000 to 9,000-word families were needed for reading novels and newspapers whereas 6,000 to 7,000-word families sufficed for comprehending spoken texts. The lower lexical demand of spoken texts is supported by the estimates of vocabulary size targets for the 95% figure in studies by Laufer and Ravenhorst-Kalovski (2010) and van Zeeland and Schmitt (2013a). These studies showed that while 4,000 to 5,000-word families are needed for reading comprehension, 2,000 to 3,000-word families are needed for listening comprehension level at the 95% threshold.

With the development of corpus linguistics research and frequency-based wordlists, a growing variety of spoken texts have been examined for their vocabulary size targets to reach the 95% and 98% coverage figures. In the past ten years, lexical coverage studies have been conducted to identify the vocabulary size required by different types of spoken texts. Most adopted the updated version of BNC/COCA 1-25,000 word-family lists (Nation, 2016, 2018). Table 2.3 presents their findings in terms of the number of word families required to reach the 95% and/or 98% figures.

² Recently, Stoeckel et al. (2020) argue that using word family Level 6 as a word grouping unit in vocabulary assessment overestimates learners' vocabulary size.

Table 2.3 *Summary of lexical coverages for spoken texts of different genres*

Type of spoken texts	Number of word families for 95% coverage	Number of word families for 98% coverage
Movies (Webb & Rodgers, 2009a)	3,000 to 4,000	5,000 to 10,000
TV programs (Webb & Rodgers, 2009b)	2,000 to 4,000	5,000 to 9,000
Ted Talks (Coxhead & Walls, 2012)	4000	n/a
Academic lectures and seminars (Dang & Webb, 2014)	4,000	8,000
Listening texts for proficiency tests (Webb & Paribakht, 2015)	4000	n/a
Laboratories and tutorials at the university level (Coxhead et al., 2017)	3,000	7,000
Popular songs in English (Tegge, 2017)	2,000 to 3,000	4,000 to 6,000

As shown in the table, the vocabulary demands of spoken texts vary by genre. Overall, the more formal the text is (e.g., scripted academic talks or the listening passages in a test paper), the more word families it requires to reach either the 95% or 98% coverage figure. Given that both formal and informal spoken texts are included in instructional materials for listening, the vocabulary demands of these instructional listening texts, such as those found in EFL textbooks, are worth investigating. Previous textbook analyses are reviewed in Section 2.4.1.

2.3.2.2 L2 learners' vocabulary and listening comprehension. The findings of the studies reviewed above indicate that L2 learners' comprehension performance has a linear relationship with the lexical coverage levels of the input they read or listen to. This linear relationship is also identified when L2 learners' vocabulary knowledge is compared to their comprehension performance. Laufer and Ravenhorst-Kalovski (2010) invited 745 Israeli EFL learners to take the Vocabulary Level Test (Nation, 1983; Schmitt et al., 2001), which measures their vocabulary knowledge at the levels of 2000, 3000, 5000 and 10,000-word families as well as the knowledge of the academic words in the Academic Word List (Coxhead, 2000). These learners also did a reading comprehension test. The findings showed that the learners with vocabulary knowledge at the 2000 level achieved a score of 90 in the reading comprehension tests whereas learners at the 5000 vocabulary level obtained a score

of 138. These findings suggest that there is a positive association between L2 learners' vocabulary size and their reading comprehension performance.

Previous empirical studies have also found that L2 learners' receptive vocabulary size positively correlated with their listening proficiency (Stæhr, 2009). Stæhr (2009) measured 115 advanced Danish EFL learners' written receptive vocabulary size using the Vocabulary Level Test (Nation, 1983; Schmitt et al., 2001), and compared the test results with the learners' listening scores. He found that vocabulary level test scores explained nearly half of the variance in listening scores (49%), and there was a strong correlation ($r=.75$) between these two variables. Such a strong predictive power is also identified for L2 learners' receptive vocabulary size in spoken form. Wallace (2020) adopted the Listening Vocabulary Level Test (McLean et al., 2015) to measure 226 Japanese EFL learners' spoken vocabulary size, and found that the learners' vocabulary knowledge at each level had a strong correlation with their listening comprehension performance (r ranges from .785 to .855). Wallace also found that L2 learners' vocabulary size in spoken form correlated more strongly with their listening scores than other factors such as learners' topical knowledge and attention. When more language skills are included as variables, L2 learners' vocabulary size still positively correlates with listening skills, although the correlations with writing skills (Milton et al., 2010; Miralpeix & Muñoz, 2018) and reading skills (Stæhr, 2008) are stronger.

In addition to the link between L2 learners' vocabulary size and listening comprehension performance, the relationship between receptive vocabulary knowledge and listening is also considered by the research (e.g. Bonk, 2000; Stæhr, 2009; Vandergrift & Baker, 2015), and L2 learners' ability in recalling word meaning is measured in this regard. By comparing the results of Japanese EFL learners' dictation tasks and their listening comprehension scores, Bonk (2000) found that the more lexical familiarity reported by the learners, the better they performed in listening tasks. Stæhr (2009) also measured the Danish EFL learners' vocabulary knowledge using the Word Associate Test (Read, 1993), and identified a high correlation between the test results and listening scores ($r=.65$). Vandergrift and Baker (2015) compared the influences of multiple factors in L2 listening, such as learners' vocabulary knowledge (in both L1 and L2), their metacognitive awareness and memory capacity, and found that L2 vocabulary knowledge (measured by oral vocabulary task in French) was the strongest predictor for listening comprehension.

Recently, Matthews and Cheng (2015) highlight the importance of aural knowledge for high-frequency words in listening comprehension. They followed the frequency bands reassessed by Schmitt and Schmitt (2014), and categorized the most frequent 3,000-word families as high-frequency words.³ Matthews and Cheng (2015) developed a new measure of vocabulary knowledge (i.e., an adapted partial dictation) to assess learners' productive phonological knowledge for high-frequency words, and linked this knowledge to word recognition ability in connected speech. Their results showed learners' phonological knowledge of the most frequent 3,000 words predicted 52% of the variance in listening comprehension scores. Matthews (2018) then expanded the frequency band of the target words from high to mid frequency level and found that the predictive power of vocabulary knowledge on L2 listening comprehension varied according to frequency levels.

To sum up, among the different dimensions of vocabulary knowledge, phonological knowledge has the strongest link to listening comprehension, but orthographic knowledge and form-meaning linkage also account for variance in listening performance.

2.3.3 Vocabulary knowledge gain through L2 listening

The other side of the relationship between vocabulary and L2 listening lies in the construct of incidental learning through meaning-focused L2 input. In applied linguistics, incidental vocabulary learning is defined as a by-product of encountering/engaging with meaning-focused input (Webb, 2019). In other words, L2 input either in written or spoken discourse can be a source of vocabulary knowledge gain. In recent years, there has been an increasing amount of research on the effectiveness of L2 input of various modes (e.g. reading or listening) in learning vocabulary, which will be reviewed in this section.

Most studies investigating incidental vocabulary learning from L2 input employ a comparative approach, comparing vocabulary learning gains through different types of modes (e.g., reading vs. listening). Findings appear to be mixed. Earlier studies found that when learners are exposed to the same L2 input, such as graded readers (Brown et al., 2008) or academic lectures (Vidal, 2011), they gain less vocabulary knowledge through the listening mode than the reading mode. van Zeeland and Schmitt (2013b) attributed this smaller

³ Schmitt and Schmitt's (2014) reassessment on frequency bands expand the high frequency vocabulary from 2,000-word families (West, 1953) to 3,000-word families. This thesis also follows their approach to identify the frequency bands, more details are provided in Methodology chapter.

vocabulary gain through listening to the demands of processing spoken language. These demands align with the lexical problems learners experience during listening as described by Field (2003) and Goh (2000), including difficulties in parsing speech and lexical segmentation. Nonetheless, a recent comparative study on effectiveness of three input modes (reading, listening and viewing) found that a similar amount of vocabulary gain was obtained through each mode for the same TV program segment (Feng & Webb, 2019).

Research has also found that combined modes of L2 input such as reading-while-listening (e.g., Webb & Chang, 2015) and viewing-while-reading (e.g., Montero Perez et al., 2014; Pujadas & Muñoz, 2019) produce higher vocabulary gains than a single mode (Brown et al., 2008; Chen, 2021). In addition, L2 learners acquire new vocabulary knowledge incidentally through spoken texts only, of different genres (e.g., lectures or TV programs). Studies have shown this for English songs (Pavia et al., 2019), TV programs (Peters & Webb, 2018) and informal academic lectures (Vidal, 2003). In an L2 listening classroom, learners not only listen to listening texts, but also may have chances to read the transcripts of spoken input. Moreover, with the development of technology in education, audio-visual materials (e.g., short segments of TV programs) have become more common in L2 listening classrooms. Nonetheless, little is known about the value of different L2 inputs for vocabulary learning in the classroom.

Research shows that incidental vocabulary learning through L2 input depends on a range of factors, and one of them is repetition of the target words (e.g., Brown et al., 2008; Webb & Chang, 2015). As learners encounter an unknown word repeatedly when they read or listen to a piece of input, incidental learning is more likely to take place. Repetition can also take the form of providing repeated exposures to L2 input (e.g., Pavia et al., 2019). In L2 listening classrooms, the playing of audio/video recordings repeatedly is a commonly implemented classroom practice, which may affect learners' incidental vocabulary learning in listening instruction.

Taken together, the research reviewed in Section 2.3 has revealed a dynamic relationship between L2 listening and vocabulary. The next section reviews research on how vocabulary is accounted for in the teaching of L2 listening.

2.4 Vocabulary in L2 classrooms

Despite the importance of vocabulary in L2 listening, research on vocabulary in L2 listening classrooms is fairly rare. This section, therefore, adopts a broad approach and reviews the analyses of vocabulary in the teaching materials, vocabulary-related classroom practices and learning outcomes in L2 classrooms of other types (e.g., reading classes or integrated language classes), as well as the views held by L2 teachers and learners on the vocabulary component in L2 classes.

2.4.1 Vocabulary in L2 teaching materials

Research reviewed in Section 2.3.2 shows that the more words learners know, the better their comprehension of L2 input. For L2 teachers, this implies a need to know the vocabulary demands of their teaching materials. Furthermore, given the important role of high-frequency words identified in the research on the relationship between vocabulary knowledge and comprehension (e.g., Matthews & Cheng, 2015), L2 teachers need to know the extent to which L2 learners could encounter high-frequency words in classroom teaching materials. Therefore, two questions are raised: How many word families do learners need to know to comprehend L2 teaching materials? How many high-frequency words are contained in L2 teaching materials?

Several studies have been carried out by corpus-based vocabulary researchers to answer these two questions. These studies gathered textbooks used for specific classes or language programs into corpora, and used the BNC/COCA 1-25,000 word-family lists (Nation, 2018) and its previous version, BNC word lists (Nation, 2004) with the corpus-based instrument RANGE (Heatley et al., 2002) to implement their textbook analyses. The findings regarding the number of word families required to meet the 95% and 98% coverage figures of the textbook corpora are presented in Table 2.4. This table also provides their findings regarding the percentage of high-frequency words in the textbook materials.⁴

⁴ The classifications of high-frequency words depend on the word lists used in the corpus analysis. Before the BNC/COCA word lists (Nation, 2004, 2018) was developed, the GSL (West, 1953) was usually adopted to identify the percentage of the most frequent 2000 words in English. Hence, if the GSL is used as the baseword list, the high-frequency words are the first 2,000 most frequent words; BNC 1-14 word lists (Nation, 2004) also classify the first 2,000 words as high-frequency; in the latest BNC/COCA 1-25,000 word family lists (Nation, 2018), high-frequency words are the first 3,000 words, which aligns with the classification proposed by Schmitt and Schmitt (2014).

Table 2.4 *Summary of EFL textbook corpus analyses*

Textbook corpus analyses	The textbook corpora	Textbooks vocabulary load results	Results of the coverage of high-frequency words in the textbooks
Sun and Dang (2020)	11 EFL textbooks across three grade levels used at senior high schools in China	For the whole textbook corpus: 3000 word-families and 9000 word-families reach 95% and 98% respectively	82.7% of the vocabulary in the whole textbook corpus are 3000 most frequent words
	Textbook materials contain both written texts and transcripts of listening activities	For each grade level: 3000-word families for 95% but varied numbers required by each level for 98% coverage figure	For grade level 1: 98.5% For grade level 2: 86.7% For grade level 3: 62.8%
Yang and Coxhead (2020)	Two books (Book 3 and Book 4) from a popular EFL textbook series used at cram schools in China	For Book 3: 3000-word families for 95% and 5000 word families for 98%	95.15% of the vocabulary in Book 3 are 3000 most frequent words
	Textbook materials include the reading and listening passages for each unit, but exclude exercises and glossaries	For Book 4: 4000-word families for 95% and 6000 word families for 98% Varied(increased) vocabulary loads identified across the units within one textbook	92.78% of the vocabulary in Book 4 are 3000 most frequent words
Hsu (2014)	100 ESP textbooks across 20 engineering subject areas used at Taiwanese universities	For the whole textbook corpus: 5,000-word families to reach 95% lexical coverage	88.63% of the vocabulary in the whole textbook corpus are 3000 most frequent words
		Varied vocabulary loads identified across the subject areas	
Hsu (2011)	48 ESP business course books across 12 subject areas used at Taiwanese universities	For the whole textbook corpus: 3500-word families to reach 95% lexical coverage	91.84% of the vocabulary in the whole textbook corpus are 3000 most frequent words
		Varied vocabulary loads identified across the subject areas	

Textbook corpus analyses	The textbook corpora	Textbooks vocabulary load results	Results of the coverage of high-frequency words in the textbooks
Hsu (2009)	36 General English reading textbooks across four proficiency levels used at Taiwanese universities	2,500 to 13,000 words families across different levels to reach 95% coverage; Varied vocabulary loads identified across the proficiency levels	85.22% to 85.72% of the vocabulary in the textbooks are the 2000 most frequent words
Matsuoka and Hirsh (2010)	An ELT textbook used at global market for upper-intermediate learners Textbook materials include “reading passages, vocabulary and grammar tasks, and information to learners on related skills work including listening and writing tasks” (p.60)	The first 2,000 most frequent words + knowledge of proper nouns, technical words, textual word, technology words + academic words reached 95% coverage figure	90% of the vocabulary in the textbooks are the 2000 most frequent words

Several patterns can be identified in these findings. First, EFL textbooks typically require 3000 to 5000-word families to reach the 95% coverage figure. The 95% figure is probably a more appropriate target than 98% in the classroom context, because EFL learners are not expected to comprehend the textbook without assistance from teachers (Matsuoka & Hirsh, 2010). In comparison, in analyzing science textbooks used by L1 speakers of English at New Zealand high schools, Coxhead et al. (2010) found that as many as 9000-word families were needed to reach the 96.5% coverage figure. Secondly, Table 2.4 illustrates the variations of the vocabulary loads across English for General Purpose (EGP) (Hsu, 2009) and English for Specific Purpose (ESP) textbooks (Hsu, 2011, 2014), across the subject areas the textbooks are designed for (Hsu, 2011, 2014), across the units in one textbook (Yang & Coxhead, 2020), and across the proficiency levels of the textbooks (Hsu, 2009; Sun & Dang, 2020). Thirdly, irrespective of the varied classification for high-frequency words, the most frequent 2000 or 3000 words account for the majority of the vocabulary in the textbooks that have been analyzed (at least 80%).

A better understanding of the vocabulary demands of L2 teaching materials can be achieved by relating the lexical coverages of the textbook to L2 learners' vocabulary size and/or knowledge (Sun & Dang, 2020). Two types of vocabulary measurements have been proposed and adopted: size test and levels test. Webb and Nation (2008) proposed using the Vocabulary Size Test (Nation & Beglar, 2007) together with the vocabulary analysis of written texts in teaching materials, to evaluate the lexical suitability of these texts. Their rationale is that at that time (in 2008), both the VST and RANGE program with BNC word used the same BNC 1-14 word lists. The comparison of vocabulary size targets by textbooks and the actual vocabulary size measured by the VST can thus reveal the extent to which the textbooks are suitable for learners. More recently, Sun and Dang (2020) incorporated the Updated Vocabulary Level Test (Webb et al., 2017) into their high school EFL textbook analysis in China. This updated levels test measures the knowledge at each level of the first five 1,000-word families. By using this measurement, Sun and Dang found that most learners did not have sufficient vocabulary knowledge of high-frequency words (i.e., words within the first three levels) to cope with the vocabulary in their textbooks. The inadequate high-frequency vocabulary knowledge was also found in Webb and Chang's (2012) vocabulary growth study on Chinese EFL learners. These research findings suggest that EFL textbooks used in Chinese high schools or universities might be demanding to the learners.

In addition to the frequency-based words, the vocabulary in supplementary lists of BNC/COCA 1-25,000 word-family lists (Nation, 2018) has also been included into the corpus studies listed in Table 2.4, except for Matsuoka and Hirsh (2010). These words are proper nouns, compound words, marginal words, and abbreviations, and they are included in the load calculation because they are widely assumed to carry little learning burden (Nation, 2016). However, there have been arguments regarding whether proper nouns should be considered as known words for comprehension (Brown, 2010; Klassen, 2018, 2021). On the one hand, proper nouns are believed to be easily recognized, because of the capitalized initial letter and the role of context (Hirsh & Nation, 1992; Nation & Wang, 1999). On the other hand, L2 learners may confuse proper nouns with regular words due to their lack of word recognition ability (Brown, 2010), and the context of L2 input is not as supportive as expected (Klassen, 2018, 2021). Empirical studies also show that L2 learners make compromises in either reading or listening comprehension when they encounter unfamiliar proper nouns (Erten & Razi, 2009; Klassen, 2018; Kobeleva, 2012). Therefore, caution needs

to be exercised when relating learners' knowledge of proper nouns to the vocabulary demands of listening materials in textbooks.

To date, there has been little corpus-based research which focuses on listening teaching materials used in the classroom context (e.g., listening texts and the texts of listening activities). Moreover, little is known about the role of glossaries in listening textbooks. Nation (2013) summarizes two major functions of glossing unknown words within or near the reading texts: encouraging vocabulary learning and facilitating reading comprehension. However, it is difficult to gloss words within or near the listening texts as listeners would not see these texts. This thesis will follow the corpus-based approach reviewed in this section and fill in these gaps. The next section will discuss the existing research on why and how vocabulary is addressed in L2 listening classroom practices.

2.4.2 Vocabulary in L2 classroom practices

In their survey and classroom observations on 115 L2 listening teachers in the UK, Graham et al. (2014) and Graham and Santos (2015) (see Section 2.2.3) found that 95% of the teacher participants acknowledged the need to highlight unknown vocabulary before listening, and 42% of the listening events involved some focus on vocabulary. However, little detailed information was provided by Graham and Santos (2015) in terms of the process of target word selection and making decisions on vocabulary teaching. The vocabulary component in the L2 listening class is an under-researched area, compared to research on providing vocabulary support in listening comprehension performance (e.g., Berne, 1995; Chang, 2007; Chang & Read, 2006; Elkhafaifi, 2005).

In studies on the effect of vocabulary preparation on listening comprehension, researchers typically select a list of target words from the spoken input, and either ask L2 learners to self-prepare these words (Berne, 1995; Chang, 2007; Elkhafaifi, 2005) or pre-teach them (Chang & Read, 2006; Pan et al., 2018) prior to listening comprehension tasks (e.g., multiple choice items). Vocabulary support in the form of pre-teaching has involved teachers' explicit instruction in word meaning and pronunciation (Chang & Read, 2006; Pan et al., 2018). Chang and Read (2006) found that, compared to other pre-listening support (e.g., question preview), vocabulary support did not improve listening comprehension significantly. They attributed this to two major reasons. First, learner participants lacked time for vocabulary study before engaging with listening tasks, especially when they needed to study both written

and spoken form of unfamiliar words. Secondly, a pre-listening focus on vocabulary may distract learners from meaning-focused comprehension to understanding the meaning of the target words. Similar conclusions were reached by Zhang and Graham (2019), in their intervention study of 137 first-year Chinese university EFL learners. Learner participants were divided into three treatment groups and one control group. After the intervention sessions, all learner participants attended a listening comprehension test and a set of vocabulary tests related to aural knowledge. Control group learners who received no vocabulary instruction outperformed other groups in listening comprehension tasks. These research findings suggest that despite the positive correlations between vocabulary knowledge and listening comprehension (see Section 2.3.2), the interplay between L2 learners' vocabulary knowledge and their listening comprehension ability when they engage with listening activities is complicated (Zhang & Graham, 2019).

That said, incorporating explicit vocabulary instruction into classroom-based listening has been shown to be useful in previous studies. For instance, Chang and Read (2006) showed that L2 learners welcome vocabulary support prior to listening. This is not surprising, as lexical problems have been reported as part of the major listening difficulties by L2 learners (e.g. Goh, 2000; Graham, 2006). From a teaching perspective, a study by Hennebry et al. (2013) showed that teaching vocabulary in listening classes proved beneficial to new vocabulary acquisition, even though the primary pedagogical goal is meaning-focused learning (engaging with listening activities). The effectiveness of explicit vocabulary instruction in learning vocabulary knowledge is widely confirmed by other studies (e.g., Lee & Levine, 2020; Tian & Macaro, 2012; Zhang & Graham, 2019). These studies compared the effectiveness of different instructional conditions for vocabulary learning and found that *Contrastive Focus-on-Form* instruction (CFoF) appeared to be more effective than other conditions (e.g., code-switching, or L2 explanation only) in contributing to vocabulary acquisition through listening. This vocabulary instructional method was developed from the concept of *Lexical Focus-on-Form* (Laufer & Girsai, 2008; Tian & Macaro, 2012), which involves both code-switching (i.e., the teacher provides an explanation in the learners' first language and an L2 sample sentence) and L2-explanation. *Contrastive Focus-on-Form* instruction engages learners with activities to compare and contrast target words in L2 and L1 translation. Laufer and Girsai (2008) employed Schmidt's (1990) Noticing Hypothesis to explain the effectiveness of such contrastive activities. They showed that when L2 learners engaged with the tasks requiring them to transfer between two languages (e.g., translation

task), they paid more attention to the lexical items and therefore retained a more solid memory of them.

Vocabulary instruction in L2 classrooms is more complicated and multi-dimensional than simply providing one or two instructional conditions investigated in the studies reviewed above. This complexity is evident in the few existing investigations of vocabulary moments in actual L2 classrooms. Xie (2013) observed how vocabulary explanation was offered by four teachers at two Chinese universities. She found that the teachers provided isolated vocabulary explanation in the integrated reading classes in a series of steps: “frame, focus, definition, example following definition, drill practice, elaboration, repetition and frame” (Xie, 2013, p. 437). Within this sequential model, the third step “definition” involves providing L1 (i.e., Chinese) equivalents, and the fifth step “drill practice” involves the CFoF as this required the learners to engage with a translation task on a lexical item. Additionally, providing a sample sentence (i.e., example following definition as the fourth step) and more information about vocabulary knowledge such as part of speech or collocation (i.e., “elaboration” as the six step) were also identified as the typical explicit vocabulary explanation in Chinese EFL reading classrooms. While all the vocabulary explanations in Xie’s study were initiated by the teachers, vocabulary moments in L2 classrooms can also be initiated by learners (Folse, 2010). Folse (2010) observed a week’s lessons for five different courses provided by an American intensive English program. The purpose of this study was to identify the frequency of any instance relating to vocabulary either initiated by the teachers or the learners in the observed classes. These instances were operationalized as *Explicit Vocabulary Focus* (EVF). An EVF may involve the teacher providing sample sentences for a word or writing a word on the board, or learners’ behaviors of asking word meaning from teachers or peers, or looking items up in the dictionary. Overall, more teacher-initiated than learner-initiated EVFs were identified in the observations (63% vs. 37%). These two studies provide insights into the way teachers address vocabulary in L2 classrooms.

The isolated vocabulary explanations provided by the teachers in Xie’s (2013) observed classes appeared to be planned, as the teachers believed that teaching language-related components should be intentional and deliberate. In contrast, the EVFs in Folse’s study (2010) appeared to be spontaneous. The contrasting findings highlight the importance of context in shaping approaches to vocabulary in listening classes. Episodes of classroom interaction (e.g., conversation) which involve attention paid to linguistic elements (e.g.,

vocabulary) are called *Language Related Episodes* (LREs) (Basturkmen & Shackleford, 2015). Using LREs as a unit of analysis, Basturkmen and Shackleford (2015) investigated scenarios in which teachers and learners interact with each other when they focused on language in an accounting course at a New Zealand tertiary institution. Two types of LREs were identified in the classroom observation data: pre-emptive and reactive LREs. Pre-emptive LREs attend to linguistic elements regardless of whether it was a problem for the learner, whereas reactive LREs occur to solve issues or problems that arose in the classroom. Similar investigations of LREs were also conducted for the learning of specialized words in carpentry courses in New Zealand (McLaughlin & Parkinson, 2018) and English-medium instruction classrooms in South Korea (Hong & Basturkmen, 2020). So far, no classroom evidence has been provided for LREs for vocabulary (which can be termed as vocabulary-related episodes) in L2 listening classrooms.

Classroom-based research findings on vocabulary-related practices in the above studies would have been more comprehensive if they attempted to incorporate teachers' and learners' perceptions of vocabulary in their classrooms. According to Folse (2010), EVF data suggests that teachers play a crucial role in shaping vocabulary explanations and influencing learners' vocabulary learning behaviors. The frequency of EVFs in each observed course appeared to be related to teachers who taught the course. The communicative skills course had the most frequent EVFs, and the teacher of this course was good at explaining vocabulary. More interestingly, learners in this course were more active in initiating EVFs. Folse (2010) also questioned the low frequency EVFs initiated by learners as he assumed that learners did have lexical difficulties in the observed classes. Still, no further attempts were made to explore teachers' justifications for or learners' reactions to the vocabulary moments identified in this study.

Teachers' instructional practices can be closely related to teachers' beliefs (Basturkmen et al., 2004; Hsiao-Ching, 2000; Johnson, 1992; Phipps & Borg, 2009). Regarding the teaching practices termed *Focus-on-Form* instruction (Ellis et al., 2001), such as in the construct of LREs described above, Basturkmen et al. (2004) observed a "tenuous" relationship between teachers' beliefs and classroom practices (p.269). Despite the reflection of teaching beliefs in the observed classroom practices (e.g., the importance of teaching grammar), mismatches were identified between what teachers believed in and what they actually did (e.g., responding to students' problems). Basturkmen et al. (2004) acknowledged the important role

played by teachers' beliefs in classroom practices, especially for teaching behaviors pre-set in the teaching plan. However, they suggested that teachers' stated beliefs needed to be investigated together with actual classroom practices to provide a better understanding of spontaneous classroom attention in relation to *Focus-on-Form* instruction. To the best of my knowledge, there has been no research investigating the link between vocabulary-related classroom practices and teachers' beliefs in L2 listening classrooms. Furthermore, little is known about the extent to which the teaching experience (Breen et al., 2001; Macalister, 2012), teachers' own vocabulary learning experiences (Gao & Ma, 2011) and personal differences (Nural, 2014) impact on how teachers engage in vocabulary-related practices in L2 listening classrooms.

Another topic that needs further investigation when studying vocabulary moments in L2 classrooms is their effect in learning outcomes (Basturkmen & Shackleford, 2015). Dobinson (2001) provides evidence to confirm increased vocabulary knowledge as a result of classroom interaction about lexical items (either between teachers and learners or among the learners). In this study, four General English courses taught by three different teachers were observed and video-recorded. The focus when analyzing the transcribed observation data was to identify classroom interaction events related to vocabulary, including the exchange between teachers and learners as well as among the learners (e.g. teachers providing word definitions, or learners requesting word meaning). After class, learners completed a vocabulary recall test and a reflection sheet about the recall test. Findings revealed a strong link between classroom interaction and the extent to which vocabulary was recalled after class. Dobinson also found that learners could recall words which were not explicitly focused on in the classroom interaction. He explains that this might be related to "covert participation" by learners in the study (p.206). Again, we need more classroom-based evidence of learning vocabulary from the learners' perspective in the context of L2 listening classrooms.

2.5 Research gaps and research questions

Three major research gaps are identified in this chapter. First, investigations conducted by Siegel (2014) and Graham and Santos (2015) indicate a divergence between recommendations derived from research and actual classroom practice in teaching L2 listening. Thus, research is needed on the nature of listening instruction in L2 listening classrooms in different contexts and educational sectors. There is also a need for more research on how listening materials, such as textbooks, are employed by teachers. To date,

apart from Graham and Santos' (2015) study conducted in English high schools, there has been no classroom investigation into the relationship between textbook design and instruction practice. Even in Graham and Santos (2015), there is only a weak link between their textbook analysis and listening classroom observation. The last element in need of research is learner perception of the listening instruction they receive.

Second, research has not adequately addressed the question of vocabulary demands in L2 listening classes. Little has been done to examine the vocabulary load and vocabulary profile of L2 listening textbooks. No corpus analysis has been undertaken to explore the vocabulary in L2 listening textbooks which include both written and spoken input. The current research study fills this gap by analyzing the vocabulary load, vocabulary profile as well as the words glossed in the listening textbook used in the target classroom. It will link the textbook corpus analysis to the vocabulary size and knowledge of Chinese EFL learners at university level to provide a better understanding of the vocabulary demands of the textbook. Moreover, this study aims to provide information about the distribution of various types of vocabulary in the listening textbooks, such as high-frequency words, which have been claimed to deserve the most teaching and learning efforts (Nation, 2013).

Third, classroom practice in terms of why, when, and how vocabulary is dealt with in L2 listening classrooms lacks research. None of the studies reviewed in this chapter have addressed whether learners can gain vocabulary knowledge from the vocabulary-related classroom practices in the listening class. Finally, no previous studies have included both teacher cognition and learner perceptions of vocabulary in L2 listening classrooms.

To fill these research gaps, this thesis attempts to explore three specific areas related to two EFL listening classrooms at a Chinese university. The first focuses on the nature of listening instruction in Chinese teachers' EFL listening lessons. The second explores the vocabulary demands of the textbook and relates this to the vocabulary size and knowledge of the learners. The third topic examines vocabulary teaching and learning in the context of listening instruction. Each topic is addressed by a series of research questions.

Topic One: Listening instruction and learning in the classroom

Research Question 1: How is listening instruction represented in a textbook?

Research Question 2: To what extent do the teachers' implementation decisions align with or

diverge from the textbook and in what ways?

Research Question 3: What are the teachers' beliefs, assumptions, and knowledge about teaching listening?

Research Question 4: What are the learners' beliefs, expectations, and knowledge about learning listening?

Topic Two: Vocabulary in the textbook and of the learners

Research Question 5: How many word families are required to achieve 95% and 98% lexical coverage of the textbook?

Research Question 6: What is the vocabulary profile of the textbook?

Research Question 7: What kind of vocabulary is glossed in the textbook?

Research Question 8: What is the written receptive vocabulary size of the learners?

Research Question 9: What is the learners' receptive vocabulary knowledge of the items from one listening unit in the textbook?

Topic Three: Vocabulary teaching and learning in the listening classroom

Research Question 10: What do the teachers say about vocabulary in the listening classes?

Research Question 11: How frequent are the vocabulary-related episodes (VREs) and who initiates them?

Research Question 12: How are the VREs distributed across lesson phases and textbook sections?

Research Question 13: What lexical items are attended to in the VREs?

Research Question 14: What instructional techniques are used in the VREs?

Research Question 15: What do the learners say about vocabulary in the listening classes?

Research Question 16: What, if any, learning gains occurred for unfamiliar words met in the listening classes?

Research Question 17: What kind of role do the VREs play in the vocabulary knowledge gain?

A multi-methodological research design is adopted to investigate the three topics. What follows is the methodology chapter, providing detailed information of the research design as well as the specific methods used in the current thesis.

Chapter 3 Methodology

3.1 Introduction

This chapter presents the methodology for the research. The study involved collecting data from multiple sources within a first year listening course at a Chinese university. In this chapter I begin by providing a description of the context and participants. I then describe my reason for choosing a case study approach to the research and the methods for data collection. The following section outlines data analysis and the chapter concludes with a summary.

3.2 Research context

As described in Section 1.4, the research was situated in the EFL program at a university in a capital city in the South East of China. The program caters for major and non-major English students – all students enrolled in the university are required to study English. The English program employed around 50 English teachers at the time of the study. The specific context of the study was the first-year listening course for English majors. This was chosen because it required students to attend four listening sessions per week in comparison to the second-year course which only required two sessions per week.

3.3 Participants

The teachers and learners who taught and attended the first year listening skills course were the target participants.

3.3.1 The teachers

When the current research was undertaken between March and June in 2019, four English teachers were assigned to teach the listening skills course for first-year English major learners. They all followed the same syllabus. The classroom observation required at least two listening classes taught by two different teachers to allow for a comparison of teaching practices. To recruit teacher participants, I first emailed the four teachers prior to the teaching semester (i.e., during the winter vacation in 2019) and provided them with an overall description of the study and what they need to do if they were interested in participating. I reminded them of their rights to refuse if they were not interested. Two of the teachers agreed to take part in the research (with the pseudonyms of Gigi and Amanda). Their biodata is provided in Table 3.1.

Table 3.1 *Information about the teacher participants*

Pseudonyms of teacher participants	Gender	Age	Years of teaching English	Educational background
Gigi	Female	29	9	Masters in English Education in mainland China
Amanda	Female	35	12	Masters in English Literature in mainland China

Both Gigi and Amanda participated in one-on-one interviews after the classroom observations.

3.3.2 The learners

Two hundred and thirty first-year English majors from seven English classes were enrolled in the listening course during the period of data collection. For the purpose of statistical analysis, the vocabulary size test required a large number of student participants, and for this reason all 230 students were invited to take the test. For the purpose of the pre-and-post vocabulary recognition task, all the learners who attended the two observed listening classes were chosen as participants. In addition, a small group (e.g., around four to six) of learners in each class were expected to attend group interviews after the observations.

To recruit the learner participants, I introduced the project in the mandatory evening self-study classrooms for the first-year English major learners in all seven classes. I provided information about the study. I emphasized that what learners do in the study would not affect their course grades and that participation was voluntary. After the explanations, all the learners in the two to-be-observed classes agreed to be observed, and a small group of them volunteered for the group interviews. Three out of 35 learners in one of the to-be-observed classes declined to sit in the pre-and-post vocabulary recognition task. Most of the learners from the seven classes agreed to attend the Vocabulary Size Test (Nation & Beglar, 2007). Table 3.2 below summarizes the exact number of the learner participants who signed up for each research instrument.

Table 3.2 *Learner participants for each type of data collection*

Data collection	Target participants	Actual number of participants
Vocabulary size test	First-year English major learners in the target university	205
Classroom observation	Teachers and learners in intact listening classes	Two listening classes (67 learners and two teachers)
Pre-and-post vocabulary recognition tasks	Learners from the observed classes	64 (32 from each class)
Group interviews with learners	A group of learners from the observed classes;	Seven

In total, two hundred and five learners participated in the research, 192 females ($n=192$), and 13 males ($n=13$). All these learners sat the Vocabulary Size Test (Nation & Beglar, 2007). Of these learners, 67 were in the two observed classes, with 35 learners from Class One and 32 learners from Class Two. Most learners agreed to complete the vocabulary recognition tasks before and after their listening lessons ($n=64$). Seven learners volunteered to participate in the group interviews after observations, three from Amanda's class and four from Gigi's class. The average age of these learner participants was 18 years ($SD=0.78$), and they shared the same L1 (i.e., Mandarin). Their English language learning experience ranged from six to nine years. Their English proficiency level was estimated to range from lower to upper intermediate according to their final exam performance at university⁵. They had not taken any standard English proficiency level assessments such as the International English Language Testing System (IELTS) test.

3.3.3 *Ethical considerations*

The research was approved by the Human Ethics Committee of Victoria University of Wellington (Ethics Approval No. 26631; see the formal approval letter in Appendix A). Before recruitment of participants, I approached the dean of the School of Foreign Studies at the target university for permission to contact the English major teachers and learners and enter their listening classes for data collection. All the participants were given information sheets with detailed explanations about the purposes and steps for each data collection

⁵ Gigi and Amanda provided me with general information on the learners' performance in final exams in conversations.

instrument. They signed written consent forms if they agreed to participate⁶. They were offered vouchers and/or snacks to express my gratitude for their participation at the end of each piece of data collection. After data analysis, all the participants were provided with a summary of findings⁷.

3.4 Overview of the research approach and method

A case study approach was adopted to guide the data collection methods in the current research. Duff (2014) defines a *case* as an “individual entity” (p.236). In the field of language teaching and learning, a class or an educational institution can serve as a *case* (Duff, 2014). The listening skills course for first-year English majors at a Chinese university which motivates this research is considered as a *case*, because it constitutes a bounded entity. My research into this course is likely to offer findings that are transferable to similar programs in other Chinese universities which use the same listening textbook series.

For the purpose of providing a rich description of the listening course, both quantitative and qualitative data collection instruments were adopted (Dörnyei, 2007). This included:

- Classroom observations and interviews to collect qualitative data on the classroom practices, teacher cognition and learner perceptions of the course
- Measures of the learners’ vocabulary knowledge
- Content and corpus analysis of the textbook

Table 3.3 provides a summary of the data collection methods and aspects of the listening classes they addressed.

⁶ Samples of information sheets and consent forms in Appendix B.

⁷ A sample of the feedback report is provided in Appendix C.

Table 3.3 *Multiple methods for data collection*

Data collection methods	Aspects of the listening course
Content analysis	The textbook (listening materials)
Corpus analysis	The textbook (vocabulary)
Vocabulary measurements	The learners' vocabulary size and knowledge prior to listening classes The learners' vocabulary gain after listening classes
Classroom observation	The classroom practices (listening and vocabulary)
Interviews	Teacher cognition and learner perception (listening and vocabulary)

3.5 Data collection instruments

This section provides details of the instruments adopted to collect data from each participant group described above, focusing on what they are, how some of them were developed from piloting to main study (observation schemes and interview schedules) and why they were chosen in the current research.

3.5.1 Vocabulary Size Test

3.5.1.1 The test format. The Vocabulary Size Test (VST) developed by Nation and Beglar (2010) was used to measure the learners' receptive vocabulary size. The VST was designed to test both L1 and L2 learners' English vocabulary size in the written form. It was originally created based on the British National Corpus (BNC) 14,000 frequency levels (Nation, 2004). Nation and Beglar (2007) selected ten words from each level to form a 140-item multiple choice test. Although each target word is placed in a non-defining sentence as the test item, only decontextualized vocabulary knowledge can be tested. The test takers are required to choose each word's best definition in English out of four options.

Multiple versions of VST have been developed, such as the 20,000 version with an updated frequency-level up to the 20th thousand word-families (Nation & Coxhead, 2021; Coxhead et al., 2014), and bilingual versions with the test items written in EFL learners' first languages (e.g., Elgort, 2013; Nguyen & Nation, 2011). In the current research, I used the Mandarin version of the 14,000 VST for the learners' receptive written vocabulary size. In this bilingual version, the options were provided in the form of translations in Mandarin so that the learners

were not challenged in understanding the grammar and meaning of the definition options (Elgort, 2013). The full test paper was downloaded from Paul Nation’s website: <https://www.wgtn.ac.nz/lals/resources/paul-nations-resources/vocabulary-tests>, and an example of the test items is presented in Figure 3.1 below.

Figure 3.1 *Example of the Mandarin version of the VST*

词汇量测试	
First 1000	
1. see: They saw it.	8. shoe: Where is your shoe ?
a. 切	a. 父或母
b. 等待	b. 钱包
c. 看	c. 钢笔
d. 开始	d. 鞋子

3.5.1.2 Rationale and limitation. The VST was chosen in the current study for two major reasons: First, it is a valid and reliable vocabulary test (Beglar, 2010). Moreover, it is fast and convenient for collecting a larger data set. Second, the VST uses the same frequency-level classified in the British National Corpus (Nation, 2004) as the Range program does (the program used to analyze the vocabulary in the textbook, see Section 3.7.2). It should be noted, however, that the wordlists in the Range program have been updated to BNC/COCA 25,000 word-families (Nation, 2018), while the VST remains at the 14,000 level (Nation, 2004). This is acceptable in the current research as the Chinese university learners’ vocabulary size is unlikely to exceed 10,000-word families (Nation, n.d.; Sun & Dang, 2020; Webb & Chang, 2012).

One major limitation of using the VST in the current research is that it can only provide information about the learners’ written receptive vocabulary size, excluding their vocabulary size in the spoken form. Nevertheless, vocabulary size measured in the written form has been used to examine the relationship between vocabulary knowledge and listening comprehension in the previous research (e.g., Stæhr, 2008; Stæhr, 2009). What is more, as described in Section 3.3, the learners were exposed to both written and spoken input in the textbook. In this sense, the written receptive vocabulary size measurement can be a useful indicator to show the extent to which students comprehend the listening textbook materials.

3.5.2 Vocabulary recognition task

In order to measure the learners' receptive knowledge of vocabulary in the textbook (to supplement the overall measure of vocabulary size using the VST), I developed a vocabulary recognition task for the learners in the observed classes. The task was implemented before and after the instruction sessions over the listening unit (i.e., a pre-and-post task) to measure both the learners' receptive knowledge and their vocabulary gains in the observed listening classes. This sub-section provides a description of the format and the development process of the task.

3.5.2.1 The task format. I adapted a Yes/No test format to design the vocabulary recognition task. The Yes/No test is considered as a valid, reliable and practical instrument to measure L2/EFL learners' receptive vocabulary knowledge (e.g. Meara & Buxton, 1987; Nation & Webb, 2011; Read, 2000). By using this format, a large number of target words can be measured for their form-meaning relationship within a short period of time (Read, 2000; Schmitt, 2008; Schmitt et al., 2011). In the current study, the learners were required to self-report whether they recognized the target words in the textbook materials by choosing Yes or No for each word. Before I started the data collection in China, the two teachers who agreed to participate in the study provided me with a teaching schedule for the whole semester. According to this teaching schedule and my own data collection arrangement (see Section 3.6), listening Unit 6 was likely to be taught in the two classes that I was going to observe. Therefore, I selected target words from this unit to develop the Yes/No task. Guiding principles for choosing the target words are presented below.

3.5.2.2 The selection of the target words. I adopted a corpus-based approach to select the target words from the listening unit. That is, I chose the target words based on their frequency levels in Nation's (2018) British National Corpus (BNC)/Corpus of Contemporary American-English (COCA) 1-25,000 word-family lists and four supplementary lists. This updated version provides the most comprehensive frequency levels from the 1st to the 25th 1,000-word families. Four supplementary word lists for proper nouns, marginal words, transparent words, and abbreviations are also included. I also took the number of their occurrences in Unit 6 in account. In order to obtain the frequency levels and number of occurrences of the words in this unit, I ran the RANGE program (Heatley et al., 2002) over both the spoken input and written texts which were distributed in seven listening sections

such as phonetics, news items or videos.⁸ In this way, target words were selected from both the full range of instructional sections and the full range of frequency levels in the BNC/COCA 1-25,000 word-family lists for both spoken and written input in Unit 6. Then, drawing on the vocabulary profile results from Unit 6's, I developed and implemented the following principles to select the target word.

The first principle was to exclude the function words (e.g., articles, pronouns, conjunctions and prepositions), because they were more related to learners' grammatical knowledge than vocabulary knowledge (Nation, 2016). Therefore, only content words (e.g., nouns, adjectives, verbs, and adverbs) from the BNC/COCA 1-25,000 word-family lists were considered as possible target words. This dataset included the proper nouns and transparent compounds in BNC/COCA's supplementary word lists (Nation, 2018). This means that receptive knowledge of both frequency-based words and words in the supplementary lists could be measured.

Secondly, words which occurred more than twice at each frequency level were selected, as repeated word are more likely to be learnt (Nation, 2013). Some words occurred only once at a certain frequency level (e.g., low frequency). They were also selected because they were also likely to be learnt in the listening classes when they are the targets of explicit explanations by teachers. In addition, long words with more than two syllables were chosen despite the number of occurrences because they might need more effort and/or attention to acquire than shorter ones (Ellis, 1994). A list of 375 initial candidate words was created following these steps.

The next step was to single out the words which appeared in both spoken input and written texts in the initial list. These words were more likely to be encountered by the learners as they could be both heard and read in the listening class. As a result, the list of possible target items was divided into four sections. The first section included items that were in both the reading and speaking texts. The second part was composed of either the most frequently repeated word or the only word at each frequency level in the spoken input or the written texts only. The third part of this list consisted of the long words in either spoken input or written texts. Finally, any words which were glossed but did not appear in the first three parts were

⁸ The information of the listening sections within one unit is presented in Section 3.7.1. The corpus analysis process for unit 6 follows the corpus analysis for the whole textbook corpus, which is presented in Section 3.7.2.

categorized in the fourth section of the list. The candidate list at this stage contains 110 target words.

The last step was to delete two types of word items from the candidate list. The first type was the overlapping words in the BNC 14,000 VST. These were deleted to avoid the possible bias from the VST which was implemented before the Yes/No tasks (see Section 3.6.1). After cross-examining the list of candidate words and the VST test paper, one word was deleted: *haunt*, as it appeared on the 5th 1000 level in the test paper. The second type was the low-frequency words which occurred only once in the listening unit. These words were deleted because they were unlikely to be known or learnt by learners due to their frequency levels and rare occurrences. Nine words of this kind were excluded from the target word list.

Finally, 100 words were selected from Unit 6 as the real target words (as opposed to pseudowords, see below) for the vocabulary recognition task sheet. Table 3.4 summarizes the number of target words for high, mid and low frequency bands of the BNC/COCA 1-25,000 word-family lists as well as supplementary lists. In this study, I followed Nation's (2013) and Schmitt and Schmitt's (2014) advice to categorize words within the 1st to 3rd frequency level as high-frequency words, words within the 4th to 9th level as mid-frequency words and words within the 10th to 25th level as low-frequency words. Examples are provided together with their source in terms of discourse type and textbook sections.

Table 3.4 *Yes/No task target words from high-, mid-, low- and supplementary word family lists*

BNC/COCA word family lists	N	Detailed information of the target words		
		Sample words	Type of discourse	Listening section
High-frequency band (1 st -3 rd)	57	academy	both spoken and written	Passages
		electronic	written only	News items
		urban	spoken only	Video
Mid-frequency band (4 th -9 th)	27	crust	both spoken and written	Passages
		cockpit	written only	News items
		protocol	spoken only	Passages
Low-frequency band (10 th -25 th)	6	abominable	both spoken and written	Dialogues
		aeronautics	written only	Passages
		kamikaze	both spoken and written	Video
Proper nouns	4	Scotland	both spoken and written	Passages
		America	written only	Dialogues
		Swiss	both spoken and written	News items
Compound words	6	wingspan	both spoken and written	News items
		businessman	written only	News items
		airplane	spoken only	News items
Total	100	n/a		

As shown by the examples in Table 3.4, the original form of the words rather than the headword of a word family was retained in selecting the target words. I made this decision based on the evidence found in piloting the tasks with another group of learners before the main study (see section 3.5.2). During the pilot studies, the word *circumnavigation* was reported to be unknown by the learners. However, the learners reported knowing the meaning of *navigate*, the head word of the word family to which *circumnavigation* belongs. This highlighted the risk in assuming that the learner participants would know the meaning of the target words just because they knew the headword. Therefore, I decided to keep the original form of the target words as they were in the listening unit to provide more accurate data about the learners' receptive vocabulary knowledge.

3.5.2.3 Developing and selecting pseudowords for the Yes/No task. One of the widely criticized drawbacks of the Yes/No test format is that it does not require the test takers to demonstrate their vocabulary knowledge. Along with the potential for not being taken seriously by the participants, overestimation has also been found to occur (Nation & Webb,

2011). The pilot studies I conducted supported these findings. To mitigate this issue of overestimation, L2 vocabulary researchers have suggested inserting pseudowords (i.e., non-existing words) into the task sheet (e.g., Anderson & Freebody, 1983). If learners choose YES on most of or even all the pseudowords, it is likely that the task is not being treated seriously and that learners are exaggerating their vocabulary knowledge level. This means that their task results should be excluded (Pellicer-Sánchez & Schmitt, 2012).

While the percentage of the pseudowords depends on the number of target words and the particular research purposes (e.g., Schmitt et al., 2011), a proportion of one-third is recommended to control overestimation (Nation & Webb, 2011). The pilot task showed that learners needed 10-15 minutes to complete the Yes/No task with 100 words (see more details about the pilot below). To ensure that learners had enough patience for the task, I decided to maintain this time length, and added 20 pseudowords to the vocabulary recognition task (i.e., 20 out of 120 words were pseudowords).

There is no fixed rule for creating pseudowords and multiple approaches have been adopted. For example, pseudowords can be created by simply altering the real words by one or two letters but keeping the phonotactic features (Mochida & Harrington, 2006) or they can be generated by software such as Wuggy (Keuleers & Brysbaert, 2010). The current study adopted the character-gram algorithm developed by König et al. (2019), which breaks the real words in an input wordlist into character-grams and then uses statistical probability to chain the character-gram back together to form a pseudoword. I chose this algorithm because it maintains the orthographic forms of the pseudowords, ensuring they will not be easily recognized as a non-existing word at a quick glance. Hence, the learners will need to think about the pseudowords carefully and seriously during the self-report process. I provided an input wordlist containing real words from another listening unit⁹ in the textbook to the algorithm creator (i.e., König), and received a list of pseudowords ranging from 2-gram, 3-gram and 7-gram characters. I selected 20 of them randomly to constitute the pseudowords part of the vocabulary recognition task in the current study, as shown in Table 3.5 below:

⁹ The decision on choosing words from other units to create pseudowords was made after 1st pilot task, see below

Table 3.5 *Pseudowords in the Yes/No task sheet*

glown	insanized
thian	breatment
cominnuy	glor
buttry	exerbal
smenic	treal
pernal	schotic
fiscular	criage
pation	hereakdown
volation	lunance
classifical	verbility

The full list of the target words for the Yes/No tasks (100 real words plus 20 pseudowords) used in the main study is provided in Appendix D.

3.5.2.4 The pilot test. The vocabulary recognition tasks were piloted with two Chinese postgraduate students in Wellington in January 2019¹⁰ to ensure the internal validity of the task design (i.e., whether it measures what it is supposed to measure). The following aspects were checked and refined in the pilot (Nation & Webb, 2011):

- a) The time length to complete the task
- b) Learners' understandings of task instructions
- c) Learners' familiarity with the task format

In this pilot, the task sheet contained 100 words (80 real words plus 20 pseudowords which were created based on another 20 real words chosen from Unit 6). The two participants completed the task on their smartphones, and each participant spent approximately 10 to 15 minutes on the task. The feedback from this pilot is as follows:

- 1) Participants preferred a pencil-and-paper version of the task sheet.
- 2) When the task instructions were given in Mandarin, the participants completely understood the task requirements.
- 3) Providing oral explanations about the meaning of pseudowords reminded the learners to pay careful attention when encountering them.

¹⁰ This pilot was the subject of the 1st ethics amendment: see the amendment template in Appendix A.

- 4) A randomized order of the word items between pre-and-post task sheets helped avoid the participants' memory of them between the two tasks.
- 5) It was better to insert pseudowords created from real words in other listening units, because participants might remember the real words in Unit 6 after engaging with the listening activities.

All these outcomes were marked and integrated into the final task design for the main study phase. During the pilot task, I invited the participants to provide a concurrent verbal report (i.e., think aloud protocol) to explain their choices during the post-task (Dörnyei, 2007). In this way, I was able to verify the extent to which they reported in an honest manner in the task.

3.5.3 Classroom observation scheme

A classroom observation scheme was developed to guide observations of lessons in two first-year English major learners' listening classes taught by two teachers. In order to develop the observation scheme, I requested permission to observe two second-year listening lessons as a pilot. I chose this lesson because second-year English learners had the same type of listening course and used the same textbook series. The same ethics procedure as described in Section 3.4.2 was implemented for this pilot. During the piloting, I adopted an open observation style without any scheme and observed two listening sessions (40 minutes per session). I sat in the back of the classroom and briefly noted down teaching procedures. I particularly noted down what the teacher did and said to teach listening and deal with vocabulary. I also audio- and video-taped the observed lessons, which provided me more chances to identify the classroom patterns. After piloting and reviewing the observed data from field notes and video-taped clips, I developed a semi-structured observation scheme for the main study, as shown in Figure 3.2 below:

Figure 3.2 *The classroom observation scheme used in the main study*

Observation scheme for the listening classes

Date: _____
Time: | _____
Teacher: _____
Learners: _____
Classroom: _____

Listening Section	Time length of the section	Phase of listening	Teaching procedures	Time of listening	Vocabulary-related practices	Learners' reactions/behaviors	Researcher's thoughts
		Before Listening					
		While listening					
		Post-listening					

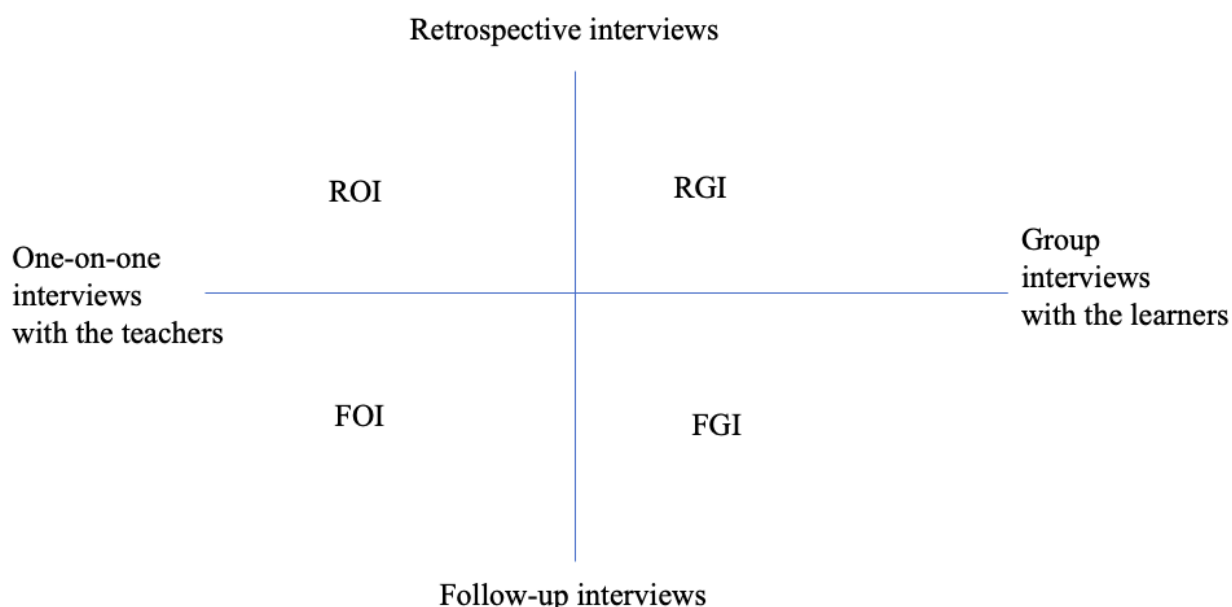
Using the scheme as shown in Figure 3.2, I was able to take observation notes for each listening section within the unit, and for the before-while-post listening phases. There were two reasons for doing this. First, the pilot observation showed that when the teacher used this textbook series, the teaching procedures consistently followed the pre-, during- and after-listening phases. Second, teaching procedures in these phases may provide insights into the extent to which schematic knowledge and/or listening strategies (e.g., prediction or evaluation) were emphasized. The vocabulary column in the refined observation scheme aimed to reflect two major components of vocabulary-related practices: the lexical items which were focused on in the listening classes (i.e., what) and the instructional techniques adopted by the teachers to deal with the word items (i.e., how). I also included a column named *Researcher's thoughts* in the scheme, so as to provide any interpretations on the descriptive data from the researcher's perspective (i.e., myself) for a preliminary analysis (Graham & Santos, 2015). Finally, generic information such as dates, instruction hours, pseudonyms of listening teachers, number of learners, and classrooms were also included in the scheme. In sum, this observation scheme was able to obtain data in both the "low-inference category" (e.g., teaching procedures, time length, number of repeated listening) and the "high-inference category" (e.g., researcher's thoughts) in a systematic manner (Mackey & Gass, 2015, p. 244).

3.5.4 Interview schedules

The final data collection instrument is interview. Overall, the study was planned to have four types of interviews with the teachers and the learners respectively, to collate their beliefs, assumptions and knowledge concerning their listening classes. They are (see also Figure 3.3):

- 1) retrospective one-on-one interviews with the teachers (ROI)
- 2) retrospective group interviews with the learners (RGI)
- 3) follow-up one-on-one interviews with the teachers (FOI)
- 4) follow-up group interviews with the learners (FGI)

Figure 3.3 *Matrix of interview types*



The main function of the retrospective interviews was to gather thoughts from teachers and learners on the listening lessons they had just completed. The purpose of follow-up interviews was to explore teachers' beliefs and learners' perceptions on teaching and learning listening and vocabulary in the listening classes. I refined the interview schedules for the main study based on pilot interviews with the second-year teacher and learners in the observed listening class (see Section 3.5.3). When piloting the retrospective interviews, I mainly asked questions according to the sequence of teaching procedures that I had noted in the pilot observations, either for teachers' explanations or for learners' perceptions of each element of the teaching procedure. In the follow-up interviews with the pilot group, I adopted

a semi-structured interview format to gather participants' opinions about teaching and learning listening, using the textbook, and dealing with vocabulary in listening classes.

Data from the pilot interviews indicated that the main study needed a more structured interview schedule with more focused categories, and each category should serve as a base to obtain rich data of the beliefs, assumptions, knowledge and perceptions of specific aspects constituting listening classes (e.g., listening activity design, vocabulary difficulties, etc). Therefore, the interview schedules moved from a relatively loose structure in the pilot to a more structured schedule in the main study. A schedule of four semi-structured interviews was adopted in both retrospective and follow-up interviews with teachers and learners after the observations.

Table 3.6 below presents the focuses and categories in each refined retrospective interview schedule used in the main study. Each category contains a number of interview questions, which are tentative as they may change according to the responses of the participants. The full interviews schedules for each interview are provided in Appendix E.

Table 3.6 *Focuses and sub-categories in the retrospective interview schedules (i.e., ROI and RGI)*

Focuses	Categories for the teachers	Categories for the learners
Questions related to each listening section in the unit	Teaching expectations for each listening section	Learning expectations for each listening section
	Estimations regarding learners' difficulties in each listening section;	Difficulties in each listening section
Questions related to teaching practices before, during, and after listening	Justifications for the repeated listening and for the summarized teaching patterns in each listening phase	Stated behaviors and/or expectations during each time of playing audio/video recordings and in each listening phase
	Justifications for the specific teaching practices	Perceptions of the specific teaching practices
Questions related to vocabulary-related practices	Evaluations of the textbook's vocabulary demand	Evaluations of the textbook's vocabulary demand
	Justifications for the types of vocabulary that was dealt with in the listening class;	Perceptions of the types of vocabulary that was dealt with by the teacher in the listening class;
	Justifications for the way in which vocabulary was dealt with in the listening class	Perceptions of the way in which vocabulary was dealt with by teacher in the listening class Evaluations on the effect of listening lessons on vocabulary learning

As shown in Table 3.6, the three main elements in the retrospective interviews aligned with the key elements in the refined observation scheme (see Figure 3.3). Each focus is

accompanied by sub-categories related to various aspects of the observed classroom practices. The distinction between the questions for teachers and the learners lies in the type of response. The retrospective interviews were aimed at teaching expectations and justifications for the observed classroom practices from the teacher participants (ROI). As for the learners, the RGI schedule mainly aimed to obtain information on the learners' self-stated perceptions of engaging with the listening activities in the observed lessons, as well as their explanations and perceptions of the vocabulary-related practices in the listening classrooms. Additionally, as noted earlier in piloting the Yes/No tasks (see Section 3.5.2.4), it was important to gather the learners' views on this task. Therefore, I included two questions at the end of the RGIs about thoughts on the effect of listening lessons on vocabulary learning:

- a) Did you notice any words encountered in your pre-test when you received instructions or when you engaged with the listening activities in the class? If yes, did you pay special attention to them as you received instructions/engaged with the listening activities?
- b) What role did the listening lessons play in your learning of these particular words?

Table 3.7 presents the main focuses and categories included in the follow-up interview schedules in the main study.

Table 3.7 *Focuses and sub-categories in the follow-up interview schedules (i.e., FOI and FGI)*

Focuses	Categories for the teachers	Categories for the learners
Warm up questions	Teaching experiences in English language and listening course	Years of learning English language; difficulty of four language skills in English reasons for ranking the four skills
Questions related to listening comprehension	Understandings of the construct of listening comprehension	Understandings of the construct of listening comprehension
Questions related to classroom-based listening instruction	Overall goals of teaching listening courses; Self-evaluation in teaching listening	Perceptions of learning listening course in classroom context
Questions related to teaching materials in the listening classes	Evaluation of the listening textbook design (e.g., genres of listening texts, types of listening activities)	Evaluations of the listening textbook design (e.g., genres of listening texts, types of listening activities)
Questions related to the vocabulary in listening class	Understandings of the construct of vocabulary knowledge Beliefs about the role of vocabulary in listening class; Beliefs about time accorded to dealing with vocabulary in listening class; Beliefs about the vocabulary instructional approaches in the listening classes Perceptions of factors in vocabulary-related practices in the listening classes Assumptions about learners' vocabulary learning in listening class	Understandings of the construct of vocabulary knowledge Perceptions of the relationship between listening and vocabulary Perceptions of vocabulary learning in listening class
Final questions	Contextual factors in listening classroom teaching	

As the table shows, the FOIs aimed to explore the teacher participants' beliefs, assumptions and knowledge about teaching and learning in the listening classroom. Furthermore, the influence of contextual factors on teaching cognition was also explored in these interviews. Regarding the learner participants, I developed FGI schedules which sought to obtain information on the learners' perceptions concerning their understandings of listening comprehension and vocabulary knowledge as well as the relationship between these two components. Having described and justified the research instruments, the next sections focus on data collection procedures.

3.6 Data collection procedures of main study

The Vocabulary Size Test data gathering took place early in the spring semester of the target university in 2019. The pre-and-post vocabulary recognition tasks followed with the listening classroom observations and interviews in May and June 2019.¹¹ The retrospective interviews were conducted within 48 hours of the classroom observations. The follow-up interviews took place one week later. Table 3.8 illustrates the time flow of the data collection process in the main study.

Table 3.8 *The data collection procedures in the main study from March to June 2019*

Data collection instrument	Timeframe
The Vocabulary Size Test	March 2019
Pre-vocabulary recognition task	May 2019
Classroom observations	May-June 2019
Post-vocabulary recognition task	May-June 2019
Retrospective interviews	June 2019
Follow-up interviews	June 2019

In the following sub-sections, I will present descriptions related to the administration of the two vocabulary measurements, as well as the procedures for classroom observations and post-lesson interviews with the teachers and learners in each listening class.

3.6.1 Administration of the Vocabulary Size Test

I carried a trial test with the three second-year English major learners from the pilot classroom observations three days before I the target learner participants (i.e., 205 first-year English major learners) sat the test. The main purpose of this trial test was to refine the

¹¹ All the pilot studies were completed in April 2019.

instructions, which were initially drafted based on the instructions given on VST online (www.my.vocabularysize.com). After the trial test, I provided the instructions in Mandarin on top of the test paper (see Figure 3.4 below, and the English translation in Figure 3.5). A paper-and-pencil version of the test format was adopted in the current study so that the learner participants treated the test more seriously than completing the electronic version (e.g., on their smartphones).

Figure 3.4 *The VST instructions in Mandarin*

英语词汇量测试

测试说明

本测试共有 140 道题目。请仔细阅读每道题中的英语单词和括号中的例句，例句可以帮助大家理解题目里的单词。请从每道题下面的四个选项中选出与题目中单词意思相符的中文翻译。为了帮助大家了解自己最真实的英语语言词汇量，请大家各自独立完成该测试，不要参考任何词典，亦不要与他人讨论。

请填写个人信息

姓名:

性别:

年龄:

班级:

测试题目

Section 1

1. see (They saw it.)

a. 切

b. 等待

c. 看

d. 开始

Figure 3.5 *English translation of the VST instructions*

English Vocabulary Size Test

Instructions

There are 140 questions in this test. Look at the word and an example of the word in use.
Choose the meaning that most closely matches the words in each test item. You cannot go back and change your answer. Please do not use any dictionaries or discuss with others when you are completing the test, so as to get your actual English proficiency level.

Personal Information

Name: _____

Gender: _____

Age: _____

Class: _____

|

Test items

Section 1

1. see (They saw it.)

a. 切

b. 等待

c. 看

d. 开始

The VST was administered during the learners' regular evening self-sessions from 7pm to 8pm on 14 March 2019. Two hundred and five first-year participants sat in seven self-study classrooms. Seven teachers from the target university administered and supervised the test. These teachers kindly offered to help distribute and collect test papers and made sure that the learners did not look at their cell phones or talk to each other during the test. The learners were told to complete the test using as much time as they needed. They all completed the test within 40 minutes.

3.6.2 Administration of the vocabulary recognition tasks

In the main study phase, I delivered the pre-lesson Yes/No task sheets to the learners one day before their listening lessons for Unit 6. Then I implemented a post-task with randomized word items the day after the lessons were completed. Again, the learners from the two observed listening classes sat the tasks during their evening self-study sessions. Since the two observed classes were working through Unit 6 at different paces, I supervised the task performances for each class in person. The task sheet instructions are presented in Figure 3.6, and Figure 3.7 provides the English translation.

Figure 3.6 Yes/No task instructions in Mandarin

	词汇识别任务 (课前任务)
个人信息	
姓名:	
年龄:	
性别:	
班级:	
任务说明	
这是一个词汇识别报告任务, 请根据自己的词汇知识水平判断你是否知道以下这些单词的意思:	
如果你 确定 自己知道以下单词所含的至少一种意思, 请选择 YES;	
如果你 认为 自己 不认识 该单词, 请选择 NO;	
如果你 不确定 自己是否知道该单词的意思, 也请选择 NO。	
请注意:	
1. 以下词汇中, 有些不是真实存在的英语单词, 请根据自己的真实词汇知识水平进行选择。例如, ‘ <u>volumn</u> ’ 不是一个英语单词, 但是它和 ‘volume’ 这个真正的英语单词非常相似。	
2. 请诚实作答, 不要盲目猜测选择。	
3. 请独立完成该项任务, 不要参考任何词典, 亦不要与他同学讨论。	

Figure 3.7 English translation of Yes/No task instructions

	Vocabulary Recognition Task (Pre-task)
<u>Personal information</u>	
Name:	
Age:	
Gender:	
Class:	
<u>Task instructions</u>	
This is a vocabulary recognition self-report task, please make choices according to your own English vocabulary knowledge :	
If you are sure you know at least one meaning of the target word, please choose YES;	
If you do not know the meaning of the target word, please choose NO;	
If you are not sure whether you know the meaning or not, please choose NO as well	
<u>Note:</u>	
1. Some words in this task sheet are not real English words, for example, ‘ <u>volumun</u> ’ is not real, but it looks like ‘volume’, which is a real English word. Please make your choice based on your real English vocabulary knowledge. 。	
2. Please be honest with your answers.	
3. Please complete the task on your own, do not use any dictionaries or discuss with others.	

Using insights from the pilot studies, I offered oral instructions to explain and emphasize the role of pseudowords in addition to these written instructions. Again, learners were given as much time as they needed to complete the tasks and most of them finished the task within 15 minutes.

3.6.3 Observations of the listening classes

In the main study, I observed one complete listening unit (seven lessons in Gigi's Class and six lessons in Amanda's Class). The textbook content analysis showed that all 15 listening units were identically designed (see Section 3.7.1.1), so one unit was taken as representative of the classroom practices in this listening class. After piloting and the subsequent development of the classroom observation scheme by the end of April 2019, both Gigi and Amanda were about to start teaching Unit 6. Prior to the observations, I asked both teachers and learners to teach and learn in their listening classes as they would usually do to eliminate the "Hawthorne effect" (Mackey & Gass, 2015, p. 240)¹². I also highlighted the expectation about gathering classroom data of what would actually take place in their daily listening classes both in the ethics written information sheets and oral explanation when I recruited the teacher and learner participants. During the observations, I adopted the role of *non-participant* observer: sitting at the back of the classroom and taking notes based on the categories in the observation scheme (described in Section 3.5.3) In addition, I set up a tripod and used a cell phone to video and audiotape every instructional session so that I could compare my notes with details from the video recordings at the data analysis stage.

3.6.4 Interviews with teachers and learners

As described in Section 3.5.4, I conducted four types of interviews with the teachers and learners respectively (see the matrix in Figure 3.4). The retrospective interviews took place within 48 hours of the classroom observations, and the follow-up interviews took place a couple of weeks later but before the end of the teaching trimester. All the interviews took approximately one hour. The interview settings included the teacher's office, the canteen or the café on campus, as the audio recordings could be made without too much distraction at these places. More importantly, the teachers and the learners were familiar with these places so they could participate in the interviews with less stress. The language used in the

¹² Mackey and Gass (2015, p. 240) describe the Hawthorne effect thus: "...when the observers were present, the productivity of workers increased regardless of whether or not there were positive change in working conditions."

interviews was Mandarin. During the interviews, participants were encouraged to refer to their textbooks and/or teaching materials, and stimulus such as the summarized examples of their listening classroom practices were provided.

All the data collection procedures were completed in June 2019, and each type of data was analyzed independently, which is described in the section below.

3.7 Data analysis

This section begins by detailing the data processing of listening and vocabulary content in the textbook, including descriptions of the data type, the analytical frameworks, and tools. Then it moves to the analyses of vocabulary test and task results. The final part of the section focuses on the analyses of observation and interview data.

3.7.1 Content analysis of the listening textbook

The main teaching material in the listening classes is a mandatory textbook series, *A Listening Course*¹³, which has been used at the university since 2014 and is one of the most widely used university textbooks by English major students in Southeast China. The series contains four volumes, and each volume includes a student's book and a teacher's book. During data collection, between March and June in 2019, the target listening classrooms for the first-year English major learners were using the second volume of the textbook series. Therefore, the content analysis and corpus analysis focused on this textbook.

While using the textbook, learners are exposed to both spoken input and written texts. The spoken input includes the listening texts and video scripts of different genres provided by the accompanying CDs. These spoken texts covered a range of topics, such as education, health, science & technology, and so on. The written texts include the listening activities and listening support in the student's book. The teacher's book provides transcripts of listening texts, answer keys to listening activities and the teaching tips. In addition to the audio and video materials, the CDs provide multi-media support. The teachers can use the CD to play the audio and video recordings, and show the answers to the listening activities on a computer screen and/or projector in a multimedia classroom or a language lab. Figure 3.8 presents a screenshot of the multi-media support.

¹³ Main editor: Shi Xinyuan; Publisher: Shanghai Foreign Language Education Press

Figure 3.8 A screenshot of the multi-media support for the textbook

Part 2 Dialogues

Dialogue 1 I Don't Believe It!

Background information

The **Abominable Snowman** or Yeti is the legendary wild man of the Himalayas. Reports of sightings have come from Nepal (where it is known as Yeti) and from parts of China, Siberia, and other areas in Asia. Sightings have also been reported in North America, where it is called **Bigfoot** in the United States and Sasquatch in Canada. It is said to be elusive; to be heavily built, apelike, hairy, and malodorous.

X

haunt

/hɔ:nt/ *v.* to inhabit, visit, or appear in the form of a ghost or other supernatural beings

W

A

6.2.2 Listen to the dialogue and answer the questions.

S

Key

1. What are they probably talking about?
They are talking about supernatural things.
2. Which speaker do you think believes supernatural things least, the first speaker, the second speaker or the third speaker?
The first speaker.

Vocabulary
• haunt

Unit 6 **65**

I adapted a recent and comprehensive analytical framework provided by Graham and Santos (2015) to analyze the content of the listening textbook. The purpose of this in-depth content analysis was to explore the textbook representation of L2 listening pedagogy.

The analysis focused on the following components of the textbook:

- a) Listening texts: genre, length, duration time and speech rate
- b) Listening activities: listening phase and activity type
- c) Listening support provided in the textbook (e.g., vocabulary, background knowledge)
- d) Teaching tips in the teacher's book

The following sections describe and justify how and why I analyzed these components of the textbook.

3.7.1.1 Listening texts. First, I downloaded the electronic versions of all the listening texts into a word document as well as the recordings from the publisher's website

(<https://www.sflep.com>). I identified the genres of the listening texts based on two types of information provided in the textbook. First, I examined the titles of the listening sections to see whether they specified the genre. For example, all the listening texts in the sections called *Dialogues* were found to be spoken input in the form of conversations between two or more speakers, so they were identified as *Dialogues*. Second, I read through the transcripts of the listening texts to determine their genres. This was because some section titles (e.g., *Phonetics*) did not reveal any information about the genre of the accompanying listening texts. After examining the transcripts, I found that both short sentences delivered by one speaker and short conversations between two speakers were included in this *Phonetics* section. Hence, the genre labels of *Single Sentences* and *Dialogues* were assigned to the listening texts in this section. Five genres were identified: single sentences, monologues, dialogues, news items and TV scripts. Next, I examined the length of the listening texts by calculating the word count of each transcript in the word documents. I also noted down the duration time of each audio recording and then generated their speech rates by calculating the word count per minute.

3.7.1.2 Listening activities. The textbook provides various listening activities to accompany the listening texts. I started the analysis of the listening activities by identifying the listening phase they belonged to. As we saw in Section 2.2.2, regardless of the instructional orientation (i.e., product vs. process), a listening lesson would cover the phases of pre-listening, while-listening tasks and post-listening activities (Field, 2008; Goh, 2018). In order to identify whether such a lesson format was represented in the textbook, I identified the listening phases of the activities according to the directions provided by the textbook. For example, activities which were clearly categorized in the directions as *Pre-listening Questions* were identified as pre-listening activities; activities which instructed learners to listen to the spoken input and then complete a task were identified as while-listening activities (e.g., *Listen to the passage and choose the best answer to each of the questions you will hear*); activities which required the learners to complete the comprehension questions or sentence completion without listening again were classified as post-listening activities (e.g., *Complete the following sentences with what you can remember*).

Next, I followed three steps to identify the listening activity types:

- 1) I listed all the directions for the listening activities in an Excel spreadsheet.

- 2) I labelled each direction by describing the main characteristics and generated a list of initial descriptive codes for the activity type. For example, the direction written as *Listen to the dialogue and answer the following questions* was labelled as *Short answer question (written)* while *Listen to the passage again and discuss the following questions* was labelled as *Short answer question (oral)*.
- 3) I re-examined the list of initial codes, and re-named them using the consistent phrase *Listen and ...* The short answer questions described above were therefore re-named as *Listen and answer questions* and *Listen and discuss questions* respectively. I also merged the initial codes which shared similarities during this step. For instance, *Charts/forms/tables completion*, *Tick the box in the tables* and *Circle the labels in the pictures* were merged into one combined category and labelled *Listen and complete the charts/forms/tables/pictures*. A codebook including the initial codes, examples of directions and merged codes for the listening activities is provided in Appendix F.

Having described the analytical steps taken in connect with the textbook's listening texts and listening activities, I turn now to the analytical procedures involved in the learning and teaching support provided in the textbook. Two types of support were provided: listening support in the student's book and teaching tips in the teacher's book.

3.7.1.3 Listening support. I labelled all written texts other than the listening activities in the student's book as *listening support*, and then categorized them according to their content and title. First, the lists of words and phrases under the heading of *Vocabulary* were categorized as *vocabulary support*, and the explanations or advice provided under the heading of *Lead-in* were labelled *learning tips*. The paragraphs in either English or Chinese under the heading of *Background information* were labelled *background knowledge*. Finally, the English explanations of words or phrases under the heading of *Language in use* were categorized as *grammatical support*. Examples for each category are provided in Appendix F.

So far, I have described how I analyzed the compulsory parts of the textbook. Based on my own teaching and learning experience, these components are highly likely to be used and/or followed in target listening classrooms. The results of these analyses are presented in Chapter 4 (Section 4.2.1 to 4.2.4). I now turn to a description of analytical procedures involved in the optional sections of the textbook: the teaching tips in the teacher's book. This part is optional because it is up to the teacher whether to use it or not in the listening classrooms.

3.7.1.4 Teaching tips. To examine the features of the teaching tips, I entered all the tips into an Excel spreadsheet. Then I referred to the listening strategy taxonomies proposed in the L2 listening literature, such as *Note-taking*, *Selective attention* and *Activation of prior knowledge before listening* (Graham & Santos, 2015; Santos, 2015), to code them qualitatively. For example, teaching tips which contained content such as *Before listening to the talk, students can be given more information about ...* or *After listening to the talk, students can discuss...* was labelled as *Involve the learners in pre-and-post listening discussion*. If a tip reminded teachers to raise questions about main ideas or guide students to study the outline or general headings of the listening text, it was labelled as *Draw the learners' attention to global understanding* (see the full list of the categories in Appendix F). Next, I calculated the number of the teaching tips provided by the textbook. The results of the calculation are presented in Chapter 4 (Section 4.2.5).

3.7.2 Corpus analysis of the listening textbook

Moving from content analysis to the vocabulary analysis of the textbook, I adopted a corpus-based approach. As reviewed in Section 2.3.2 and Section 2.4.1, this approach has been widely used to analyze the vocabulary loads and types of vocabulary in various L2 inputs, including L2 textbook materials (e.g., Hsu, 2009, 2011, 2014; Sun & Dang, 2020; Yang & Coxhead, 2020). I compiled both the spoken input and written texts of the textbook into an overall textbook corpus. To examine whether vocabulary load varied across the input discourse and across the genres/sections for each discourse, I also compiled the combined corpus for spoken input and written texts separately, and a couple of sub-corpora. The combined corpus for spoken input consisted of all the transcripts of the audio and video recordings throughout the 15 units in the textbook. A sub-corpus was established for each genre of the spoken input (see the genres in Section 3.7.1.1). The second combined corpus focused on the written texts in the textbook. Again, sub-corpora were created for the texts in each of the four sections: listening activities, background knowledge, learning tips and grammatical support. Table 3.9 shows the composition of the textbook corpus. The size of each corpus is provided in the table. The counting unit of the corpus size is token (i.e., running words).

Table 3.9 *The composition of the listening textbook corpus and its sub-corpora*

Types of corpus	Size
Overall textbook corpus	84,164
Combined corpus of the spoken input in the textbook	54,851
Sub-corpus of the monologues	20,075
Sub-corpus of the dialogues	14,660
Sub-corpus of the news items	6017
Sub-corpus of the single sentences	2473
Sub-corpus of the TV scripts	5854
Combined corpus of the written texts in the textbook	28,313
Sub-corpus of the listening activities (including rubrics)	23,619
Sub-corpus of the background knowledge	2177
Sub-corpus of the grammatical support	1013
Sub-corpus of the learning tips	845

To build the textbook corpus described above, I downloaded all the audio and video transcripts from the publisher's official website and typed all the written texts accompanying the listening activities and other sections manually into word documents. In the next three sections, I will present the corpus analysis tool used in the current research and describe the preparation involved in the corpus data processing, including the textbook corpus tidy up and word lists adaptations.

3.7.2.1 Corpus analysis tool. Following the above mentioned previous textbook corpus analysis, I used RANGE software (Heatley et al., 2002) to analyze the vocabulary in the compiled textbook corpus. This software adopts various well-established word lists such as West's (1953) General Service List, Coxhead's (2000) Academic Word List and as already mentioned in Section 3.5.2.2 Nation's (2018) BNC/COCA 1-25,000 word-family lists and the four supplementary lists to identify the vocabulary profile of the target corpus.

The vocabulary load of the textbook corpus was generated by calculating the cumulative coverages of the BNC/COCA word-family levels. RANGE uses word families at Level 6 according to the classifications provided by Bauer and Nation (1993) as the counting unit. At this level, each word family contains the headword, inflections and all the derivational affixes up to Level 5, such as the inflectional suffixes at Level 1 (e.g., -ing), the most frequent and regular derivational affixes (e.g., -ness), and so on. There are 1000 word families contained at each frequency level of the BNC/COCA word lists, which means a vocabulary size counted in word families can be calculated by looking at the cumulative percentage of frequency

levels to reach the aforementioned comprehension threshold at 95% or 98%. For example, if the cumulative percentage of frequency levels reaches 95% at frequency level 3, a vocabulary size of 3,000-word families may be required for acceptable comprehension (van Zeeland & Schmitt, 2013a).

3.7.2.2 Cleaning the textbook corpus. The first step in preparing the textbook corpus was to identify and fix any typographical errors in the target corpus (Nation, 2016). In addition to the spellchecking function in the MS office word documents, I followed Nation's (2016) suggestions to check these errors by converting the sample corpora into TEXT files, inputting them into RANGE for a trial run, and then examining the items in the category of *not found in any lists*, which is where items with errors appear. I then used the *Find* and *Replace* function to fix these errors. Contractions and numerals in the recordings were changed to the full forms of English words. For example, *you've* was changed to *you have*; *7:30 train* was changed to *seven thirty train*. The items which were not spoken but appeared in the transcripts were enclosed by using the symbol < > so that they could be ignored by the RANGE program (Nation, 2016). For example, in the dialogue transcripts, speakers' names such as *Tessa* were enclosed as <*Tessa*> because the learners would not hear these names in the dialogues, effectively eliminating the need for comprehension.

3.7.2.3 Adapting the BNC/COCA word lists. After tidying up the textbook corpus, I imported it once again into the RANGE program and examined the category of *not found in any list* closely, and incorporated items in this category into the existing base word lists. The following four types of words in this category were re-classified into the existing base word lists of BNC/COCA 1-25,000 and the four supplementary lists (ranked from 31st to 34th):

- (a) Proper nouns
- (b) Hyphenated words
- (c) Marginal words and abbreviations
- (d) Words that belonged to the word family of the words listed in 1-25,000 family lists

Re-classification of proper nouns

Nation (2016) summarized three main types of proper nouns in English:

- (1) the names of people, gods and pets as the major type;
- (2) the names of places and enterprises as the "halfway" type (Nation, 2016, p.56);

(3) the names of events and artefacts as the peripheral type

Upon examining the content in the category of *not found in any list*, I made decisions on whether any words could be identified as proper nouns by double checking their meanings in the context of textbook materials. For example, *Anhui* was identified as the name of a province in mainland China, which occurred in a news item. *Christine* was the name of a person, *Stromboli* was a movie title (a 1950 Italian film) and *Mongo* was a name of a (fictional) planet in the particular textbook context. In total, 89 proper nouns were identified and added to the BNC/COCA supplementary proper noun list (i.e., 31st word list).

Re-classifications of the hyphenated words

A number of hyphenated words appeared in the category of *not found in any list*. The hyphens indicate either an affix and suffix or a close grammatical relationship between the hyphenated items (Nation, 2016). The following steps were followed to adapt these words into the existing base word lists (based on Nation, 2016):

- (1) I removed the hyphens, treated the hyphenated items as non-hyphenated words, and then checked whether they belonged to the transparent compounds listed in the BNC/COCA supplementary transparent compound list (i.e., 33rd word list). If they did, I added them into the list of transparent compounds. Words like *icecream* and *wholewheat* were found in this list.
- (2) If the non-hyphenated words matched the definition of transparent compounds provided by Nation (2016, p.67): “have a close and obvious connection with the meaning of its parts”, I added them into the transparent compound list. Examples of these words were *milkshake* and *smartphone*.
- (3) If the non-hyphenated words did not belong to the transparent compound list, I continued to check whether they belonged to the 1-25,000 word-family lists. If they did, I added them into these base word lists accordingly. For example, when the hyphenated word *work-out* was changed into its non-hyphenated form as *workout*, it was found in 7th 1,000 word family list.
- (4) I replaced the hyphens with a space, treated them as separate words, and checked them against the 1-25,000 word family lists. For example, *note-taking* was treated as *note* and *taking* separately. Another example is *frog-eater* (in this textbook, it refers to

the people who love eating frogs in France), which was changed into *frog* and *eater* rather than *frogeater*, because *frogeater* is not transparent.

In total, 38 transparent compounds were identified and added to the BNC/COCA supplementary transparent compound list.

Re-classifications of the marginal words and abbreviations

Marginal words have little meaning but frequently occur in spoken discourse (Nation, 2016), for example *argh* and *um*. These items were identified in the listening textbook corpus and included in the BNC/COCA supplementary marginal word list (i.e. 32rd word list). Then, I examined the abbreviations and acronyms in the category of *not in any lists* to see whether they were proper nouns, transparent compounds, or a shortened form of single words. If they were not, they were added into the BNC/COCA supplementary abbreviation/acronym list (i.e., 34th word list). Two marginal words were identified and added into 32rd list: *urn* and *hum*. Four abbreviations were added into 34th list: *VOA*, *IPV*, *MRA*, and *XDR*.¹⁴

Words added into the word family listed in 1-25,000 word-family lists

After the adaptations of the proper nouns, transparent compounds, marginal words, acronyms and abbreviations, I re-examined the rest of the items in the category of *not found in any list*, to identify if I could add any items into the 1-25,000 word-family lists based on the criteria of word family Level 6 classified by Bauer and Nation (1993). For example, *debuting* was not found in any lists, but it could be included in the family of *debut* in 4th 1,000 word-family list. Other examples included *eatable* in the family of *eat* in the 1st 1,000 word-family list, and *meteorologically* in the family of *meteorology* in the 10th 1,000 word-family list. In total, 18 words from the category of *not found in any list* were added into the families of the words in BNC/COCA 1-25,000 word-family lists.

3.7.3 Analysis of the vocabulary test and task results

3.7.3.1 The VST results. Once the textbook vocabulary analysis was complete, I moved on to measure the learners' actual vocabulary size and knowledge. In this section, I present the analytical procedures of the two vocabulary measurements adopted in the current research.

¹⁴ VOA: Voice of America; IPV: Internet Protocol Version; MRA: Marketing Research Association; XDR (also abbreviated as SDR): Special Drawing Rights

The first measurement used was the Vocabulary Size Test (Nation & Beglar, 2007). VST papers of 205 participants were collected and used for the analysis of vocabulary size. I imported all the responses into Excel 2016 and marked them against the VST answer keys on Nation's website (<https://www.wgtn.ac.nz/lals/resources/paul-nations-resources/vocabulary-tests>). One point was given to each correct response. I followed Nation's (n.d.) instruction to calculate vocabulary size by multiplying the test scores by 100 because the VST was developed based on the BNC 14 word-family levels and each level contains 1,000 word families. For example, a test score of 30 leads to a written receptive vocabulary size of 3,000-word families. Such vocabulary size figures can be compared with the vocabulary size required by the textbook to indicate whether the learners are able to comprehend the textbook in general. SPSS 25 was then adopted to analyze the descriptive statistics of the test scores. The results of the VST are reported in Chapter 5 (see Section 5.3.1).

3.7.3.2 The Yes/No task results. The second measurement was the vocabulary recognition tasks conducted before and after the observed listening lessons. Prior to the data analysis of the task results, the dataset was selected based on two criteria. The first criterion was to exclude the learners who only attended either the pre- or the post-task. Secondly, to ensure the validity of the task results, the learners who were considered to overestimate their vocabulary knowledge were excluded from the analysis. This was operationalized by categorizing the task results into four response types, which are proposed by Huibregtse et al. (2002) to score the items in the Yes/No test format:

- (a) Hit (H): choose YES on real words
- (b) Miss (M): choose NO on real words
- (c) False Alarm (FA): choose YES on pseudowords
- (d) Correct Rejection (CR): choose NO on pseudowords

Schmitt et al. (2011) proposed a cut-off of 10% in checking the pseudowords as criterion to decide whether an overestimation has occurred, that is, if the learner chooses YES for more than 10% of the total pseudowords, his/her response should be excluded. In this study, a total of 20 pseudowords were included in the task sheet. Therefore, any learners who knew more than two pseudowords (i.e., more than two False Alarms) were supposed to be deleted from the data set. However, the number of the participants reduced sharply if following this

criterion. Thus, I decided to use a less strict criterion and retain the responses which had no more than two FAs on average across the pre and-post tasks. That is, if a learner had 3 FAs in a pre-task but only 1 FAs in a post-task, his/her response was kept in the data set because such a response may not indicate a deliberate overestimation. A total of 22 learners in Class 1 ($n=22$) and 23 learners in Class 2 ($n=23$) were therefore included in the final data analysis for vocabulary recognition tasks.

In the final dataset, one point was given to each response type listed above, and a simple formula was used to generate the final task result by deducting the points of False Alarms on pseudowords from the Hit points on the real words (Pellicer-Sánchez & Schmitt, 2012). The Miss points on real words and Correct Rejection on pseudowords were ignored. For example, if a learner participant chose YES on 80 real words and YES on 10 pseudowords, his/her task result was 70 points.

To obtain receptive vocabulary knowledge of the target words of the whole group of 45 learners prior to the lessons, the mean score of the pre-task results was calculated.

Furthermore, to reveal various patterns of the vocabulary knowledge (e.g., the number of high-frequency words reported as known) prior to the listening classes, the results of each real word item in the pre-task were compared with their vocabulary profile in the BNC/COCA 1-25,000 word-family lists. To measure vocabulary gains in the listening classes, I carried out a paired-sample T-test in SPSS 25 to compare the results of pre-and-post tasks in each class. The patterns of the changes in word items between the two tasks (i.e., before and after listening classes) were analyzed as well. The results are reported in Chapter 5 and Chapter 6 (see Section 5.3.2 and Section 6.5).

Thus far, I have presented analytical procedures related to the data from the listening textbook as well as the learners' vocabulary level. I turn now to the analytical procedures and frameworks for the data gathered from the two listening classrooms, namely the observation data and the post-lesson interview data.

3.7.4 Analysis of classroom observation data

3.7.4.1 Overview of the observation dataset. I observed seven sessions of Unit 6 in Gigi's Class and six sessions in Amanda's Class; each session lasted for 40 minutes. Overall, 280 minutes of observation data was collected from Gigi's class and 240 minutes from

Amanda's class. After organizing the observation notes taken on-site and the video recordings for each session, I completed the observation schemes (see the sample scheme in Figure 3.3) for each observation. Given the current research aimed to explore the two major components in the observed classes: listening and vocabulary, I chose to analyze the classroom practices in relation to these two components separately. The next two sections present the analytical steps and/or framework adopted for each of them.

3.7.4.2 Analyze the classroom practices of listening. In order to reveal the extent to which teachers followed the textbook in their teaching of listening, I identified the following generic information from the observational data:

- (a) Sections taught in the observed lessons;
- (b) Number of sessions spent on the listening unit;
- (c) Time allocation in each section; and
- (d) Numbers of repeated listening in each section.

The descriptive results for each observed class are provided in Chapter 4 (see Table 4.3 in Section 4.3).

Once the listening sections taught in each observed class were identified, I developed a custom-made coding system (Mackey & Gass, 2015) to categorize the teaching practices in each taught section across the pre-while-post listening phase. This coding system was adopted to serve the research aim about the extent to which teachers use the mandatory textbook to teach listening (see RQ 2 in Section 2.5). I used two different symbols in this coding system:

- (1) Enhancing the textbook by implementing activities/support in addition to the textbook was marked as ▲ (e.g., when teachers used Wikipedia information to introduce background knowledge, in addition to the textbook materials)
- (2) Reducing the textbook by ignoring activities/support provided by the textbook was marked as ▼ (e.g., when teachers skipped anything provided in the textbook such as a warm-up question)

Multiple symbols were sometimes assigned to teaching practices as teachers could both enhance and reduce the textbook within one particular listening section. For example, before

playing the recordings (i.e., pre-listening phase), the teachers provided pictures or video clips from other sources in addition to using background knowledge provided in the textbook, while skipping the warm-up questions in the textbook. In this case, both ▲ and ▼ were used to mark these practices. The results of these categorized teaching practices in each observed class are provided in Chapter 4 (see Table 4.4 in Section 4.3).

Next, I labelled each enhancement according to the description in the completed observation scheme. For example, Gigi carried out an enhancement to engage her learners with a retelling task in the *Listening and Note-taking Part B* section. I labelled this enhancement as *Engage learners with supplementary activities*. Occurrences of each type of enhancement were calculated afterwards. To identify commonalities and differences in textbook enhancements between the two teachers, I completed the labelling and calculation for Gigi and Amanda respectively, and a comparison of the results is provided in Chapter 4 (see Table 4.5 in Section 4.3). Finally, I examined the teachers' choices in using different versions of listening texts and their classroom language (i.e., English and/or Chinese). This was done to provide insight into how listening was taught by different teachers when following the same textbook series. The findings are presented in Chapter 4.

3.7.4.3 Analyze the vocabulary-related classroom practices. In order to explore how the vocabulary was dealt with in the observed listening classes, I used the construct of *language-related episodes* (Basturkmen & Shackleford, 2015) to operationalize the classroom interactions around vocabulary. This approach was narrowed down to *vocabulary-related episodes* (VREs hereafter). Unlike the LREs in the existing research which highlight the unplanned or spontaneous attention on linguistic elements (see the review in Section 2.4.2), the VREs in this study included both planned vocabulary teaching based on the textbook glossaries and unplanned encounters with the vocabulary in the listening classes. In other words, VREs in the current study are conceptualized as any classroom practices related to the textbook-specified lexical items. After reading through the notes in the column of *vocabulary-related practices* of the completed observation scheme (see Figure 3.3) and watching the videotapes, I established a VREs dataset for each observed class. Figure 3.9 below illustrates the composition of the dataset with an example in the section of *Listening and note-taking Part A*.

Figure 3.9 *An example of the VREs dataset*

A	E	F	G	H
Listening sections	Lexical items	Listening phase	Textbook sections	Description of the video-taped transcripts
Listening and Note-taking Part A	innocent person	pre-listening	Items of the listening activities	08.35 (1st session on 21 May) This is a phrase in the task item #2, the teacher guided the learners to make predictions on the missing words before playing the recording, and she asked the learners to pay attention to this phrase: "注意一下这个词组, innocent person, 无辜的人"
	culprit	pre-listening	Items of the listening activities	09.15 This is word in the task item #3, the teacher guided the learners to make predictions on the missing words before playing the recording, and she asked the learners to pay attention to this word: "Here is a new word for you, I don't know whether you've prepared this word, culprit (some learners provided English meaning), yes, criminals, especially criminals, right?"
	question	while-listening	Answers to the listening activities	13.15 This is a word required by the task item #1, when the teacher was checking the answers after listening sentence by sentence, she asked, "how do you understand the word 'question' here?" (Learners said:质疑) "询问, 盘问"

As shown in the figure, the VREs data was organized according to the listening section and then classified into the following four categories:

- Lexical items: What kind of words or phrases were dealt with in VREs?
- Listening phases: When did VREs occur across the pre-while-post listening phases?
- Textbook sections: Which part of the textbook materials did VREs' lexical items come from?
- Descriptions: How did the teachers and learners deal with VREs' lexical items (i.e., what they did they do and say)?

Drawing on this dataset, I could calculate the VREs' frequency of occurrence across the listening phases and textbook sections (i.e., the distributions of the VREs in listening phases and textbook sources). The results are presented in Chapter 6 (see Section 6.3.2).

Additionally, I used the RANGE program (Heatley et al., 2002) to conduct a corpus-based analysis on the lexical items in category (a), so as to identify word frequency levels in the BNC/COCA 1-25,000 word-family lists. The results can be seen in Section 6.3.3.

Then, I coded the descriptions to identify the initiators and the instructional techniques in each VRE. As shown in Figure 3.9, the content in the *description of the video-taped transcripts* contained the utterances and behaviors of the teachers and learners. The utterances were transcribed from the video-taped observation verbatim. That is, if the teachers said

anything in Chinese, I retained the Chinese in the dataset. I first coded the initiator by simply examining who (i.e., teachers or learners) initiated the attention on the lexical items (e.g., asking a question). Then I conducted a content analysis to identify the instructional techniques. First, I conducted an initial coding for each piece of description, which was entirely descriptive. For example, when Amanda mentioned the word ‘chin’, her utterance was described verbatim: “chin, c-h-i-n, 下巴啊 (L1 translation)”. Then, I initially coded this description as *Provide L1 translation and spell it letter by letter orally*. Gigi also mentioned this word in her class, and her behavior and utterances in the description column were:

What is chin? [She touched her own chin]. This is chin. [Then she provided L1 translation] Don’t you know the Chinese meaning of this word? [Most learners shook their heads] Do you mix it up with cheek ? c-h-e-e-k, cheek, This is cheek.

This description was initially coded as *Use body language, provide homonym and provide L1 translation*. Secondly, I grouped and merged these initial descriptive codes based on their commonalities, and generated a list of themes representing the instructional approaches of the VREs for each observed class. For example, the descriptions which was initially coded as *Provide the synonym to the lexical item* and the one coded as *Explain about the part of the speech of the lexical item* were grouped into the theme named *Provide orthographic knowledge of the lexical item*. Finally, a group of instructional techniques were identified for the VREs in each observed class. To ensure the reliability of the coding, I developed a codebook which contained the full list of the second codings, their definitions and examples of the VREs (see Appendix G). I invited an inter-rater to code 10% of the dataset for each class.¹⁵ . A reliability figure of 84% was reached after the inter-rater assessment. After that, the rater and I discussed parts where we disagreed and reached a 100% agreement on the coding. I slightly adjusted the coding again based on this discussion and finalized the themes for VREs’ instructional techniques in each observed class. The number of occurrences of each practice within each theme was calculated to show their distribution. The results are presented in Section 6.3.4.

¹⁵ These interviews are related to the 4th ethics amendment, see Appendix A.

3.7.5 Analysis of interview data

3.7.5.1 Overview of the interview dataset. I gathered interview data from the four types of interviews described in Section 3.5.4. The length for each interview recording is summarized in Table 3.10.

Table 3.10 *Overview of the interview time lengths*

Teacher participants	ROIs	FOIs
Amanda	43 min	43 min
Gigi	47 min	37 min
Learner participants	RGIs	FGIs
Amanda's learners	67 min	50 min
Gigi's learners	67 min	50 min
Total	224 min	190 min

Again, two major components were the focus of the interviews: listening and vocabulary. Most of the interview time was spent on the listening part with a smaller proportion of time on the vocabulary component. These proportions were determined by the classroom observation data which showed that the majority of the time in the listening classroom was allocated to listening rather than vocabulary. For example, in the retrospective group interview (RGI) with Amanda's learners, 50 minutes out of a total of 67 minutes (see Table 3.10 above) were spent on perceptions of learning listening in class. The remaining 17 minutes focused on perceptions of vocabulary. Additionally, the RGIs for both classes included the learners' sharing their retrospective thoughts on the vocabulary recognition tasks (around 4-5 minutes), so they lasted slightly longer than the FGIs.

In the current research, I analyzed the interview data related to the components of listening and vocabulary separately. After listening to the video-taped interviews and reviewing the notes that I made during the interviews, I transcribed the interview data verbatim in Chinese, because this was the language used during the interviews. In this way, I was able to keep the responses as close as possible to their original meanings. Then, I adopted a thematic analysis to code the interview data related to both components. To provide reliable qualitative data analysis, I analyzed the interview data recursively (including both deductive and inductive analysis) at the following three coding levels:

- (1) Initial coding
- (2) Second-level coding

(3) Grouping and merging into themes

The details of the coding process for each component are presented in the next two sections.

3.7.5.2 Analyze the listening-related interview data. After reading through the transcribed data several times to gain a general impression of what the teachers and learners said about their listening classes, I completed an initial deductive analysis (Dörnyei, 2007) using the categories in the interview schedules (see Table 3.6 and 3.7) to label the participants' responses. During this initial coding process, several new categories emerged as the participants provided unexpected responses to the follow-up questions in the semi-structured interviews. For instance, the teachers commented on the listening activity when they were asked about the expected purpose of each listening section: "Missing words (in the outline completion) are not related to the main ideas but to the details, which is not good for developing learners' top-down processing..." In this case, I added a new label: *Teacher's comments on the listening task type*. At the end of this stage, I established a list of initial coding which described the responses from the participants in a straightforward manner. Then, I established a listening-related interview dataset, and integrated the transcribed data under each initial code. Four Excel spreadsheets were established for the four types of interviews (i.e., ROIs, RGIs, FOIs and FGIs). The transcribed data in each spreadsheet was translated into English at this stage.

Drawing on the established dataset, I implemented the second-level coding by analyzing the data inductively and identifying more analytical categories among them. At this stage, I re-examined the interview responses in the dataset and labelled them again by what was indicated and/or suggested by the words, phrase or sentences used by the participants. In other words, I re-identified the meaning and implications of each part of the response regardless of the pre-defined categories. Interview data from Gigi is usefully illustrative. When Gigi was asked why she guided learners to predict the outline structure before listening, she said: "When learners succeed in predicting, they will have a sense of excitement and fulfilment and they will be more willing to be involved into the process of listening and predicting..." The response was initially coded in the pre-defined category of *Explain about the teaching procedures/practices in pre-listening phase*, and then re-coded as *(Teachers) consider learners' affective factors* because of the phrase "a sense of excitement and fulfilment".

The third step of the analysis was to group and merge the second-level categories according to their common features. For instance, among the second-level coding for the teachers' responses, *Consider learners' affective factors* and *Rely on teaching experiences* were grouped into the category of *What teachers take into consideration when they are teaching listening*. For the learners' data, the categories *Gain extra-linguistic knowledge* and *Enter into listening context* were merged into the category of *What learners expect to achieve in listening classrooms*. At the end of this stage, six same themes were identified for the teachers' and the learners' responses. All the initial and second-level coding, as well as the main categories and final themes during the analytical process for the interviews are provided in Appendix H.

3.7.5.3 Analyze the vocabulary-related interview data. I carried out a similar three-step recursive analysis of the vocabulary-related interview data. Given the vocabulary-related interview data was much less than the listening part, I translated all the questions and responses and established the dataset for the four interview types before the first step of initial coding. Again, during the initial coding, I labelled the responses using the categories under the vocabulary-related focuses in the interview schedules. For example, in Gigi's retrospective interview, her responses to the question "What do you think of the vocabulary demand of this unit (textbook)? Is the vocabulary difficult to the learners?" were: "Not difficult, compared to their intensive reading textbook...but from the perspective of a listening textbook, it is a bit difficult, yes, the vocabulary demand is a bit high...", and they were labelled as *(Teachers') Awareness of vocabulary demand*. Newly emerged categories were identified for the vocabulary-related data in the end of initial coding because the participants provided responses to the unplanned questions in the semi-structured interviews. For example, when Amanda was asked about her awareness of the vocabulary demands, her first reaction was to ask: "Vocabulary demand?" indicating a need for clarification. This led to me rephrasing the question and asking: "Do you think there is a lexical gap between the vocabulary contained in this textbook and the learners' existing vocabulary size? Can the learners catch up with the vocabulary in this textbook?" Amanda's positive response to these queries resulted in further follow-up questions, all of which allowed me to probe deeper understandings of the place of vocabulary in the listening course. The resulting explanations were coded as *Justification of teacher's awareness of the vocabulary demand*.

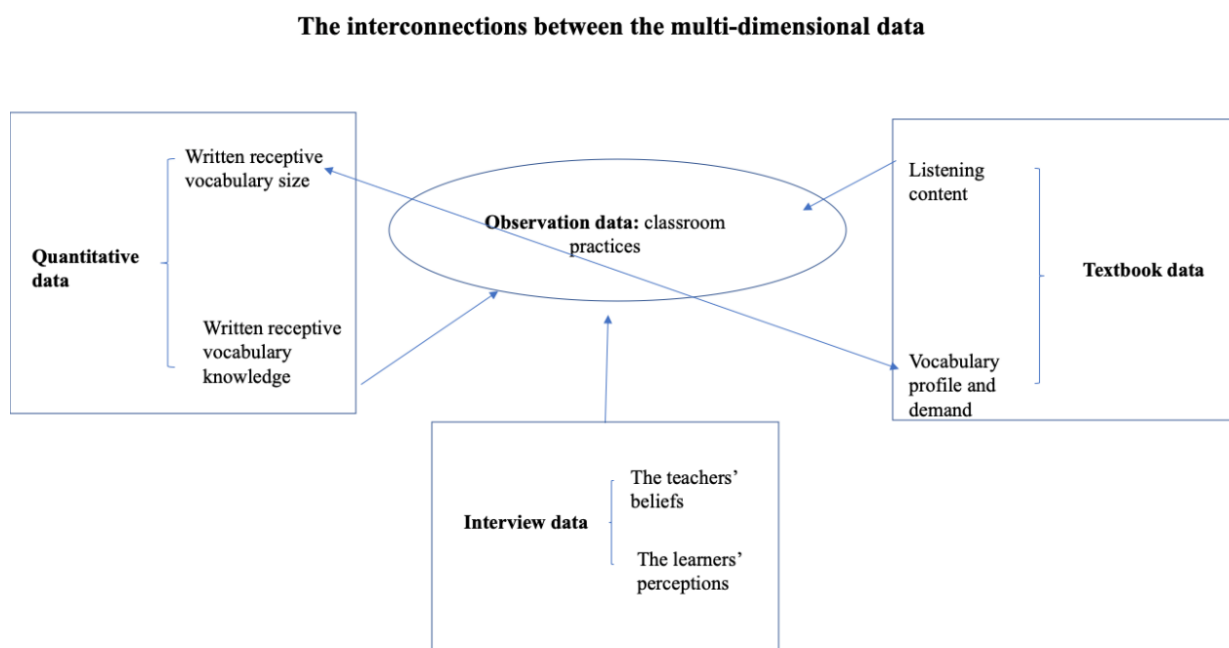
I then carried out the second-level coding on the responses to transform the initial codes into newly-coded statements. For example, Amanda's response to the question "Why do you usually teach vocabulary by giving their Chinese translation?" was: "Saving time. If I explained them in English, it would be very long and time-consuming. I would have to repeat once or twice; while the learners can get the meaning immediately if I give the Chinese translation". This response was initially coded as *Justifications of format and presentation* and then it was further coded as *Consider the classroom time/choose the most efficient way* at the stage of second-level coding.

The final step of the analysis was to group and merge the second-level coding for each teacher according to their relationships and/or commonalities. For example, Amanda's second-level coding included *Confidence in the learners' vocabulary knowledge* and *Assume the learners may have questions about the lexical items based on teacher's own vocabulary knowledge*. Both of these codes involve the idea of teacher's assumptions and estimations, and naturally extended to a broader theme of *The teachers' estimations of lexical difficulties in the listening classes*. Finally, four themes were generated for the teachers and three themes for the learners in terms of their cognition and perceptions of vocabulary in listening classes. The findings are presented in Chapter 6 (Section 6.2 and 6.4). The full lists for the coding at each level are provided in Appendix H.

3.8 Summary of the chapter

Following the methods described in this chapter, a multi-dimensional dataset was obtained for this thesis. Figure 3.10 illustrates the interconnections between the various data types in the dataset.

Figure 3.10 *Types of data and relations between the data types*



As shown in the diagram, the thesis contained four data types, and the observed classroom practices are located at the center of the dataset. Considering the multiple factors which contribute to constituting the classroom practices related to both listening and vocabulary, this study also explored the textbook materials, learners' vocabulary size and knowledge, and the views held by the teachers and the learners. Moreover, the comparison between the learners' vocabulary size and the textbook vocabulary demands provides information about the lexical gap that might be faced by learners who used the textbook in the listening classes. The interconnections between data sources contribute to the research aim of depicting a full picture of the scenario in Chinese EFL university listening classrooms. Findings regarding the three aspects: teaching and learning listening, vocabulary in the textbook and of the learners, teaching and learning vocabulary are presented in the subsequent three results chapters (i.e., Chapter 4 to Chapter 6).

Chapter 4 Results: The teaching and learning of L2 listening

4.1 Introduction

This chapter presents the results from a multi-faceted analysis of data gathered in two EFL listening classrooms which are taught by different teachers. The data include a content analysis of the listening textbook, observations of listening lessons, and teacher and learner interviews. This chapter addresses the first four research questions of this thesis:

Research Question 1: How is listening instruction represented in a textbook?

Research Question 2: To what extent do the teachers' implementation decisions align with or diverge from the textbook and in what ways?

Research Question 3: What are the teachers' beliefs, assumptions, and knowledge about teaching listening?

Research Question 4: What are the learners' beliefs, expectations, and knowledge about learning listening?

The answers to these research questions aim to shed light on the instructional orientation in the two Chinese EFL listening classrooms, and reveal the reasons or factors that shaped the instruction. First, the chapter presents findings of the listening content in the textbook used in the class. Then it reports on the teaching procedures observed in the classrooms and the results from post-lesson interviews with the teachers and learners. The chapter concludes with a summary of major findings from the dataset, as well as several issues which emerged from the findings.

4.2 The listening content in the textbook

To answer Research Question 1: How is listening instruction represented in a textbook? I conducted a content analysis of a listening textbook, covering the following areas:

- (a) Overall structure of the listening units and listening text type
- (b) Features of the listening text
- (c) Features of listening activities
- (d) Listening support provided in the textbook
- (e) Teaching tips in the teacher's book

This section reports on the findings for these areas one by one.

4.2.1 Structure of the listening units

The overview of the structure of the listening units is presented in Table 4.1. The textbook contains 15 listening units, each of which is divided into main sections and subsections. In the section on *Tactics for Listening*, Units 1-9 focus on *note-taking* whereas Units 10-15 develop *prediction and inference* skills. A close examination of the activities termed *tactics* suggests that they are mostly conventional comprehension-based activities, such as gap filling exercises (see the listening activity types in Figure 4.2 in Section 4.2.3). Each subsection includes different types of listening texts as listed in the last column in Table 4.1.

Table 4.1 *Internal organization of the listening units*

Main Section	Sub Section	Type of listening texts
1. Tactics for Listening	Phonetics	Single sentences; Dialogues
	Listening and Note-taking Part A (Unit 1-9)	Single sentences
	Listening and Note-taking Part B	Monologues (e.g., talks, lectures)
	Prediction and Inference (Unit 10-15)	Single sentences; Dialogues; Monologues (e.g., informative texts)
	Sentence identification	Single sentences
2. Listening Comprehension	Dialogue 1	Dialogues
	Dialogue 2	Dialogues
	Passage	Monologues (e.g., story, informative texts)
	News Item 1	News
	News Item 2	News
3. Oral Work	Retelling	Monologue (e.g., story)
4. Supplementary Exercises	Passage	Monologue (e.g., story, informative texts)
	Video	TV scripts

4.2.2 Listening texts

The 15 units contain a total of 170 listening texts. Most of these texts are delivered by native speakers of English in American or British accents. The learners may also encounter English spoken by non-native speakers in the video sections, which include several adapted TV scripts.

These texts are categorized into five genres, which are listed in Table 4.2, and ranked by their proportions in the textbook in the second column. As the data shows, there is a similarly high

proportion of monologues and dialogues at 29% and 26% respectively. The unit structure in Table 4.1 shows that these listening texts are mainly included in the section on *Listening Comprehension*. This indicates that the textbook emphasizes comprehending monologues and dialogues.

Table 4.2 *Features of the listening text types*

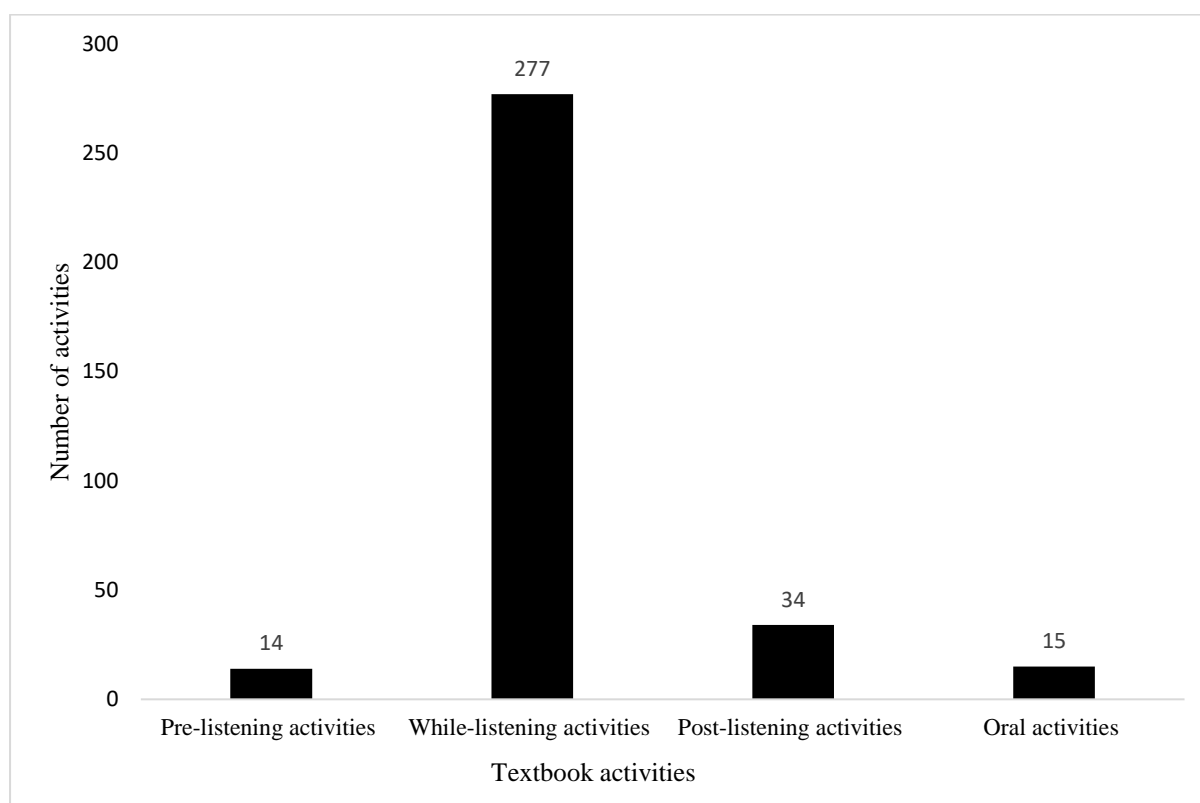
Text type	Proportion	Mean word count (in words)	Mean duration time (in minutes)	Mean speech rate (in words per minute)
Monologues	29%	350	3	115
Dialogues	26%	298	2	146
News items	18%	191	1.4	136
Single sentences	18%	16	0.3	59
Video scripts	9%	373	2.4	158

The information in Table 4.2 also shows that the listening texts vary in length, duration time and speech rate across the five genres. Video scripts contain the most words and are delivered at the fastest rate, while single sentences are the shortest and slowest. Monologues are longest, and are delivered at the slowest speech rate, aside from single sentences. The different types of texts are all accompanied by activities that aim for extracting specific information or making inferences. Now let us turn to the features of these activities.

4.2.3 Listening activities

A total of 340 activities were identified and categorized to four types according to their descriptions in the activity instruction. The distribution of these four categories is illustrated in Figure 4.1.

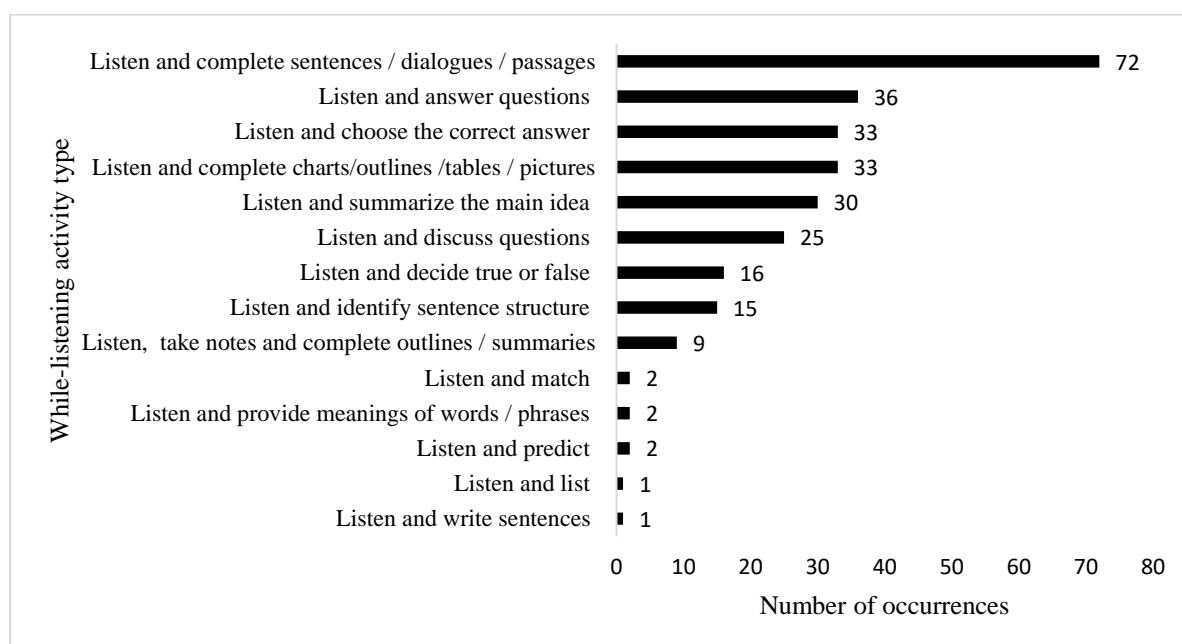
Figure 4.1 *Distribution of the activities in the textbook*



As shown in the figure, while-listening activities predominate (277 out of 340 activities), only 14 pre-listening activities are included in this textbook, and always in the form of warm-up discussion questions. A slightly larger number of 34 post-listening activities were included, asking learners to complete sentences with what they remember. In addition to the listening activities, each unit contains a story retelling activity. Little attention is paid to the whole process of listening comprehension, such as guiding learners to think about what they will experience before listening and what they have gone through after listening.

To reveal the characteristics of the 277 while-listening activities, they were categorized into 14 types, and ranked based on their occurrences in the textbook, as shown in Figure 4.2.

Figure 4.2 *Types of while-listening activities in the textbook*





As the figure shows, many of the listening activities are related to gap-filling (72), short answer questions (36) and multiple-choice questions (33). Examples of the three most frequently occurred activities are provided below:

Figure 4.3 *Example of listen and complete sentences*

Part 2 Listening and Note-Taking

Identifying Criminals

 **A**  **6.1.2** Listen to some sentences and fill in the blanks with the missing words.

- Computers can for the police to find people they
- A can lead to the an innocent person.
- A witness begins to the culprit's after spending long time
- Experts have to accurate descriptions from witnesses.
- Witnesses give when they are to recall the the crime.

Figure 4.4 *Example of listen and answer questions*



News Item 2 *Faster Speeds, Less Space on the Internet*

Background information

Internet Protocol version 4 (IPv4) is the fourth version of the Internet Protocol (IP). It is one of the core protocols of standards-based internetworking methods in the Internet. It still routes most Internet traffic today, despite the ongoing deployment of a successor protocol, IPv6.



A **6.2.7** Listen to the news item and answer the following questions. Then give a brief summary about the news item.


1. What is Akamai?
.....
2. What does the company worry about?
.....
.....
3. How many connected devices are there for each person in the world?
.....
4. What will happen by 2019?
.....
5. What problem will occur with the growth in the number of connected devices?
.....
.....




This news item is about
.....


Vocabulary


- cloud computing
- megabit
- Internet Protocol
- govern

Figure 4.5 *Example of listen and choose the correct answer*


 **Dialogue 2 Snakes**




 **8.2.4** Listen to the dialogue and choose the best answer to each of the questions you will hear.

 **1.**

A. In Europe.
B. In Africa.
C. In Southeast Asia.
D. In South America.


 **2.**

A. Because the snakes were down the tree.
B. Because she was stuck in the tree.
C. Because it was too high to jump from the tree.
D. Because she didn't want to climb down.

 **3.**

A. Once.
C. Three times.

B. Twice.
D. Four times.

 **4.**

A. She likes climbing up the trees.
B. She doesn't like Sri Lanka.
C. She often goes into hysterics.
D. She still has lingering fear of snakes.

Vocabulary

- cobra
- rat snake
- prise
- convent

These examples demonstrate a feature of “comprehension activities” defined by Field (2008, p.81). Their goal is for learners to extract factual information from the listening texts and thereby provide correct answers to the comprehension questions. Only a few activities draw learners’ attention to the process of listening. For instance, the activity of *Listen and predict*, as shown in Figure 4.6.

Figure 4.6 *Example of listen and predict*

Part 2 Prediction and Inference

Lead-in

In listening comprehension, inference is mainly drawn from logical reasoning, contextual analysis, deduction from clues and knowledge about different situations. This requires active listening.



12.1.2

Listen to the passages and find out the meaning of the following words or phrases from the context.



1. stampede:
2. ondol floor:
3. preoccupation:

Only two such activities are presented in the textbook (see the data in Figure 4.2). Moreover, although no set answers are expected in the activity, the teacher's book still provides one. Hence, it was quite likely that the learners would treat that answer as the one and only correct answer when they engage with activities of this type.

4.2.4 Listening support

The next analysis is related to listening support. Figure 4.7 presents the four types of listening support identified in the textbook. Vocabulary takes predominance, followed by providing background information. This result shows that, in the textbook, importance is given to obtaining sufficient vocabulary and schematic knowledge to facilitate L2 listening comprehension.

Figure 4.7 *Types of listening support in the textbook*

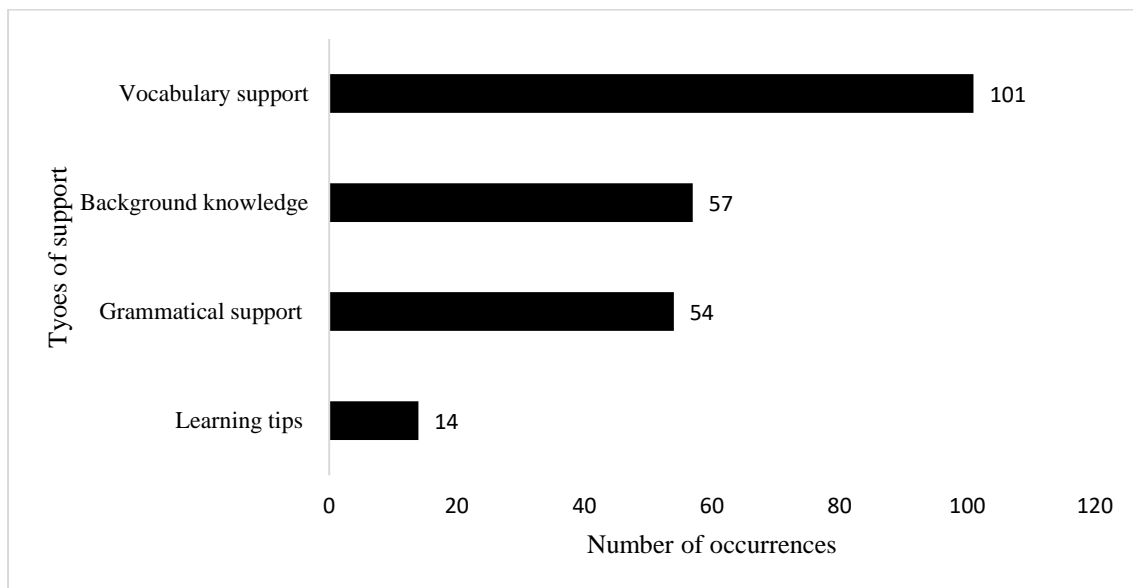


Figure 4.8 illustrates the examples for the listening support in the form of vocabulary and background knowledge.

Figure 4.8 Example of vocabulary support and background knowledge

Part 2 Dialogues



Dialogue 1 I Don't Believe It!

Background information

The **Abominable Snowman** or Yeti is the legendary wild man of the Himalayas. Reports of sightings have come from Nepal (where it is known as Yeti) and from parts of China, Siberia, and other areas in Asia. Sightings have also been reported in North America, where it is called **Bigfoot** in the United States and Sasquatch in Canada. It is said to be elusive; to be heavily built, apelike, hairy, and malodorous, with facial features resembling those of a human being; and to communicate by grunts, cries, or whistles.

Some people doubt its existence because conclusive physical evidence has not been found. Also, because the sightings often occur in remote areas and from a considerable distance, the chances of mistaken identification are great.



A  **6.2.2** Listen to the dialogue and answer the questions.



1. What are they probably talking about?
.....
2. Which speaker do you think believes supernatural things least, the first speaker, the second speaker or the third speaker?
.....

Vocabulary

• haunt

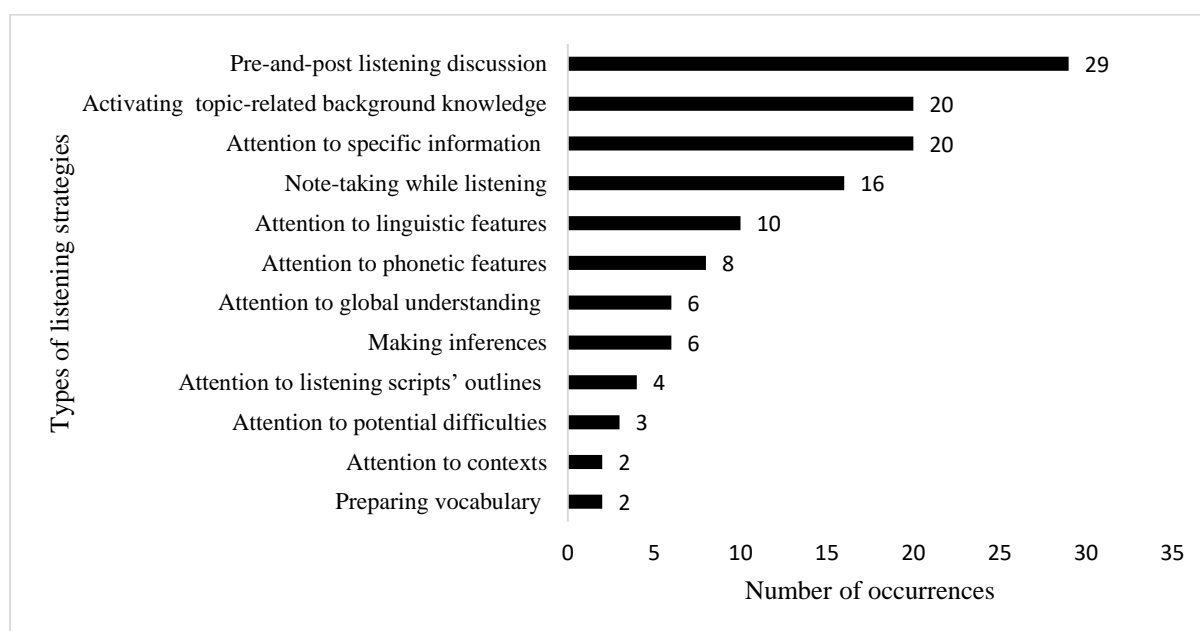
While the textbook provides background information mainly in the form of written paragraphs (as shown in Figure 4.8), the teachers could choose to show more information in the form of pictures or video clips that are provided by the multi-media teaching resources on CD. This is also the case for vocabulary support. For example, if the teacher clicks on the word *haunt* on screen, an English or Chinese explanation will appear¹⁶. Whether the teachers chose to do so will be presented later in this Chapter (Section 4.3) and in Chapter 6 (Section 6.3).

4.2.5 Teaching tips

The final analysis focuses on the teaching tips in the teacher's book. A total of 12 categories were identified, as shown in Figure 4.9.

¹⁶ The words in *Vocabulary* are also glossed and presented in the end of the textbook

Figure 4.9 *Types of teaching tips in the teacher's book*



As Figure 4.9 shows, the top three types of teaching tips involve engaging the learners in pre-and-post listening discussion, familiarizing them with background knowledge and drawing their attention to specific information in the listening texts. In contrast to the high proportion of vocabulary support in the textbook (see Figure 4.8), *preparing vocabulary* only occurred twice in the teacher's book. Teachers are advised to encourage learners to have pre-and-post listening discussion, which may give learners opportunities to prepare for and reflect on their listening. Also, teachers are frequently advised to draw learners' attention to topic-related background knowledge as well as specific information from the listening scripts, such as names, dates, places, and purposes.

Here is an example of a teaching tip:

"From Book Two we introduce a new type of exercise, "Pre-listening Question", for the passages. **Ask students to be prepared for the discussion before they come to class.** The speaker talks about both good and bad sides of taking snacks and also some tips on taking snacks. Before listening to the passage, students may go over the vocabulary first if they have difficulty finding the meaning from the context. While listening to the passage, they should listen carefully for these words and their meanings in the passage. The multiple choice exercises helps students get a very general meaning of the passage. If they have no difficulty understanding the passage, they can **just go on to the more detailed discussion on the questions without**

listening to the passage again” (Teachers’ book, p.8)

In this excerpt, teachers are directed to arrange pre-and-post listening discussion (see the bold parts). The pre-listening discussion focuses on the topic of the listening texts, while the purpose of the post-listening discussion is not specified. For example, in the end of the excerpts above, the teaching tips says “go on to the more detailed discussion on the questions”, but it does not specify what kind of questions can be discussed.

To sum up, this content analysis found that a comprehension-based approach dominated this textbook. A great majority of the while-listening activities aim for comprehension outcomes in written form. Only a few pre-and-post listening activities direct learners to plan for and evaluate their listening experiences. The teacher’s book provides more encouragement to engage learners in pre-and-post listening discussion, although most of the teaching tips aim at successful comprehension rather than developing listening skills and strategies. However, neither of the two teacher participants in the current research referred to the teachers’ book. Their justifications of not doing so are reported in Section 4.4.6. We will now explore how the teachers used this textbook (i.e., student’s book) in the listening classroom.

4.3 Implementations of the textbook

To answer Research Question 2: To what extent do the teachers’ implementation decisions align with or diverge from the textbook and in what ways? I collected listening classroom observation data from two teachers (i.e., Gigi and Amanda) who were teaching a multi-lesson listening unit in two classes across thirteen 40 minute sessions. Gigi spent seven sessions while Amanda spent six sessions to complete the same listening unit (Unit 6). This section reports on the findings of how they implemented the textbook.

Overall, both Gigi and Amanda covered the majority of the subsections in the unit. Table 4.3 presents the classroom time spent in each subsection. The data shows that 10 out of 12 listening subsections provided by the textbook were taught in each observed class. *Oral Work* and *Supplementary Passage* were not included in the classes. Predictably, the teachers’ emphasis was on teaching listening skills exclusively, rather than combining listening with speaking. Gigi provided justifications for doing so in her interview, which will be presented in Section 4.4.2.

Table 4.3 *Overview of the listening textbook sections taught in the observed classes*

Listening sections in the textbook		Gigi's Class		Amanda's Class	
	Subsections	Time spent (in minutes)	Number of listening (in times)	Time length (in minutes)	Number of listening (in times)
Tactics for Listening	1. Phonetics	6"	2x	8"	3x
	2. Listening and note-taking part A	12"	2x	6"	2x
	3. Listening and note-taking part B	33"	2x	23"	3x
	4. Identifying sentences	15"	3x	24"	3x
	5. Dialogue 1	30"	5x	20"	3x
Listening Comprehension	6. Dialogue 2	30"	3x	25"	3x
	7. Passage	50"	3x	43"	6x
	8. News item 1	25"	3x	24"	5x
	9. News item 2	25"	4x	28"	5x
Oral Work	10. Retelling	0	0	0	0
Supplementary Exercises	11. Passage	0	0	0	0
	12. Video	25"	4x	20"	3x
Total ¹⁷		251"		221"	

Table 4.3 also provides information about the amount of listening time spent for each subsection. Both Gigi and Amanda spent the most time on the monologues in the *Passage* section: 50 minutes in Gigi's class and 43 minutes in Amanda's class. However, the *Passage* section experienced different numbers of repeated listening in the two classes: Gigi played the recording of the passage three times, whereas Amanda played it as many as six times. Both Gigi and Amanda spent least time on the *Phonetics* section and only played the recordings in *Listening and Note-taking Part A* twice.

¹⁷ The total time in Gigi's class was 280 minutes and 240 minutes in Amanda's class, the time length in the table excluded the time for the oral presentations assigned by the teachers, which were not relevant to the listening instruction.

While the teachers covered the majority of the textbook materials, there were some variations in the way they implemented the activities, as reported in Table 4.4. These variations are considered textbook adaptations, and they are coded as to whether it enhanced (▲) or reduced (▼) the textbook (see code descriptions in Section 3.7.4.2). As shown in Table 4.4, in both classes, textbook adaptations occurred more frequently during the pre-and-post listening phase than the while-listening phase. Only one adaptation (▲) occurred in the while-listening phase of each class: in the *Listening and Note-taking Part B* section in Gigi's class and *Dialogue 1* in Amanda's class. This suggests that both Gigi and Amanda followed the textbook closely during the while-listening phase (i.e., after they played the listening recordings and before the task completion). A consistent practice of *play, pause and check answers* was identified in this listening phase in both classes (Field, 2008).

Table 4.4 *Teaching practices to enhance or reduce the textbook*

Subsections taught in classes	Gigi's Class			Amanda's Class		
	Before Listening	While Listening	After Listening	Before Listening	While Listening	After Listening
1. Phonetics	▲ ▼			▲ ▼		▲
2. Listening and note-taking Part A	▲					▲
3. Listening and note-taking Part B	▲	▲		▲		▲
4. Identifying sentences						▲
5. Dialogue 1	▲				▲	
6. Dialogue 2			▲			▲
7. Passage	▲ ▼		▲	▼		▲
8. News item 1						▲
9. News item 2			▲			▲
10. Video	▲		▲	▲		▲

Table 4.5 lists 11 types of enhancements (▲) identified across the three listening phases in the two classes. Most types had at least one occurrence in either Gigi's or Amanda's class.

Table 4.5 *Enhancements of the textbook*

Phase of listening	Types of Enhancements	Number of occurrences in Gigi's Class (in times)	Number of occurrences in Amanda's Class (in times)
Before listening	Guide learners to go through the questions of the listening activities	7x	7x
	Explain about or discuss with learners about the topics of the listening texts	6x	2x
	Guide or encourage learners to make predictions	3x	1x
	Draw learners' attention to the potential difficulties of the listening activity	1x	0
	Provide additional background knowledge	2x	0
	Help learners with strategies to cope with the listening activities	0	1x
	Engage learners with supplementary activities	1x	0
During listening	Draw learners' attention to make inferences during the listening	0	1x
	Show the written scripts of listening texts and remind learners to read after the speakers	3x	8x
After listening	Pick up words, phrases or sentences from the written scripts to explain	1x	2x
	Show learners a model on how to retell story	1x	0

As the table shows, before playing the recordings, both Gigi and Amanda guided learners through the comprehension questions (seven times in each class). These questions included short answer questions, multiple choice options and outline completion. This shows the teachers' emphasis on listening task completion. Notably, Gigi engaged learners with discussion of the topic of the listening texts six times during the pre-listening phase. For instance, she showed the Wikipedia website on the Loch-Ness Monster before playing the recording for the *Passage* and guided learners to talk about the title of UFO in *Dialogue 2*. Such warm-up discussions only occurred twice in Amanda's class. Gigi also provided background knowledge in addition to what was included in the textbook (three times). Examples of the latter were a picture of Snowman in the *Dialogue* Section, and a movie trailer of the Loch Ness Monster in the *Passage* Section. Neither the picture nor the trailer were provided in the textbook. No such practices were evident in Amanda's Class.

Enhancement occurred only once during the while-listening phase in each class. Gigi assigned an extra listening task in the *Listening and Note-taking Part B* section. After playing the recording a third time, she asked the learners to retell an experiment mentioned by the speaker. Then, she played this part several times, reminding the learners to take notes, and gave the class three minutes to prepare. The learners were asked to perform this task both individually and in a class discussion guided by Gigi. They struggled to do so because the task was difficult for them. Amanda's enhancement was simply to remind her learners to notice speakers' attitudes in the *Dialogue 1* section. Neither Gigi nor Amanda explained why the learners needed to engage in these classroom practices.

During the post-listening phase, although Amanda enhanced activities more than Gigi, Amanda's enhancement activities were limited to showing her learners the transcripts on screen and playing the recording one more time while they read. Twice, Amanda also paused the recordings and picked up words or phrases to explain. While Gigi had fewer enhancements in the post-listening phase, she once showed learners a model of retelling in the *Video* section. After completing the tasks in this section, she modelled how to use the vocabulary support in the textbook to retell the video story, but did not ask any learners to practice doing the same. Thus, whether the learners were able to perform the task is unknown.

Taken together, classroom observation findings suggest that the teachers relied on the textbook heavily in implementing teaching practices in the listening classes. Given the comprehension-based approach represented by the textbook, their listening classrooms were dominated by this approach. The next section focuses on the findings from the post-lesson interviews with the teachers and learners.

4.4 The teacher and learner cognition in L2 listening classes

The qualitative data from the post-lesson interviews address the third and fourth research questions. As described in Section 3.7.5.2, an iterative coding process was implemented to analyze these data, and the following six themes were identified:

Theme 1: Priority in completing listening comprehension activities

Theme 2: Main lesson objectives in L2 listening classes

Theme 3: Knowledge about L2 listening comprehension

Theme 4: Perceptions of the linguistic and non-linguistic knowledge in L2 listening classes

Theme 5: Perceptions of skills and strategies in L2 listening classes

Theme 6: Factors in teaching and learning listening in the classroom context

Each theme and its associated sub-themes are discussed below, with interview excerpts provided to illustrate the theme.

4.4.1 Priority in completing listening comprehension activities

Both the teachers and learners prioritized completing listening activities, although none of them explicitly stated that this was the major goal in their listening classes. When talking about the difficulties or challenges in the classes, both groups described them from the perspective of completing activities. For example, "writing down the answers to the tasks word for word" was viewed as a big challenge. Here is what Gigi said about how she helped learners with listening anxiety:

I found that learners only focused on the words after the first listening and they wanted to write down all the words although they were not able to write down them completely. So I played the second time immediately, so that they can complete the words and pay attention to the content afterwards. Learners would get anxiety if there is only one time of listening. [ROI-listening-D68]

One of Gigi's learners also perceived providing accurate answers to listening activities as a kind of listening difficulty:

I think maybe we are so used to the exam demands that requires the accuracy of the answer, so every time I try to provide an accurate answer by using the exact words from the input. But it is very difficult to write down the words exactly used in the input; so even though I sometimes understand the information conveyed, I can still not complete the tasks. [RGI-listening-D68]

In addition, the two teachers justified their listening teaching procedures from the perspective of completing activities. For example, when Amanda explained why she guided learners to preview listening, she said:

I ask learners to preview the MC options and questions to improve learners' task performance after communicating with the learners. [ROI-listening-D68]

The emphasis on completing listening activities also influenced teachers' expectations on developing learners' skills. Both Gigi and Amanda believed that the types of skills or abilities

developed in the listening classes depended on the types of listening activities. For instance, they would like the answers of the listening activities to have a closer link to the main idea of the listening texts, so that the learners can develop the skill of listening for main ideas. Here is how Gigi commented on the outline completion activity in *Dialogue 2*:

Missing words are not related to the main ideas but to the details, which is not good to develop learners' top-down processing. [ROI-listening-D36]

Amanda seemed to hold a similar opinion as seen in her comment on the sentence completion activity in *Listening and Note-taking Part A*:

I hope that the missing words were chosen from the talk in Part B rather than the randomly chosen words or phrases, so that the learners can grasp the main idea of the spoken input in Part B. [ROI-listening-C33]

The emphasis on completing listening activities was more obvious among the learners' responses. They were more concerned with the listening activities than the spoken input they encountered in the listening classes. For example, when the learners were asked to recall what they did during each time of listening to the spoken input when the teachers replayed the recordings, they only seemed to care about whether the repeated exposures can lead to successfully completing the activities. One of Gigi's learners recalled:

I would know where the answer is in general during the 1st time of listening, and I would take down some words then, during the 2nd time of listening, I will try to write the sentence to answer the question. [RGI-listening-D110]

This perception was shared by Amanda's learners in terms of the repeated viewing in the *Video* section:

During the 1st time of listening, I just enjoyed the video, then 2nd time I answered the questions, 3rd time I checked the answers. [RGI-listening-C48]

Amanda's learners further confirmed the emphasis on completing activities over comprehending spoken input when they commented on the *Passage* section:

Learner A in Amanda's Class: I would get bored if only listen to the passage without listening tasks. [RGI-listening-C31]

Learner B in Amanda's Class: We are easily influenced by the tasks, and just focus on completing them without understanding the whole passage. [RGI-listening-C33]

From the teacher's perspective, Gigi realized that this over-emphasis on correct answers was not helpful for deeper listening comprehension:

...when checking the answers after listening, I will mark in the textbook where learners appeared to get confused and replay the part for that item again or more; the purpose is to let learners fully understand the listening text rather than just complete the activities because sometimes they still don't understand it even after the task completion, for example, after completing multiple choice activities. [ROI-listening-D44]

Despite this concern, Gigi seemed to accept the consequence of the incomplete listening comprehension. Both her responses and the observed practices show that she did not take any action to shift the learners' attention from the tasks to the texts. She did not check whether the learners had fully comprehended the texts either. As long as the learners provided or took notes for the correct answers, she moved on to the next part of the textbook. The reason behind such a compromise in Gigi's classroom practices appears to be related to the limited classroom time, which was one of the contextual factors identified in the teachers' responses (see Section 4.4.6).

4.4.2 Main lesson objectives in L2 listening classes

The next key theme is related to the major lesson objectives perceived by the teachers and the learners. The teachers' responses indicated that they did not distinguish listening in the classroom from listening in a test. The evidence for this is in their stated expectations on developing learner autonomy or self-efficacy. Gigi conceptualized autonomy as an ability to pause the listening recordings appropriately:

I will teach learners when and how to pause while listening, to get the complete meaning chunks, because learners are not as skillful as teachers, and they have no idea when and how to pause to get a complete meaning chunk; so I will teach them to be more autonomous by showing how to pause during listening, and then I will provide some explanations in terms of knowledge, which is also very beneficial to learners. [FOI-listening-D16]

Amanda used the word "method" to describe her lesson objective:

To teach methods regardless of the course type, not just in listening class, so as to develop learner autonomy; reach the self-efficacy. [FOI-listening-C12]

Although Amanda did not elaborate on the meaning of “method” or “self-efficacy”, she explicitly expressed her disapproval with regard to developing learners’ listening strategies in this particular context, due to the concern that the learners “do not have the linguistic capability to develop any strategies”. [FOI-listening-C8]

Therefore, it seemed that, both Gigi and Amanda appeared to connect learning listening in the classroom with learning the techniques to cope with testing listening. Such a connection was also revealed in the learners’ interviews. For example, one of Gigi’s learners treated the listening class as a place to get prepared for testing:

It [the section of *Listening and Note-taking Part B*] helps me get familiar with the structure in the form of outline, so that when I do the dictation part in TEM 4, during the first time of listening, this kind of outline structure appears in my mind, and I am aware that which part I am listening to. [RGI-listening-D8]

The learners also expressed an expectation to access communicative spoken input equivalent to real-life situations. This was reflected by Gigi’s learners’ preference for dialogues over monologues:

Learner A in Gigi’s Class: I prefer dialogues, because there are exchanges of information, passages are long and sometime tiring, I will laugh if I hear anything funny in dialogues which makes me not that bored;

Learner B in Gigi’s Class: I like dialogues too, because they are very authentic with two speakers, and you can feel that you are put into a communicative context. [FGI-listening-D37]

Such a preference was shared by Amanda’s learners:

The genre of dialogues is good because it is more interactive between the male and female speakers, and their intonations can help you enter into an authentic context, so we can have a better understanding, and get familiar with the communicative conversations in English context. [FGI-listening-C24]

The insights from the data indicate a mismatch in the lesson objectives for teachers as opposed to learners. In addition to preparing for exams, learners expected to learn about listening skills which can be used in real-life communication, whereas teachers seemed to focus on training for listening testing strategies. A more salient divergence between the

teachers and learners was identified in developing language skills other than listening in the classroom. The learners mainly expected to develop speaking skill in the listening classes, with a rationale that they could learn from the native speakers in the spoken input. Here is an example given by one of Amanda's learners:

After listening to this section, I hope I can pronounce like native-like speakers, for example, Americans, I can improve my pronunciations. [RGI-listening-C3]

Gigi's learners expected to handle the communications with various English accents:

To improve speaking [in the listening classes], for example, to communicate with native speakers of English when you meet different accents by accumulating experiences in listening. [FGI-listening-D29]

One of Gigi's learners also expected to improve her writing and reading skills, as she treated the structure of the listening text as a good writing sample:

To improve my writing and reading, because I am more familiar with the structure of this discourse via listening, we need an awareness of structure in writing and reading English. [RGI-listening-D6]

Amanda did not mention any expectations of other language skills, but Gigi explicitly claimed that the listening skill should be the only skill developed in listening class:

Learners will be reading if I show them the captions, I don't wanna them focus on reading in a listening class; still, I will show them the caption in the second time of watching if time permits. [ROI-listening-D72]

This was also the reason why she decided to skip the story retelling section in the textbook (Amanda agreed with her decision when scheduling the teaching plans):

I gave up the part of speaking [retelling] because I concerned that it is too difficult for learners, they cannot speak too much actually and I don't want to waste any listening classroom time; so I only implement listen so far, and a bit watch [video]. [FOI-listening-D31]

The findings under this theme show that the teachers and the learners had different lesson objectives for their listening classes. Moreover, it seemed that Gigi treated her class as an exclusive listening skills course while Amanda sought to develop other skills as well.

4.4.3 Knowledge about L2 listening comprehension

Varied levels of knowledge about what L2 listening comprehension entails were identified among the teachers and learners. For teachers, Gigi was more knowledgeable than Amanda in understanding the distinction between top-down and bottom-up processing of L2 listening. She provided definitions of top-down and bottom-up processing as follows:

Top-down means you start with main idea and then move on to details; bottom-up means you first go to details and then build up the main idea based on your building up capacities; these two processing are working as guiding concept, providing the approaches to complete the process. [FOI-listening-D9]

This excerpt shows that although Gigi's practices did not entirely match recommendations from research literature on the processes of L2 listening comprehension (e.g., Vandergrift & Goh, 2012), she was aware of the sequence from main ideas to details and the other way around. In contrast, Amanda could not provide a definition of these concepts. She was not able to use the terms correctly, as she termed them as a "top to bottom" process. In addition, she needed assistance and explanations in terms of the meanings of these terms.

Regarding the processing experienced by the learners in the listening classes, both teachers believed that learners experienced more bottom-up processing than top-down processing. Nevertheless, they attributed this preference to different reasons. Gigi believed that it was the textbook listening task design which led to more bottom-up processing experienced by her learners:

More bottom-up processing due to the listening activity types in the textbook, which are designed to be more bottom-up, such as gap-filling...[FOI-listening-D2]

Amanda, on the other hand, believed that the learners inclined to experience more bottom-up processing in the listening classes because they were not capable of top-down processing:

...learners mainly rely on bottom-up processing, they cannot grasp the material/spoken input at a macro level, and actually they cannot do this in any English language skill course, and they always started with minor details at the micro level.
[FOI-listening-C2]

Both Gigi and Amanda acknowledged the importance of top-down processing. To this end, they would like to draw learners' attention to main ideas, which might represent this type of

processing in their view. Here is what Gigi preferred:

...as a teacher I would like to provide more chances to [let the learners] experience top-down processing, because if you can grasp the main idea first you will be clear about the structure, just like how you do it during reading. [FOI-listening-D3]

Amanda also had a clear preference in terms of listening processing:

The process in listening class should be the top-down processing only, so I **always** find a chance to focus on main idea. [FOI-listening-C4]

However, observation data in Section 4.3 showed that Amanda did not implement teaching procedures as consistently as her “always” answer indicated. Compared to Gigi who drew learners’ attention to discussing the topic of listening texts six times, Amanda only did this twice (see Table 4.5). These findings reveal divergences between teacher cognition and their actual classroom practices (Phipps & Borg, 2009).

As for the learners, awareness of listening comprehension processes seemed to be largely absent in their views, although they did report focusing on the “minor details” first, and then struggling to get the main ideas. One of Amanda’s learners recalled her behavior during the first time of listening to the spoken input as follows:

During the first time of listening, I could only get a couple of isolated words; [I] cannot get the gist even though it is required; a rough main idea; only a certain specific details left after 1st time of listening such as a couple of single words...[RGI-listening-C104]

One of Gigi’s learners provided a similar description to show her process of listening:

Personally, maybe I came to notice the words first in most cases, I can hear those words, but I don’t understand what the speaker means... [FGI-listening-D15]

4.4.4 Perceptions of skills and strategies in L2 listening classes

Based on the main lesson objectives described above, both teachers and learners reported that the learners needed a combination of listening skills and other general language skills in the listening classes. Vandergrift and Goh (2018) list six main listening skills. Among them, the skill of *listen for main ideas* was most valued in the teachers’ responses. Neither of the teachers mentioned other commonly recommended listening skills such as *listen selectively*

or *listen for detailed information*¹⁸.

Amanda believed that the skill of *listen for main idea* was the major teaching goal in her class, regardless of the features of listening texts:

To instruct the learners to obtain the main idea of the dialogues, and I don't care about the types of genre, like dialogue is different from the talk in terms of genre, as long as learners can get the main idea of the listening input, it doesn't matter what kind of listening input they listen to. [ROI-listening-C8]

Therefore, she expressed a wish to implement an ideal teaching procedure, which started from *listen for main ideas*, and concluded with the goal of task completion:

I will only, if I could, focus on the passages of the 15 listening units; go through three-step teaching procedures: main idea – details -check details. [FOI-listening-C8]

Unlike Amanda, Gigi expected her learners to develop listening skills according to the types of listening texts. For instance, she focused on the skill of *listen for main idea* particularly in the *News Items* section:

The genre of news is different from passage; news is more organized, and I would teach learners to focus on the very first sentence for the main idea due to the inverted pyramid structure of news. [ROI-listening-D11]

Also, Gigi expected her learners to obtain the “key information” for the purpose of better comprehending the listening text:

I want to let learners realize the importance of grasping **key information** during the listening; they don't have to get everything. Instead, if they can get the key information and then to reorganize it by using their own words, that would be great; I highlighted the key words to encourage the learners: if you get them [key information] done, then you will be good. [ROI-listening-D71]

Nonetheless, the skill of *listen for main idea* or *listen for global understanding* were reported by the learners as a big challenge. One of Gigi's learners said:

¹⁸ The six core listening skills are: listen for details, listen separately, listen for global understanding, listen for main ideas, listen and infer and listen and predict (their definitions are provided by Vandergrift & Goh, 2018, p.142).

Generally speaking we can understand 80% of the input; the other 20% may be [missing] due to the difficulty in obtaining the details. I only focus on what is required to be filled in blanks; the lengthy input makes me miss some details. [RGI-listening-D57]

Another one of Gigi's learners said: "I found it more difficult to build up images; sometimes I don't understand what has been said after the first time so I am not able to build up any images". [FGI-listening-D22]

One of Amanda's learners pointed out the gap between her expectation and ability: "I hope I can grasp the main idea, but actually I can only get certain words, repetitive words". [FGI-listening-C14]

The skill of *listen for details* was also reported to be difficulty probably because the learners considered the "details" as "everything" in the listening texts. As one of Gigi's learners commented:

I will try to get what has been said in general, and I may get 60-70% of it, I may miss something because I still cannot grasp the overall structure; I can only get a general idea, not the details, I cannot understand the details [during the 1st time of listening]. [RGI-listening-D104]

Secondly, skills and abilities beyond the scope of the listening skill were reported by both the teacher and learner participants, either as challenges or learning goals in their classes. Examples were the abilities of handwriting for note-taking, memorizing capacities, retelling the stories, as shown in the following excerpts:

Amanda: [I would like to]To develop learners' note-taking abilities and skills to deal with the huge amount of information in the spoken input, as learners would suffer from their short memories. [ROI-listening-C4]

Gigi: I would like to summarize it after listening, such as I guide learners to recast the story by using the vocabulary in the listening texts. This is an effective but simple way to help learners summarize the main ideas. [ROI-listening-D50]

One of Amanda's learners expressed expectations of speeding up handwriting when taking notes after listening: "[We want to develop] handwriting speed". [RGI-listening-C54]

Finally, listening strategies were rarely mentioned during the interviews. Gigi appeared to have good knowledge of what listening strategies entail:

I think there are two categories of listening tactics: strategies and skills; skills are quite concrete, for instance, predicting before listening, taking notes while listening, memorizing after listening; strategies are in a broader level, which play the role of guiding, for instance, to think about what is the purpose of listening to this, [or] should I adopt top-down or bottom-up approach. [FOI-listening-D8]

Despite such an understanding, it seemed that her goal of implementing strategies such as prediction was still focused on task completion and preparing for the exam, as seen in the following two comments:

I would guide learners to predict about the missing parts before listening, to guess the type of words which are needed, sometimes guess the content of the missing parts, in this way, learners can build up a connection between their prior knowledge and the topic of the incoming talk. [ROI-listening-D3]

This (prediction) is a kind of skill, like what we taught in preparing IELTS listening test, asking learners to use the skill of predicting and then verify their predictions after listening. If you can successfully predict, it may indicate that the task is either not designed very well or it is designed in logical way. [ROI-listening-D53]

Amanda was not able to define the concepts of *listening skill* or *listening strategy*. After being provided with their definitions, she claimed that it was not necessary to include them in her listening classes as “they are too difficult for the learners to handle, due to the Chinese EFL learners’ qualities and [learning] habits”. [FOI-listening-C8]

The learners seemed to be unaware of the value of developing listening strategies. The response from one of Amanda’s learners showed that they tended to view prediction as a testing strategy rather than listening strategy: “We hope that teacher guide us to predict the content and missing parts before listening, and we were not able to do it without teacher’s instruction”. [RGI-listening-C12]

4.4.5 Perceptions of linguistic and non-linguistic knowledge in L2 listening classes

The next theme that emerged from the interview data was related to how teachers and

learners viewed the linguistic and non-linguistic knowledge that they needed and/or could gain in the listening class. Both the teacher and learner participants believed that three main types of linguistic knowledge were needed to help learners comprehend listening texts and engage with listening activities: vocabulary knowledge, grammatical knowledge and discourse knowledge.

First, regarding the difficulties in vocabulary, the teachers viewed the “unfamiliar words” or “terminologies/specialized vocabulary” in the textbook materials as a major lexical challenge. For example, Amanda believed the *News Items* section was difficult because of the vocabulary it contained: “News items are faster and more difficult; it’s difficult because it contains unfamiliar information and vocabulary to learners”. [ROI-listening-C14]

Additionally, the teachers reported on an awareness in the importance of phonological vocabulary knowledge, such as stress, intonation, pronunciation of a word.

Gigi: ...intonation is also more important than pronunciations; sometimes you can still be understandable when your intonations are right regardless of your pronunciation. [ROI-listening-D2]

Amanda: I expect learners to learn about the patterns of pronunciations in the section of phonetics; then they can better grasp the key points of the listening input delivered by native speakers. [ROI-listening-C2]

Gigi’s learners also realized the difficulties caused by the lack of vocabulary knowledge in spoken form: “...intonations and stresses are very important to help you figure out the meaning conveyed when you are talking to a native speaker”. [RGI-listening-D3]

Second, the learners showed concern about grammatical knowledge which required the ability to identify the sentence structure. This is not surprising, as one of the listening sections is *Identifying Sentences*. For instance, one of Amanda’s learners attributed the difficulty of this section to grammar: “I have no idea about the content without teacher’s explanation, may be because of the unknown vocabulary, unfamiliar grammatical structure”. [RGI-listening-C62]

Gigi’s learners agreed with this concern:

Sometimes the sentences are too long, containing too much information, and the

structure is not salient [by using punctuations]. I have no idea of the meaning; I can't understand it at all when there is a long sentence. [RGI-listening-D64]

The last type of linguistic knowledge identified among Gigi and her learners, in particular, was discourse knowledge. Gigi believed that it was important to draw the learners' attention to the discourse of the listening text, for better comprehension: "...I would teach learners to focus on the very first sentence for the main idea due to the inverted pyramid structure of news". [ROI-listening-D11]

Gigi's learners also expected to gain discourse knowledge, although they saw this as most useful for the purpose of developing other language skills or meeting the examination requirements:

Learner A in Gigi's Class: [I take listening lessons] To improve my writing and reading, because I am more familiar with the structure of this discourse via listening, we need an awareness of structure in writing and reading English. [FGI-listening-D6]

Learner B in Gigi's Class: It [short talk] helps me get familiar with the structure in the form of outline, so that when I do the dictation part in TEM 4, during the first time of listening, this kind of outline structure appears in my mind, and I am aware that which part I am listening to. [FGI-listening-D8]

In addition to linguistic knowledge, Gigi and her learners saw listening topic-related background knowledge as crucial in the listening classes. For instance, Gigi said:

The background information in this unit is not very good. Take *Dialogue 1* for example; it provides background knowledge of Snowman, which is actually not the key information of the dialogue. The key information should be supernatural things, so more examples should have been given, I [also] don't quite understand the point of the background information in passage, because think the key point should be Loch Ness Monster [rather than the ones in the textbook], so I ignored the background information [provided in the textbook and used other sources for this information]. [ROI-listening-D58]

One of Gigi's learners appreciated the opportunity of learning about topic-related knowledge: Going through background information is the most helpful to me. We were offered to watch movie trailers of Loch Ness Monster, I am very impressed, it aroused my

interest and I am more motivated when I listen to it later. [RGI-listening-D81]

Amanda's learners also valued in background knowledge. However, Amanda appeared to minimize or even skip this step in her listening classes. The interview excerpts below showed this mismatch:

Amanda's learners¹⁹: We expect teacher providing pictures or videos to supplement the background knowledge provided by the textbook, rather than reading through what is provided in the textbook. [RGI-listening-C95]

Amanda: ... it is the learners' job to get background knowledge ready before or after the class; a quick go-through in the classrooms. [ROI-listening-C58]

4.4.6 Factors in teaching and learning listening in the classroom context

The final theme that emerged from the interview data was the stated factors that shaped teaching and learning listening. Overall, three types of factors were identified: teacher-related factors, learner-related factors and contextual factors. Teacher-related factors involve the teachers' teaching experience and their previous educational background, which they mainly relied on to make decisions in the listening classes. For instance, Gigi tended to rely on what she had learnt in her postgraduate study:

...the research literature and theories I accessed from my Master study; second, positive influence from peer teachers, like more experienced teachers, I observed their classes. [FOI-listening-D38]

Amanda would like to stick to her teaching patterns from previous teaching experiences:

No, I did not refer to the teacher's book, because I am lazy [laughing]. Actually I did look at some of them, but for one thing I am lazy; another reason is that I found myself reluctant to follow those tips, and I would rather follow my own patterns of teaching [listening]. [FOI-listening-C41]

Learner-related factors include the affective factors assumed by the teachers and reported by the learners, as well as the learners' reactions in the classroom. The teachers also reported that they occasionally observed learners' reactions after listening, and then made decisions to move on or not. Here is an example from Gigi: "...negative impact from learners' reactions, I became more and more demotivated; the times that I have taught the course". [FOI-listening-

¹⁹ The learners' responses here are expressed in a group

D38]

The teachers also reported contextual factors related to the compromises the teachers made due to “limited classroom time”:

Amanda: Considering the classroom time, I did not make any changes to the textbook; Limited time to adapt or revise the unsatisfied listening tasks in the textbook. [FOI-listening-C35]

Gigi: I gave up the part of speaking because I concerned that it is too difficult for learners, they cannot speak too much actually and I don't want to waste any listening classroom time; so I only implement listen so far, and a bit watch [video]. [FOI-listening-D31]

Other contextual factors such as the uniformed curriculum design or final examination requirements did not bother the teachers in the current research very much.

4.5 Major findings and emerging issues

This chapter presents the findings from three types of data: the content of the listening textbook, observations of listening lessons, and interviews with the teachers and learners. The major findings showed that the listening textbook placed great emphasis on the product of listening comprehension, which could hardly support the development of the learners' core listening skills and strategies. The two teachers followed the textbook quite closely during the while-listening phase although they implemented varied teaching procedures before and after listening activities. Variations were also identified in their beliefs about teaching listening. The learners perceived the product-based comprehension approach in a positive way. This perception may be related to the particular learning and assessment context. These findings will be discussed under the topic of the teaching of L2 listening in Chapter 7 (see Section 7.2).

In addition, two issues pertaining to vocabulary emerged from the findings in this chapter. First, vocabulary support in the form of a textbook glossary dominated the listening support provided in the textbook. Classroom observation data showed that both teachers worked with the textbook glossary prior to listening activities. This was an important part of the vocabulary-related episodes (VREs) reported later in Chapter 6. The findings regarding VREs in the listening classes will be discussed in Section 7.3.2. The second issue relates to the

various modes of L2 input identified in the listening textbook and used in the classes. Other than listening to spoken input, learners had opportunities to read the scripts of spoken input and to view videos. In this vein, the modes of listening-while-reading or viewing are provided in the listening classes. Moreover, observation data showed that multiple times of listening occurred frequently in the classes. These findings will be discussed together with the vocabulary learning gains reported in Chapter 6 to provide insights into the extent to which various modes of L2 input and multiple listening provided incidental vocabulary learning opportunities in the listening classes (see Section 7.3.3). In Chapter 5, I present the findings of the vocabulary in the textbook as well as the actual vocabulary knowledge held by the learners in these listening classrooms.

Chapter 5 Results: Textbook vocabulary and learner vocabulary knowledge

5.1 Introduction

The previous chapter presented the findings of how listening instruction was carried out and perceived by the teachers and the learners in the listening classrooms. This chapter focuses on the corpus analysis findings of the listening textbook used in these classrooms, as well as the results of the learners' vocabulary size and knowledge. The findings reported in this chapter may help us to, first, understand the vocabulary demands of and the vocabulary contained in this widely used listening textbook in Chinese tertiary EFL classrooms, and second, to provide information on the vocabulary size and knowledge of the Chinese EFL learners at the university level. Specifically, this chapter addresses research questions five to nine:

Research Question 5: How many word families are required to achieve 95% and 98% lexical coverage of the textbook?

Research Question 6: What is the vocabulary profile of the textbook?

Research Question 7: What kind of vocabulary is glossed in the textbook?

Research Question 8: What is the written receptive vocabulary size of the learners?

Research Question 9: What is the learners' receptive vocabulary knowledge of the items from one listening unit in the textbook?

5.2 A lexical analysis of the listening textbook

This section presents the results of the textbook corpus analysis, starting with the vocabulary load of the overall textbook. The current analysis also compares the vocabulary demands of the sub-corpora across the spoken input and written texts, together with the comparison of the demands across the spoken input of the five genres, and the written texts in the four sections described in Chapter 4 (see Section 4.2). It then examines the vocabulary profile of the textbook, and the features of the vocabulary glossed in the textbook.

5.2.1 Vocabulary load of the textbook

To answer Research Question 5, I compiled three corpora from the listening textbook, which has been described in Chapter 3 (see Table 3.9): the overall textbook corpus, the combined corpus of the spoken input (i.e., the listening texts listened to by the learners) and the combined corpus of the written texts (i.e., the texts in the textbook read by the learners).

Then, I adopted Heatley et al.'s (2002) RANGE program to calculate the cumulative coverage of the BNC/COCA 1-25,000 word-family lists and four supplementary lists (Nation,

2018). This information provided a basis for estimating the number of word families needed to reach 95% and 98% lexical coverage of the textbook. Lexical coverage of 95% has been considered as the threshold for acceptable comprehension (with the possible need for assistance such as teacher scaffolding), while 98% coverage indicates that a good level of comprehension can be achieved without any assistance (Nation, 2006; van Zeeland & Schmitt, 2013a).

Table 5.1 shows the lexical coverage of the three corpora and the total tokens in Nation's (2018) BNC/COCA 1-25,000 word-family lists and four supplementary lists. The proper nouns, marginal words, transparent compounds and abbreviations are separately classified in the supplementary lists were included in the calculation of the cumulative coverages because these words were considered to have "minimal learning burden" (Nation, 2006, p. 70). The 95% and 98% lexical coverage figures are in bold.

Table 5.1 *Lexical coverage of the overall listening textbook corpus, the combined corpora of the spoken input and the written texts*

Word levels in BNC/COCA (1,000 word at each level)	Cumulative coverage of the overall textbook (% in 83,164 tokens)	Cumulative coverage of the spoken input (% in 54,581 tokens)	Cumulative coverage of the written texts (% in 28,313 tokens)
Supplementary word lists 31 st -34 th	4.6	3.78	6.17
1 st	84.85	86.32	81.99
2 nd	92.63	93.66	90.64
3 rd	96.56	97.09	95.52
4 th	97.72	98.13	96.97
5 th	98.46	98.7	97.98
6 th	98.88	99.07	98.5
7 th	99.15	99.29	98.85
8 th	99.36	99.47	99.11
9 th -25 th	99.96	99.97	99.88

The data in the table shows that, assuming learners know the words in the supplementary word lists, the textbook reaches 95% at 3000-word families and 98% at 5000-word families. A total of 3000-word families provided a higher cumulative coverage of the spoken input than the written input (97.06% vs. 95.51%). A consequence is that for the spoken input, 4000-word families are required to reach 98% coverage compared to 6000 families for the written input.

The next analysis is related to the spoken input corpus. As shown in the listening textbook content analysis in Section 4.2, the spoken input (termed as listening texts in Chapter 4) is composed of five genres: single sentences, dialogues, monologues, news items and TV scripts. Table 5.2 shows the number of word families required to reach 95% and 98% coverages across these genres. These genres have different corpus sizes. The total of running words in each genre is provided in the table.

Table 5.2 *Lexical coverage of the spoken input across five genres*

Word levels in BNC/COCA (1,000 words at each level)	TV scripts (% in 5,854 tokens)	Monologues (% in 20,075 tokens)	News items (% in 6,017 tokens)	Single sentences (% in 2,473 tokens)	Dialogues (% in 14,660 tokens)
Supplementary word lists 31 st -34 th	5.13	2.92	6.38	2.55	3.61
1 st	83.54	84.46	82.05	89.49	93.58
2 nd	92.13	92.8	92.24	95.43	97.35
3 rd	96.18	96.21	96.54	97.69	98.49
4 th	97.56	97.54	97.67	98.3	99.1
5 th	98.19	98.35	98.37	98.87	99.41
6 th	98.26	98.9	98.94	99.27	99.54

The data shows that the genres of TV scripts, monologues and new items required more word families than the other two (single sentences and dialogues) to reach both the 95% and the 98% coverage figure. Taking the 95% figure as an example, the three more demanding genres required 3000-word families while single sentences and dialogues needed 1000 word families fewer. Dialogues, in particular, required only 1000-word families plus the knowledge of the words in the four supplementary lists to reach 93.58%, which is closer to the 95% threshold. Such a close gap suggests that 1000-word families might be sufficient to reach an acceptable comprehension threshold when listening to the dialogues in this textbook.

As for the corpus of written texts, the current analysis categorized them into four sections: background knowledge, learning tips, grammatical support and listening activities. The first three sections echo the listening support identified in the textbook content analysis (see Section 4.2.4). The last section involves the questions, activity outlines and multiple choice options of the listening activities read by the learners when using the textbook. These written texts served two main purposes: to engage the learners with listening activities, and to provide listening support. The vocabulary support material, which has been identified as

playing a prominent role in listening support in Chapter 4, is not included in these written texts. Instead, the analysis for these glossed words will be presented later in this chapter (see Section 5.2.3). Table 5.3 presents the lexical coverage figures across these four sections. Again, each section has a different number of running words, as shown in the parentheses.

Table 5.3 *Lexical coverage of the written texts across the four sections*

Word levels in BNC/COCA (1,000 word at each level)	Background knowledge (% in 2085 tokens)	Learning tips (% in 814 tokens)	Grammatical support (% in 988 tokens)	Listening activities (% in 22,330 tokens)
Supplementary word lists 31 st -34 th	8.93	1.36	0.5	6.63
1 st	72.19	81.83	84.31	86.43
2 nd	85.33	90.68	93.01	93.9
3 rd	93.2	95.84	97.36	97.99
4 th	95.36	96.95	98.37	99.12
5 th	96.99	97.93	98.77	99.57
6 th	97.71	98.79	99.17	99.94
7 th	98.14	99.16	98.77	99.99

As shown in the table, the listening activities sections which have the largest corpus size of 22,330 words required 3000-word families plus the supplementary lists to reach 97.9% coverage figure. This finding suggests that when engaging with the listening activities, if the learners knew 3000-word families, they could comprehend the written texts of the activities well. In contrast, if they need to have an adequate or even good comprehension of the background knowledge, they needed to know more words. This is shown by the data in the first column of Table 5.3. The written texts in the background knowledge section was more demanding than the other three sections (4000-word families vs. 3000-word families required to reach 95% coverage).

Taken together, the corpus analysis findings presented in this sub-section suggest that, overall, the listening textbook required 3000-word families as well as the knowledge of proper nouns, marginal words, transparent compounds and abbreviations to reach the comprehension threshold. Moreover, varied vocabulary demands were required across the spoken input genres and written texts sections in the textbook.

5.2.2 Vocabulary profile of the textbook

The results reported in this sub-section answer Research Question 6, which concerns the vocabulary profile of the textbook. Vocabulary profile analysis adopts Heatley et al.'s (2002) RANGE program to calculate the percentages of words at various frequency bands in the textbook. I combined the approaches proposed by Nation (2013) and Schmitt and Schmitt (2014) to group the 25 frequency-based word lists in Nation's (2018) BNC/COCA into three frequency bands: high-, mid- and low-frequency. The first three 1,000 word-family lists are classified into the high-frequency band, the word families between fourth and ninth 1,000 word-family lists are mid-frequency words and the words beyond the 10,000-word families are low-frequency words. Table 5.4 presents the percentages of these frequency bands in the overall textbook corpus. The number of word families and sample words at each band are also provided in the table.

Table 5.4 *The coverages of the high-, mid- and low-frequency bands in the textbook*

Frequency bands in BNC/COCA 1-25	% coverage in N of word families	Examples
High-frequency (1 st -3 rd word list)	91.96	the, for, to, food, stress, brain, monster,
Mid-frequency (4 th – 9 th word list)	2.98	solar, wheat, nylon
Low-frequency (10 th -25 th word list)	0.42	zebra, reflexology, flipper

The data in the table shows a decrease in coverage from the high to low frequency bands. The majority of the words in the listening textbook were high-frequency words, making up 91.96% of the total tokens in the textbook. These words accounted for 80% of the most frequent 3000 word families between the 1st and 3rd BNC/COCA word level (i.e., 2389 out of 3000 word families). Predictably, the coverages of the mid- and low-frequency words were much lower than that of the high-frequency words. A total of 832 mid-frequency words and 129 low-frequency words occurred in the textbook, accounting for 2.98% and 0.42% of the tokens in the textbook, respectively. The high percentage of high-frequency words suggests that when using the textbook, learners will encounter a large number of words that occur frequently in the English language.

Vocabulary profile analysis also reveals the coverage of the words in the BNC/COCA's supplementary word lists. Table 5.5 shows the coverages of the proper nouns, transparent

compound words and abbreviations in the textbook. Sample words for each type are provided in the last column. As shown in the data, proper nouns have a higher percentage than transparent compounds and abbreviations in this textbook. This is probably because of the news items, which contains a larger number of proper names such as the names of people, places, or culture.

Table 5.5 *The coverage of words in the BNC/COCA's four supplementary lists*

Supplementary lists	% coverage in N of Word	Examples	
	tokens	families	
Proper nouns (31 st list)	2.46	479	China, Ruth, Asia, English
Transparent compounds (33 rd list)	0.63	177	birthright, toothbrush, wingspan
Abbreviations (34 th list)	0.07	17	ASEAN, EU, VOA

In sum, the most 3,000 frequent words in the English language accounted for a large proportion of the listening textbook (91.96%). By using this textbook, the learners would also encounter mid- and low-frequency words, as well as proper nouns and transparent compounds, though they accounted for less than 10% of the textbook vocabulary.

5.2.3 The vocabulary in the textbook glossary

As shown in Section 4.2.4, this listening textbook provides vocabulary support in each unit. All of the words in vocabulary support are glossed in the end of the textbook. This section reports on the vocabulary in the textbook glossary, and the results answer Research Question 7. In total, 376 words were glossed in the textbook (in the unit of word family). Table 5.6 presents the number of these words at each frequency band and in the supplementary lists. Again, sample words at each frequency band or supplementary list are provided in the last column.

Table 5.6 *The profile of the words glossed in the textbook*

Type of vocabulary	N of word families (% of glossed words)	Examples
High-frequency words (1 st -3 rd word list)	131 (35%)	bear, container, abuse
Mid-frequency words (4 th – 9 th word list)	183 (49%)	whale, artery, blister, amphibian, blurt, alibi, philanthropy
Low-frequency words (10 th -25 th word list)	48 (13%)	bagel, bleachers, occident, baize, megabit, carotenoid, corker, antiphonal, analog
Proper nouns	4 (1%)	Graham, Leo, Stein, Tudor
Transparent compounds	9 (2%)	autopilot, inkwell, milestone; outstanding; sawdust, shellfish, sunbed, wingspan
Abbreviations	1 (0%)	CID

As shown in the table, the most frequently glossed words were mid-frequency words. In contrast, despite the large number of the high-frequency words identified in the textbook, only 131 out of 2389 high-frequency words were glossed. Only 13% of glossed words were low-frequency words. In addition, a small number of proper nouns and transparent compounds were glossed (4 and 9 respectively). Three out of the four glossed proper nouns were persons' names.

5.3 The learners' vocabulary size and knowledge

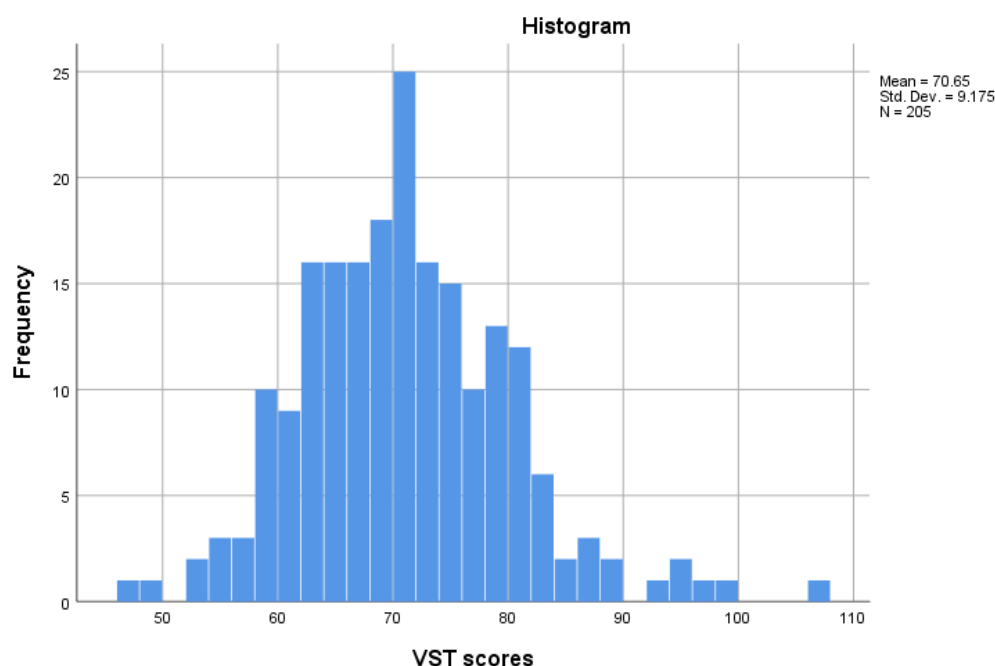
5.3.1 The learners' written receptive vocabulary size

To answer Research Question 8, I used the bilingual version of the Vocabulary Size Test (Nation & Beglar, 2007) to measure the learners' written receptive vocabulary size. A total number of 205 first-year English major learners at a Chinese university sat the test. Table 5.7 and Figure 5.1 present the results.

Table 5.7 *Descriptive statistics for the VST results*

	N	Min	Max	Mean	Std. Deviation
VST	205	47	106	70.65	9.175

Figure 5.1 *The distribution of the VST scores among the learners (n=205)*



As shown in the results, there is a wide range of VST scores ($Std = 9.175$) in the data set, with a minimum vocabulary size of 4,700-word families and a maximum of 10,600-word families. Most of the learners had a vocabulary size in the 6000 to 8000 word families range (see Figure 5.1). The mean VST score was 70.65, and the median score was 70, which translates into an average vocabulary size of around 7000-word families (VST scores are multiplied by 100 to calculate vocabulary size).

This average vocabulary size of 7000-word families is around 1000 word families larger than what has been found in four other studies that report on the vocabulary size of university-level EFL students using bilingual versions of the VST (Elgort, 2013; Karami, 2012; Nguyen & Nation, 2011; Quero, 2015). It is also higher than Nation's (n.d.) estimate based on the monolingual version of the VST, of a vocabulary size of 5000 to 6000-word families for non-native undergraduates. The current result of 7000-word families should be interpreted with caution for three reasons. First, as in the four previous studies, test takers were likely to perform better in the bilingual than the monolingual version of the VST. Second, as Gyllstad et al. (2015), Schmitt et al. (2020) and Stoeckel et al. (2020) have argued, the multiple-choice format of the VST can inflate the results because learners can use test-taking strategies to gain a better score, and Chinese EFL learners are anecdotally said to be good at test taking

strategies. Third, Stoeckel et al. (2020) show concerns on using word family Level 6 (Bauer & Nation 1993) as the counting unit in sampling target words in the VST, as knowing the headword of a word family does not necessarily guarantee knowing other family members. Thus, learners' vocabulary size could be overestimated. Taking these three cautions into account, it seems reasonable to adopt a conservative interpretation of the clustering of scores in Figure 5.1, which would suggest a vocabulary size of between 5000 to 7000-word families for the majority of these learners. Even with this conservative approach, the learners still had a larger vocabulary size than the textbook vocabulary demands reported in Section 5.2.1. Whether they can be considered to adequately comprehend this textbook will be discussed in Chapter 7 (Section 7.3.1).

5.3.2 The learners' receptive vocabulary knowledge of the textbook word items

Research Question 9 examines the learners' receptive vocabulary knowledge of the word items chosen from the listening unit in the textbook. A pre-and-post Yes/No vocabulary recognition task was developed for this purpose. As described in Section 3.5.2.2, the task contains 100 words chosen from Unit 6 according to their frequency in this unit and in Nation's (2018) BNC/COCA 1-25,000 word-family lists. In addition to these words, 20 pseudowords created by the character-gram algorithm (König et al., 2019) were included in the task sheet.

The learners from two listening classes completed this task before and after listening classes on Unit 6. Table 5.7 presents the results for the first attempt. As described in Section 3.7.3.2, there are four response types in the Yes/No task. The Hit response represents the word known by the learners. Table 5.8 shows that, on average, around 62 to 64 out of 100 real words from Unit 6 were reported to be known, while between 36 to 38 target words were claimed to be unknown by the learners from the two classes before receiving instruction on this unit.

Table 5.8 *Mean number of the four responses in the pre-lesson Yes/No task*

Listening classes	Hit	False Alarm	Correct Rejection	Miss
Gigi's Class	63.9	1.0	19.0	36.1
Amanda's Class	61.5	1.2	18.8	38.2

Table 5.9 presents the descriptive statistics of the task results, which were calculated using the simplistic formula (see Section 3.7.3.2).

Table 5.9 *Descriptive statistics for the pre-lesson Yes/No task*

Listening classes	N	Min	Max	Mean	Std. Deviation
Gigi's Class	23	43	76	62.96	9.641
Amanda's Class	22	43	71	60.32	7.581

A correlation analysis was conducted between the VST scores and pre-Yes/No task results of these learners. The results showed that the VST scores and the Yes/No task results displayed a high positive correlation ($p=0.01$). This means that the higher VST scores the learner had, the higher their results in the pre-lesson vocabulary recognition task, as shown in Table 5.10 below.

Table 5.10 *Correlations between the VST scores and the pre-lesson Yes/No tasks results*

		VST scores in Gigi's class	Yes/No task results in Gigi's class
VST scores in Gigi's Class	Pearson correlation	1	.651*
	Sig. (2-tailed)		.001
	N	23	23
Yes/No task results in Gigi's Class	Pearson correlation	.651*	1
	Sig. (2-tailed)	.001	
	N	23	23
		VST scores in Amanda's class	Yes/No task results in Amanda's class
VST scores in Amanda's Class	Pearson correlation	1	.699
	Sig. (2-tailed)		.001
	N	20	20
Yes/No task results in Amanda's Class	Pearson correlation	.699	
	Sig. (2-tailed)	.001	
	N	20	20 ²⁰

*Note** Correlation is significant at the 0.01 level (2-tailed).

Despite this positive correlation, the results of the Yes/No task suggest that even with a vocabulary size above 5000-word families, the learners were likely to encounter a few unfamiliar words in Unit 6. This is not surprising because for two reasons. First, the VST results provided a total vocabulary size of the learners across the BNC 14 frequency levels, rather than their vocabulary knowledge at a particular frequency level. In other words, a vocabulary size of 5000-word families generated from the VST does not translate into the

²⁰ Two out of 22 learners in Amanda's class did not sit in the VST, so only 20 learners' test scores and task results were included for correlational analysis.

vocabulary knowledge of the most frequent 5000-word families. Second, as described in Section 3.5.2.2, the Yes/No task adopted in this study included not only the words beyond the scope of VST items (e.g., proper nouns, transparent compounds) but also the inflected or derived family members in a word family (Bauer & Nation, 1993).

In order to obtain more detailed information about the learners' reported recognition of the words chosen from Unit 6, I classified the words with Hit and Miss responses into three categories: (1) words known by all the learners (Hit by all), (2) words known by only 1 or 2 learners (Hit by less than 10% of the learners), and (3) words unknown by all the learners (Miss by all). Among the 100 target words (excluding the pseudowords), 57 high-frequency words, 27 mid-frequency words and six low-frequency words were included in the Yes/No task sheet (see Table 3.4). Table 5.11 presents the numbers of words which were hit in each category, ranked by the frequency bands.

Table 5.11 *High, mid- and low-frequency hit words in the pre-lesson Yes/No task*

Frequency band	Words known by all the learners				Words known by 1 or 2 learners				Words unknown by all the learners			
	Learners in Gigi's Class		Learners in Amanda's Class		Learners in Gigi's Class		Learners in Amanda's Class		Learners in Gigi's Class		Learners in Amanda's Class	
	N	Examples	N	Examples	N	Examples	N	Examples	N	Example	N	Example
High-frequency words	19	afraid bees considerable	21	afraid connected international	2	psychiatrist hypothesis	1	psychiatrist	0	n/a	0	n/a
Mid-frequency words	1	disadvantages	1	disadvantages	8	apelike buzzing culprit pollinate	8	circumnavigation elusive protocol	3	circumnavigation; pollen; nectar	6	apelike culprit pollinate nectar
Low-frequency words	0	n/a	0	n/a	0	n/a	2	flipper kamikaze	3	aeronautics octagonal kamikaze	3	aeronautics octagonal abominable

As shown in Table 5.11, the majority of the words in the Yes/No task that were hit by all the learners were high-frequency. However, less than half of the high-frequency words were reported to be known by all the learner participants (19 out of 57 in Gigi's Class and 21 out of 57 in Amanda's Class). High-frequency words such as *psychiatrist* (at the 3rd 1000 level), were reported to be known by only one or two learners in each class. More mid-frequency words were reported to be unknown than known by the learner participants. Only one mid-frequency word (*disadvantages*) was reported to be known by all the learners in both classes. No low-frequency words were reported to be known by all the learners in both classes. Of the words in the supplementary lists, one proper nouns in the task (*America*) and two out of the six transparent compounds (*airplane*, *businessman*) were reported to be known by all learner participants. These findings indicate that before taking the listening lessons, the learners may have lexical difficulties with the words across a range of frequency levels, including the words in the supplementary lists.

5.4 Major findings and emerging issues

This chapter reports on the findings related to the vocabulary in the listening textbook and the learners' vocabulary size and knowledge. Findings from the vocabulary load analysis of the textbook showed, overall, 3000 to 5000-word families plus the supplementary word families were required to reach 95% and 98% respectively. The spoken input was less lexically demanding than the written texts in the textbook. Varied vocabulary demands were identified among the spoken input of different genres and the written texts in different sections. High-frequency words (i.e., the most 3000 frequent words) made up the majority of the words in textbook materials, and received less attention in the textbook glossary, compared with mid- and low-frequency words (i.e., beyond the 3000 most frequent word families). The learners had an average written receptive vocabulary size ranging from 5000 to 7000-word families measured by the bilingual Mandarin Vocabulary Size Test (Nation & Beglar, 2007). However, the learners reported difficulties in recognizing a substantial number of the words they meet in the textbook in the pre-lesson Yes/No task, including some high-frequency words.

Three questions that need further investigation emerge from these findings. First, to what extent are teachers and learners aware of the demands of the textbook and the learners' vocabulary size and knowledge? Second, in addition to dealing with the textbook glossary, what other vocabulary-related practices occur in the listening classes? Third, to what extent are the learners' self-reported lexical difficulties in the pre-lesson Yes/No tasks addressed in

the classes? These issues will be explored by the findings reported in the subsequent chapter (Chapter 6) and discussed under the topic of vocabulary addressed in L2 listening classes in Chapter 7 (see Section 7.3).

Chapter 6 Results: The teaching and learning of vocabulary in L2 listening classes

6.1 Introduction

Chapter 4 presented classroom-based evidence of how listening was taught at the target Chinese university. Chapter 5 provided the information about the vocabulary in the textbook used in these classes, as well as the vocabulary knowledge of the learners who attended the class. This chapter reports on how teachers and learners perceived and dealt with vocabulary, as well as vocabulary learning gains in the listening classes. The chapter has five sections including this introduction. The second section reports on the two teachers' beliefs concerning vocabulary and listening. The third section presents the findings of the vocabulary-related episodes (VREs) in their classes. The fourth section reports on the learners' perceptions of vocabulary and listening from group interviews. The fifth section presents learning gains from the lessons as shown in the post-lesson Yes/No vocabulary recognition task. The chapter concludes with a summary of the major findings and emerging issues that will be discussed in Chapter 7.

6.2 Teachers' beliefs about vocabulary in the listening classes

This section addresses Research Question 10: What do the teachers say about vocabulary in the listening classes? The following four themes were identified from the recursive thematic analysis of the two teachers' interview responses (see Section 3.7.5.3):

Theme 1: Teachers' perceptions of the relationship between vocabulary knowledge and listening

Theme 2: Teachers' perceptions of learners' lexical difficulties in listening classes

Theme 3: VREs from the teachers' perspectives

Theme 4: Teachers' perceptions of vocabulary learning in the listening classes

The first and the last themes reveal how the teachers see the relationship between vocabulary and listening. The second and the third themes focus on the reasons behind the way they initiated VREs. Excerpts from the interviews are provided for each theme.

6.2.1 Teachers' perceptions of the relationship between vocabulary knowledge and listening

Prior to discussing the relationship between vocabulary and listening in the individual interviews, I invited Gigi and Amanda to define what knowing a word in English meant.

They both emphasized the importance of knowing the meaning of a word. They expected the learners to be able to provide either an L1 translation or English explanation to show that they know the word. As they said:

Gigi: Knowing a word means that the learners can understand what it means when listening, you can understand what it means in this particular context, and you can provide its meaning in Chinese. Providing L1 meaning is very important in my eyes. [FOI-vocabulary-D6]

Amanda: My idea is like, the learners need to be able to explain [the word] in English, and they can explain the core concept of a word in English. It doesn't have to be like the definitions provided by the dictionary, as long as they can provide the core concept, which means they have got it, and they can use it. Actually, all the words have only one meaning, all the other meanings are derivations of this one meaning, and that is why it is called core meaning. [FOI-vocabulary-B3]

They both acknowledged that productive vocabulary knowledge (i.e., use the word) should also be included in the construct of *knowing a word*. Here is an example from Amanda:

Interviewer: Do you expect the learners to use this word in their speaking or writing?

Amanda: Er, yes, I do, and they are supposed to know how to use it in the context, as well as its collocation, grammatical detail doesn't matter, but it should be semantically correct, as it has many synonyms, and the learners have to distinguish them. [FOI-vocabulary-B3]

In linking vocabulary knowledge to listening, Gigi believed that the more the vocabulary knowledge, the better the listening comprehension, as she said:

Yes, of course it [vocabulary] is important for listening. The more words you know, the less working memory burden you will have, that is, if you have sufficient vocabulary size, you don't have to spend time reacting like, what did I hear just now?, you just absorbed at once, all the information will be available in your head, and you can release capacity to understand it or to memorize other more complicated stuff from the listening material. [FOI-vocabulary-D2]

Unlike Gigi, Amanda did not see the relationship between vocabulary and listening as being very important. This belief was consistent with her overall view that in teaching L2 skills

classes, vocabulary does not warrant much attention. She said:

Vocabulary is not closely related to listening.... [Interviewer: Why not?] Er..., I still insist on my teaching principle, that is, I focus on a general/overall understanding, if you can understand something in general, actually you can guess the meaning of many vocabulary in the context ... of course it is necessary to require a certain vocabulary size, but personally, I will not emphasize on vocabulary [teaching] in any of my language classes. [FOI-vocabulary-B2]

Amanda further claimed that teaching vocabulary “was not a listening teacher’s job”, because “vocabulary should be accumulated by the learners themselves after class” [FOI-vocabulary-B16]. Despite these varied beliefs, neither Gigi nor Amanda saw vocabulary as a major issue to address in their listening classes. They were confident in the lexical suitability of the textbook materials and the learners’ vocabulary size as reported in the next section.

6.2.2 The teachers’ perceptions of lexical difficulties in the listening classes

Both Gigi and Amanda were confident that their learners’ vocabulary size and knowledge were sufficient to cope with the materials and activities in the listening classes. The lexical gap between the listening textbook and the learners’ vocabulary knowledge was “not very big” in Gigi’s eyes. Further, her teaching intuition confirmed this confidence:

I use my teaching intuition and found that my learners’ vocabulary sizes were not very small, that is, I found that they knew most of the words..., Yes, I feel like they know these words, so I don’t need to explain them. [FOI-vocabulary-D5]

Although Gigi did not explicitly state how she knew about her learners’ vocabulary knowledge, it is likely that she based this belief on her years of experience teaching listening classes.

Amanda shared the confidence in learners’ vocabulary level and she attributed it to seeing her learners’ performance in her class:

Because no matter how many times I checked [the answers], how many times I played the recordings, even though I did not spend too much time teaching vocabulary, the learners still showed that they could understand/know these vocabulary. They would not have many problems in terms of vocabulary. Their difficulty was that they couldn’t write down the answers. [ROI-vocabulary-B4]

The last sentence in this quote indicates that Amanda's real concern was that the learners were unable to provide the written outcomes of the listening activities within a limited time. The inability to comprehend the materials was not her concern. This was because she believed that most of the vocabulary in the listening textbook was made up of "ordinary words", and her learners had "ordinary vocabulary level" to understand the words in this textbook.

6.2.3 VREs from the teachers' perspectives

The third theme concerns how the vocabulary-related episodes (VREs, see Section 6.3 below) reflect Gigi's and Amanda's beliefs about teaching vocabulary in the listening classes. Both teachers reported that they relied on their own vocabulary knowledge or teaching experiences to choose words. Take the word *culprit* for example, which was required to fill in a blank in a sentence completion activity. Both teachers referred to this word when they checked the answers after listening. Below are their justifications for choosing this word to focus on:

Interviewer: Why do you choose these words rather than others?

Gigi: Because the learners don't know these words! [Interviewer: How did you know that?] Er... according to my teaching experiences and intuition... Yeah, also, personally, I think *culprit* is a bit ... low-frequency [word], because we usually use *criminal* in most materials, so *culprit* is the low-frequency one among the words with similar words, I feel like I need to explain it. [ROI-vocabulary-D3]

Interviewer: So the reason why you emphasized it [*culprit*] was because you felt that the learners might not know it?

Amanda: Yeah, they might not know, yeah, actually I do not know this word [*culprit*] very well... [ROI-vocabulary-B9]

Gigi also relied on learners' performances of activities to identify the unknown words that she needed to deal with. This explains her preference for teaching vocabulary during the post-listening phase:

Interviewer: Which phase would you like to teach vocabulary? Pre-, during or post-listening?

Gigi: Post-listening. First of all I don't really like pre-teaching vocabulary before listening, I think it is unnecessary. The while-listening process can help me confirm which words are not known by the learners. For example, if I prepare 20 words to

teach, some of them are known and some of them are unknown by the learners, but I cannot be sure which ones are known before listening, so what is the point of teaching them before listening? However, after they [learners] complete the activities, and after [I] check the answers, I will find out which words are unknown by the learners, and which words prevent their listening comprehension, and then I choose these specific words to teach, which would be very purposeful. [FOI-vocabulary-D8]

However, Gigi's comments conflict with the VRE data from her classes reported in Section 6.3.2 in that she initiated most of her unplanned VREs during the while-listening phase and she paid less attention to vocabulary during the post-listening phase. This inconsistency will be discussed later in Chapter 7 (see Section 7.3.4).

When discussing her preferred instructional techniques to deal with vocabulary in the listening classes, Gigi claimed that she intentionally drew the learners' attention to the spoken form of a word rather than write words on the blackboard. As she said:

My principle is like, I will not write anything on blackboard unless I have to. I hope that the learners can spell the words according to their pronunciation, so I only wrote them on the board when I found the learners can't do this. You will also see in your observation that, sometimes I would guide the learners to spell the word letter by letter orally, I would watch their mouth movements, if I found most of them were able to spell the words orally, I would not write the words on the blackboard, I only did that when the learners couldn't spell the words orally. [ROI-vocabulary-D4]

However, she did not believe there was a best way of dealing with vocabulary in the listening class. When asked about this, she said:

Well, it depends. For example, some words are featured in their word-formation, so you'd better explain the word-formation for such words; some words can only be used in a particular context than any other contexts, so you explain the importance of the context for such words, for example, the words *pollen*, *nectar* in the video section of this unit, they only occur in the context of talking about bees and honey, it won't occur in the context such as a flower store, so you can explain the words together with the contexts in which they are used. So there is no single best way in teaching vocabulary, it all depends... [FOI-vocabulary-D12]

In addition, Gigi pointed out that when dealing with vocabulary in the listening classes, she would make compromises due to limited classroom time:

Interviewer: You rarely negotiate with your learners for the meaning of vocabulary. Instead, you just tell them the meaning directly. Why is that?

Gigi: I sometimes did negotiate with my learners; I just didn't do it in this unit. I negotiated with them just want to see whether the students can guess the meaning of words according to the context. Sometimes they can, sometimes not. Plus, it is quite time-consuming to engage the learners into negotiation because our classroom time is limited, and we have to take care of the efficiency. [FOI-vocabulary-D13]

Limited classroom time was also mentioned by Amanda when she explained why she usually taught vocabulary by giving the Chinese translation and did not spend time encouraging learners to guess from context:

Saving time. If I explained them in English, it would be very long and time-consuming – I have to repeat once or twice; while the learners can get the meaning immediately if I give the Chinese translation. [ROI-vocabulary-B10]

Amanda also chose not to engage learners in guessing words in context due to limited classroom time:

I didn't have time for that [guessing the word meaning in the context]. I would show my learners that how I guessed the word meaning when I mentioned this word, so that my learners would learn how to guess a meaning. [FOI-vocabulary-B17]

These teaching beliefs are reflected in the range of vocabulary instructional techniques adopted by Gigi and Amanda in the observed listening classes, as will be reported in Section 6.3.4.

6.2.4 Teachers' perceptions of vocabulary learning in the listening classes

The final theme is the two teachers' beliefs about vocabulary learning in the listening classes. Both had different views on this topic. Gigi acknowledged the value of listening classes for learning vocabulary. She believed that "any language classroom can provide vocabulary learning opportunity." This belief may explain her intention of providing as much vocabulary support in various forms as possible in the listening classes: "... I will see whether it is

necessary to whether I have classroom time to go further with that word, to teach them the how to use the vocabulary in this context and other contexts”. [FOI-vocabulary-D9]

Amanda, on the other hand, did not believe in the effect of explicit vocabulary instruction in vocabulary learning in language classes. Instead, she believed that vocabulary learning should occur when learners did translation tasks. Her belief came from her teaching experiences:

So taking my teaching experiences in reading class as an example, I rarely teach vocabulary in reading class, because I find that no matter how explicitly you teach the vocabulary in detail, the learners still don’t know those words after class. However, if you ask them to use the words to do a translation task, even to do it only once, the learners will not forget the words that they use for translation activities. [FOI-vocabulary-B21]

The observation data reported in Chapter 4 and later in this Chapter (VRE data in Section 6.3) show that Amanda did not assign any translation tasks to her learners in the listening classes, which is in keeping with her stated wish to prioritize listening task completion.

There was no evidence in the interviews that Gigi or Amanda expected the learners to learn vocabulary incidentally in listening classes. For example, when asked how learners can gain vocabulary knowledge from listening classes, Amanda attributed any learning to the efforts made by the learners:

...I think, yes, they can gain vocabulary knowledge after listening lessons. Because in my eyes, the Chinese learners in particular, no matter which type of the language class, they love taking notes for vocabulary, and they think vocabulary is everything... [FOI-vocabulary-B20]

In sum, Gigi valued the relationship between vocabulary and listening more than Amanda did and this difference may explain the various ways that they addressed vocabulary in the listening classes as seen in the next section.

6.3 VREs in the listening classes

As described in Section 3.7.4.3, vocabulary-related episodes (VREs) are defined as any part of classroom dialogue which focuses on the meaning, form or use of vocabulary in the current study. The findings in this section address research questions 11-14:

Research Question 11: How frequent are the vocabulary-related episodes (VREs) and who initiates them?

Research Question 12: How are the VREs distributed across lesson phases and textbook sections?

Research Question 13: What lexical items are attended to in the VREs?

Research Question 14: What instructional techniques are used in the VREs?

A distinction needs to be made between two types of words that were subject to VREs. The first is pre-selected words in the textbook glossary which were presented in instructional materials for audio-visual display by the teacher (i.e., glossary-based VREs). The second is words that the teachers chose to focus on during the process of instruction without any prior planning to do so (i.e., unplanned VREs). Table 6.1 shows the number of VREs for each type of word.

Table 6.1 *The number of glossary-based and unplanned VREs*

Types of VREs	Gigi's Class	Amanda's Class
Glossary-based VREs	22	22
Unplanned VREs	78	45
Total	100	67

As shown in the table, there were many more unplanned VREs than glossary-based VREs in both classes, and many more were initiated by Gigi than by Amanda.

6.3.1 Initiators and frequency of VREs

All the VREs in both classes were initiated by the teachers for the thirteen observed lessons for Unit 6. Gigi initiated 100 VREs in seven lessons, at a rate of one VRE every 2.8 minutes and Amanda initiated 67 VREs in six lessons, one every 3.5 minutes. Each lesson was 40 minutes long.

None of the learners initiated any VREs. They responded by either answering the questions raised by their teachers or checking the dictionary on their smartphones as requested by the

teachers. Here is one instance in Gigi’s Class, when she explained an acronym, *FRAME*, and encouraged the learners to check the meaning of *retrieval* (the word represented by R in the acronym):

Gigi: So what's that? Retrieval, does it mean matching? What does it mean?

Some learners: Acquire? [in whispers]

Gigi: Why don't you have a check on this word?

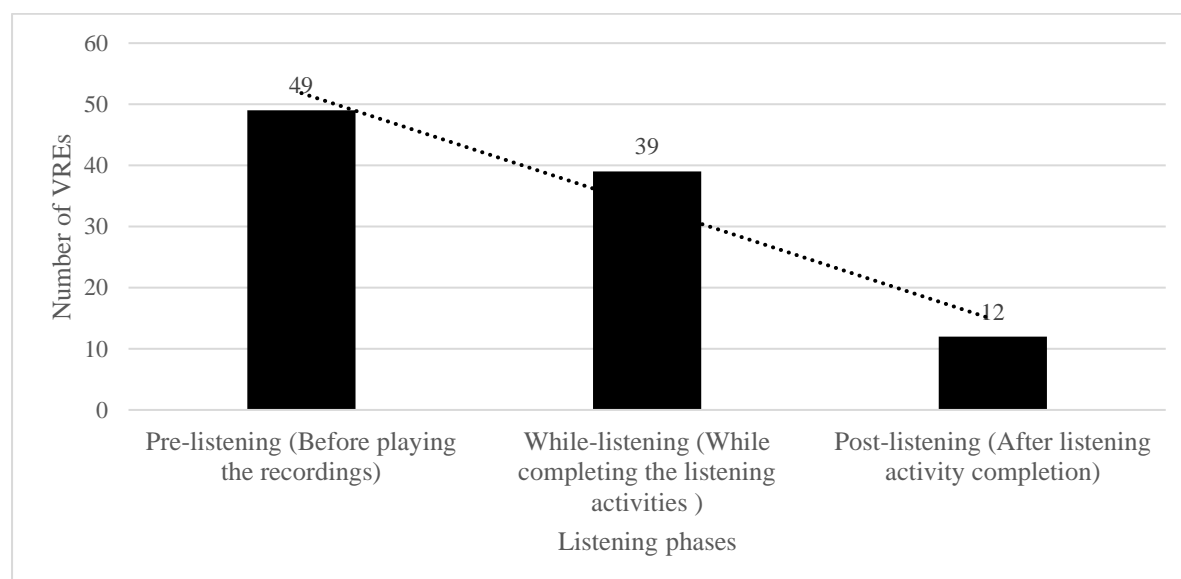
[Most learners began to look up on their smartphones]

Gigi: “What is retrieve? Retrieve, to get something, have you got the meaning in the dictionary? ...”

6.3.2 Distribution of VREs

This section presents results on the distribution of the VREs across the different stages of the lessons and textbook sections. First, the number of VREs decreased across the stages of the lessons, as shown in Figures 6.1 (Gigi’s Class) and 6.2 (Amanda’s Class).

Figure 6.1 Gigi’s VREs across the listening phases



In Gigi’s Class, 49 VREs occurred prior to listening, and nearly half of them (22) focused on words from the textbook glossary. The remaining 27 VREs either drew the learners’ attention to lexical items in the *Background Knowledge* section or focused on the vocabulary in comprehension questions. For example, in the section of *News Item 1*, learners were required to fill in gaps in a chart after listening to a news item about a solar-powered plane. Before playing the recording, Gigi highlighted the word *wingspan* in the chart by asking the learners

if they knew the meaning of this word. Then she explained the meaning of the word: “Span means width, either a concrete or abstract concept, for example, you can say, you have a memory span...” The learners took notes in their textbooks after her explanation²¹.

The 39 VREs which occurred in the while-listening phase mostly happened when Gigi checked the students’ answers to the listening activities, especially when the listening activity involved gap-filling. For example, in the section of *Listening and Note-taking Part A*, learners were required to fill in the gaps for five sentences. Here are the first sentence and its answer:

Sentence: Computers can _____ for the police to find people they _____.

Answer: Computers can make it easier for the police to find people they want to question.

The word *question* was required by the gap at the end of this sentence. After the first listening, Gigi intended to ensure that the learners knew its meaning in this particular context:

Gigi: How do you understand this word [*question*] here in this context?

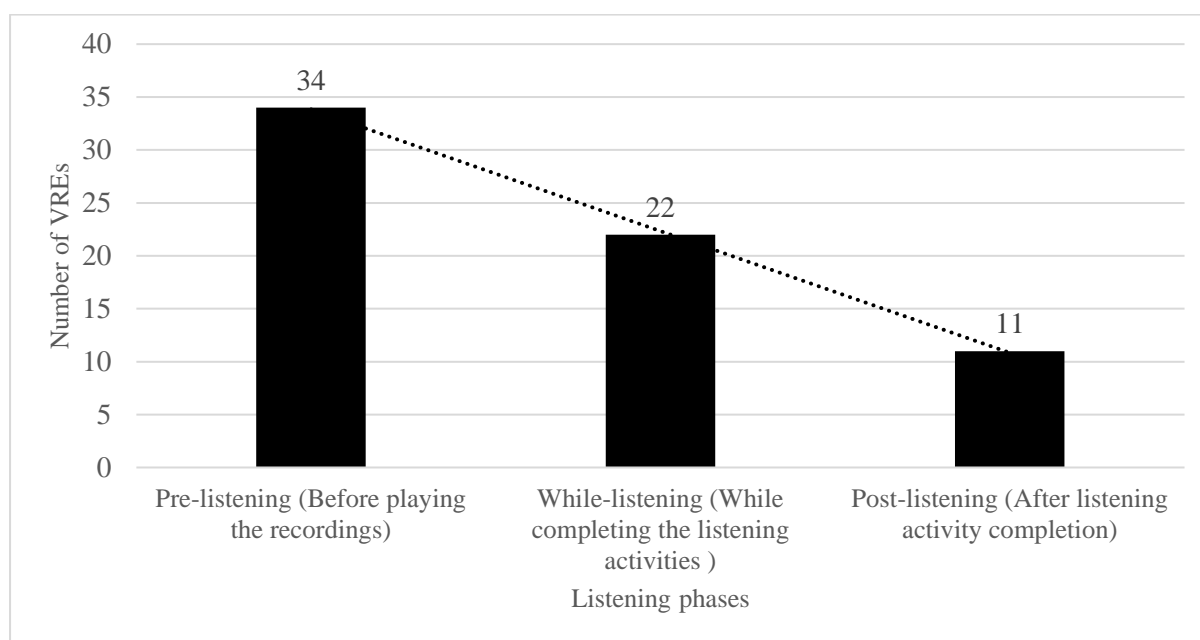
Learners: It means showing doubts about something ... [in Chinese]

Additionally, Gigi focused on unknown words in the spoken input. For example, in the *Listening and Note-taking Part B*, Gigi guided the learners to retell an experiment reported in the talk and drew the learners’ attention to several phrases in the talk by asking: “Do you know what this word means? Let us listen to this part again and I’ll show you the words from the script...” Then she played the recording again, sentence by sentence, and chose the following phrases to explain during the pauses: *well groomed*, *a mass murderer*, *murderous-looking* and *a medal of bravery*. The learners took notes while she gave explanations.

Only 12 VREs were identified once the listening activities were completed, and all of them occurred when Gigi provided the transcripts of the spoken input on the screen to the learners. Now let us turn to VREs’ distributions in Amanda’s Class.

²¹ However, this study did not get access to the learners’ notes so did not provide any evidence of the extent to which the learners paid attention to the words in VREs.

Figure 6.2 *Amanda's VREs across the listening phases*



As shown in Figure 6.2, in Amanda's Class, 34 VREs occurred before listening. Among them, 22 VREs were pre-set in the textbook glossary and the other 12 were unplanned. The while-listening phase had 22 unplanned VREs, and most of them occurred when Amanda checked the answers of the listening activities between the pauses of playing audio-recordings. Most post-listening VREs took place when she showed the transcripts for the spoken input (9 out of 11 VREs). One example involved the collocation *solo flight*, which was expected to be inserted in a sentence completion activity in the section of *News Item 2*. When this activity was completed, Amanda provided the key answers on the screen, and the learners began to take notes to make sure they spelt the words correctly. Amanda provided L1 translation to *solo*, and some learners wrote the translation besides the answers. In a second example, Amanda supplemented the explanation of the phrase *figure out* with L1 translation and a sample sentence: "..., for example, figure out mathematical problem", and then she translated this sentence to the learners. In these and other instances, Amanda focused on vocabulary to ensure the listening activities could be done successfully.

All the lexical items in the unplanned VREs were chosen from the textbook materials, including both the spoken input that the learners heard and the written texts that they could read in the student's book. These included lexical items in the answers for the listening activities (e.g., words to fill the gaps of a sentence or a chart). Table 6.2 lists the distribution of the unplanned VREs across different textbook sections.

Table 6.2 *Distributions of the unplanned VREs across the textbook sections for Gigi and Amanda*

Textbook sections	Gigi's Class	Amanda's Class
Spoken input	34	15
Written texts	30	14
Answers to listening activities	14	16
Total	78	45

Table 6.2 shows that Gigi and Amanda varied in their preferences for initiating VREs across the textbook sections. Gigi had the most VREs when she attended to the spoken input, which covered all the five genres described in Chapter 4 (see Section 4.2.2). Among them, the genre of monologue received the most attention. By contrast, she focused on words in only two sections of the written texts (background knowledge and listening activities). For example, in the section of *Dialogue 1*, which was about the Abominable snowman (i.e., Yeti), Gigi chose seven lexical items from the background knowledge to focus upon, such as *abominable* (*snowman*) and *Yeti* as the names of the wild man, or *elusive* and *malodorous* as the adjectives to describe these creatures.

Amanda had many fewer unplanned VREs for the lexis in the spoken input and written texts than Gigi. Amanda's VREs related to the spoken input only covered three genres. None of her VREs related to the genres of news items or TV scripts. Only three lexical items in the *Background Knowledge* section received attention: *Yeti* in *Dialogue 1*, *solar powered* in *News Item 1* and *protocol* in *News Items 2*. Amanda paid roughly the same amount of attention to the vocabulary as Gigi did when she addressed the answers of the listening activities (16 vs. 14). The majority of the unplanned VREs for the answers involved providing L1 translations, helping the learners spell words letter by letter or explaining about the orthography of the words needed for the gap-filling activities.

6.3.3 Lexical items attended to in VREs

This section presents the findings of lexical items which were attended to in VREs, including both single words and multiword units (MWUs). Examples of MWUs are *to mention but a few* (in Gigi's Class) and *convicted of crimes* (in Amanda's Class). Table 6.3 presents the number of single words and MWUs in each class. The data shows that more single words than MWUs were dealt with by both teachers.

Table 6.3 *Single words vs. phrases involved in VREs*

Type of lexical items	Gigi's Class	Amanda's Class
Number of single words	76	50
Number of MWUs	24	17
Total	100	67

The RANGE program (Heatley et al., 2002) was used to reveal the distribution across frequency-based bands of the single words (excluding the words within MWUs) attended to in the VREs. Table 6.4 displays the analysis of the number of words categorized into high-, mid- and low-frequency bands (Nation, 2013; Schmitt & Schmitt, 2014) and words classified in Nation's (2018) BNC/COCA supplementary lists. The table distinguishes between words from the glossaries and that were focused within unplanned VREs. Examples are provided for each type.

Table 6.4 *Single words addressed in VREs*

Frequency bands and supplementary lists	Textbook glossary-based VREs		Unplanned VREs		
	Number	Examples	Number (Gigi)	Number (Amanda)	Examples
High-frequency words (1 st -3 rd level)	2	govern, legend	27	17	heat, unsuspecting, column
Mid-frequency words (4 th -9 th level)	10	crust, elusive, cockpit	17	11	chin, culprit, jigsaw
Low-frequency words (10 th - 25 th level)	5	octagonal, visor, flipper	4	1	yeti
Proper nouns	0		6	1	Akamai
Transparent compounds	1	autopilot	3	2	wingspan
Abbreviations	0		1	0	FRAME ²²
Total	18		58	32	

As shown in the table, more than half of the glossary-based VREs focused on mid-frequency words (10 out of 18 words). In contrast, unplanned VREs by the teachers focused vocabulary from all frequency bands, and more than a half of them focused on high-frequency words (27 out of 58 words by Gigi and 17 out 32 by Amanda). This is not surprising because high-frequency words made up of most of the textbook vocabulary (as reported in Section 5.2.2). Gigi also focused on several words which were in the BNC/COCA supplementary lists. In

²² The full name of this abbreviation is Face Retrieval and Matching Equipment

addition to the proper nouns and transparent compounds shown in Table 6.4, Gigi drew the learners' attention to *FRAME*, an acronym for *Face Retrieval and Matching Equipment* in the section of *Listening and Note-taking Part B*. This acronym was the name of a tool used to identify criminals by police, which was the topic of the lecture for the note-taking activity. Amanda focused only one proper noun in the short answer question in the section of News Item 2: "Akamai? What is it? Something related to computer..."

6.3.4 Types of instructional techniques in VREs

This section reports on the types of instructional techniques used in the VREs, following the coding system described in Section 3.7.4.3. Both teachers combined more than one instructional technique in their VREs. For Gigi, of the 100 VREs, 78 contained more than one technique, and for Amanda, 37 out of 67 VREs contained more than one technique. Data related to these instructional techniques for the two teachers is reported separately below in Table 6.5 and 6.6. Instructional techniques are ranked according to frequency for each teacher.

Table 6.5 *Gigi's instructional techniques in VREs*

No.	Instructional techniques	Number of occurrences	% of the total occurrences
1	Provide L1 translation	73	30%
2	Ask learners questions about a word	43	17%
3	Provide world knowledge of a word	24	10%
4	Explain about orthographical knowledge of a word	23	10%
5	Present the textbook glossary	22	9%
6	Give an English explanation	17	7%
7	Highlight vocabulary learning strategies	14	6%
8	Spell a word	11	5%
9	Explain about phonological knowledge of a word	5	2%
10	Write on the blackboard	4	2%
11	Use non-verbal explanation	3	1%
12	Provide a sample sentence	3	1%
13	Expand on an acronym	1	0%
Total		243	100%

Table 6.5 shows that Gigi used 13 different types of vocabulary instruction in her VREs. The most frequent type was providing an L1 translation, and this occurred 73 times, while the least frequent type, expand on an acronym, occurred only once. The word *octagonal* provides an example to illustrate how Gigi used multiple instructional techniques within a VRE. This word was glossed in the section of *Dialogue 2*. Gigi first clicked on its meaning on the screen to present the information in the textbook glossary (technique number 5 in the table). Then she presented some orthographic and phonological information for the word (technique number 4 and technique number 9), saying: “*Oct*, basically means eight, because there is another word, *octopus*, *octopus*...” Then she spelt the word letter by letter orally (technique number 8) and the learners shadowed her, repeating the letters after her. In contrast, for the words *grunt*, *whistle* and *remote* in the *Background Knowledge* section of *Dialogue 1*, Gigi adopted a single instructional technique either providing L1 translation (technique number 1) or English explanation (technique number 6).

Gigi also linked the target word to broader world knowledge (technique number 3 in the table) quite often (24 times). For instance, after showing the meaning of *flipper* on the screen in the *Passage* section, she engaged the learners with a small classroom discussion about sea animals:

Gigi: Do you know what kind of sea animals have flippers? [in Chinese]

Learners: Whale. [in Chinese]

Gigi: Yeah, whale, and ... seal? [in Chinese]

Gigi highlighted vocabulary learning strategies (technique number 7) 14 times. These strategies included encouraging the learners to look up unknown words in the dictionary, using the context of spoken input to guess the meaning and helping learners establish links to previously learnt words. For example, the word *elusive* appeared twice in this listening unit, once in the background knowledge of *Dialogue 1* and once in the textbook glossary for the *Passage* section. After giving an English explanation in *Dialogue 1*, Gigi reminded the learners of this word by linking it back to previous learning in the *Passage* section:

Gigi: We've learnt this word yesterday, when we talked about snowman, big foot... [in English]

The findings for Amanda's classes are reported in Table 6.6. Amanda shared ten instructional techniques with Gigi. A comparison of Tables 6.5 and 6.6 shows that three instructional

techniques that Gigi used were absent in Amanda's class: expand on an acronym, provide world knowledge of a word, and write on the blackboard.

Table 6.6 *Amanda's instructional techniques in VREs*

No.	Instructional techniques	Number of occurrences	% of the total occurrences
1	Provide L1 translation	59	49%
2	Present the textbook glossary	22	18%
3	Explain about orthographical knowledge of a word	10	8%
4	Provide world knowledge of a word	7	6%
5	Ask learners questions about a word	7	6%
6	Spell a word	7	6%
7	Highlight vocabulary learning strategies	4	3%
8	Provide a sample sentence	2	2%
9	Explain about phonological knowledge of a word	1	1%
10	Give an English explanation	1	1%
Total		120	100%

As shown in the table, providing L1 translations and working through glossary items were Amanda's most frequent techniques. The other eight instructional techniques occurred much less infrequently. She explained about phonological knowledge for only one word (*octagonal*) when she guided the learners to say its syllables:

Amanda: *Octagonal, oc...* [in English]

Highlighting vocabulary learning strategies (table number 7) occurred only four times in Amanda's class. Three of these four strategies related to using context to understand the word meaning. None of these strategies involved looking up items in a dictionary.

Overall, while both Gigi and Amanda initiated VREs in their listening classes, Gigi initiated more VREs and used a wider range of instructional techniques than Amanda. In both classes, providing L1 translation was the dominant instructional technique, and providing information on the phonological form was less frequent. For both teachers, the VREs targeted more low-frequency words than high-frequency words and were most frequent at the beginning of the lesson, before learners listened to the audio-recordings. Next, we turn to the vocabulary in the listening classes from the learners' perspective.

6.4 Learners' perceptions of vocabulary in the listening classes

This section presents the answers to Research Question 15: What do the learners say about vocabulary in the listening classes? Three key themes emerged from their responses in the post-lesson group interviews:

Theme 1: Reports of lexical difficulties in the listening classes

Theme 2: Evaluations on VREs in the listening class

Theme 3: Perceptions of vocabulary learning in the listening classes

6.4.1 Learners' reports of lexical difficulties in the listening classes

The learners viewed vocabulary as a major obstacle in their listening classes. There were several reasons for this. First, when they were asked to comment on the vocabulary demands of the textbook, they were not as positive as their teachers:

Learner A in Gigi's Class: I think it [the textbook] is a bit difficult.

Interviewer: From 1 to 10, how many points do you give for its difficulty?

Learner A in Gigi's Class: Six?

Learner B in Gigi's class: I will give seven.

Learner C in Gigi's class: I will give seven as well, considering my small vocabulary size [RGI-vocabulary-D2]

Four learners in Amanda's class²³: It [the textbook] is demanding... especially if we don't do any pre-learning before the class, we cannot recognize every word in this unit... [RGI-vocabulary-B2]

Second, the learners showed more concern about listening problems due to the lack of vocabulary knowledge compared to reading. For example, one of Gigi's learners said:

When vocabulary knowledge is not sufficient, I feel more scared of engaging with listening...because, I feel like my listening is very weak, and I can basically understand the meaning of a reading text even though there are some unknown words, but the unknown words are bigger obstacles for me when I am listening. [FGI-vocabulary-D12]

One of Amanda's learners claimed the reason why she was more worried about vocabulary in

²³ The four learners provided this response as a group.

the listening class than in the reading class lies in the covert nature of listening. She said:

You can have context in reading materials, although you can also have that in listening, but it is gone immediately. So, it is very difficult to guess the meaning of vocabulary during the listening. [FGI-vocabulary-B4]

All the learners agreed that it was necessary to do vocabulary study before the classes and to receive vocabulary support in the classes. Two learners in Gigi's class explained the reason why they welcomed the vocabulary instruction from the teachers after pre-studying glossaries before class:

Learner A in Gigi's Class: Receiving the explicit instructions is more impressive.

Learner B in Gigi's Class: We can look up in dictionaries by ourselves first, and then receive the explicit instructions from the teacher, double effect... [RGI-vocabulary-D6]

Amanda's learners also appreciated vocabulary instruction:

Learner A in Amanda's Class: Yeah, it [teachers' vocabulary support] is necessary, because even though I do the pre-view job, it will have been a while when I start the lessons, and also maybe I can't have a very clear look-up in the dictionary. So, teacher's explanations can help me review the words again.

Learner B in Amanda's Class: [The teacher] can just mention the vocabulary by the way [when she provides listening instruction]... [FGI-vocabulary-B5]

These responses show that the learners were not confident in their vocabulary knowledge in the listening classes. Furthermore, due to the covert nature of listening, they saw that the listening classes required more vocabulary knowledge than reading classes, and so wanted vocabulary support from the teachers. The next section will report on the learners' perceptions of VREs in their listening classes.

6.4.2 Learners' evaluations on VREs

The learners' interview responses about their perceptions of VREs focused on three aspects: who should initiate VREs, how many VREs there should be, and when the VREs should occur in their listening classes. First, and perhaps most importantly, all learners believed that they were not supposed to initiate any VREs in the listening classes. They thought that any possible lexical problems should be dealt with on their own and initiating vocabulary-related

enquiries in the listening classes was a waste of classroom time. Below are some examples of their comments on this point:

Learner A in Gigi's Class: Because the classroom time belongs to everyone, if you don't know a words, you can just look it up by yourself... if I raise the question [on vocabulary] in the class, the teacher would think well this is your own problem, please do not waste everyone's classroom time. [FGI-vocabulary-D16]

Learner A in Amanda's Class: And we can look them up on our own, there are so many resources online.

Learner B in Amanda's Class: It is meaningless [to ask for teacher's explanation], because this is supposed to be pre-viewed. We've been students for years; we should know how to do the pre-view job before class. So it's a waste of time to ask teachers to explain the vocabulary in class; it's like you are wasting everyone's classroom time. [FGI-vocabulary-B8]

Secondly, while the learners wanted vocabulary instruction from their teacher in the classes, they did not want to compromise listening practice time. For example, Amanda's learners said:

Learner A in Amanda's Class: If our listening teacher focused on teaching vocabulary, we can't have effective listening in class.

Learner B in Amanda's Class: Yes, we can't have everything.

Learner C in Amanda's Class: [Classroom] time is limited... [FGI-vocabulary-B5]

That said, Amanda's learners were not satisfied with Amanda's brief coverage of unfamiliar words. Here is an example of their comments on how Amanda's use of instructional techniques in her VREs:

Interviewer: Do you need the teacher to write the words on blackboard?

Learner A in Amanda's Class: Yes, we do need, no matter on the blackboard or on the computer screen. It will strengthen my impression [on that word].

Interviewer: But your teacher didn't do that?

Learner A in Amanda's Class: No, she just went through them [only] once and orally.

I can't remember anything ... [RGI-vocabulary-B6]

Thirdly, the learners remarked that they would like to receive information about words that provided contextual richness. As one of Gigi's learners said:

If the teacher explains a word, I expect that the word can be explained in a particular context, although the dictionary provides sample sentences as well, we will have deeper impressions on the words explained by our teachers. [FGI-vocabulary-D17]

Further, Gigi's learners reported that they would like to receive support during the process of answer checking or when they were studying the transcripts after listening:

Interviewer: At which phase do you prefer receiving vocabulary instruction? Pre-, during or post-listening?

Learner A in Gigi's Class: Post-listening, because I will know which words I don't know after listening, and if the teacher shows us the written scripts and picks up some words to teach, I can read the context for them, and I can remember the words for a long time [FGI-vocabulary-D15]

This reveals that this learner tended to identify unknown words after listening to the spoken input. This seemed to support what Gigi said about how she identified unfamiliar words after learners listened to the spoken input at least once (see Section 6.2.3). The learners also agreed with Gigi regarding the instructional techniques in VREs, claiming that "[there are] no fixed rules" to providing vocabulary instruction. In sum, Gigi's learners seemed to be more satisfied with the vocabulary support from the teacher than Amanda's learners.

6.4.3 Learners' perceptions of vocabulary learning in the listening classes

The final theme focuses on how learners viewed the vocabulary learning opportunities in the listening classes. Quite distinct views were gathered from the learners taught by each teacher. Gigi's learners acknowledged the need of gaining vocabulary knowledge in the listening class. They believed that more vocabulary knowledge enabled them to be more familiar with the topics of listening texts. Two of Gigi's learners provided examples to illustrate this belief:

Learner A in Gigi's Class: For example, last trimester, our listening teacher taught many words related to the topic of wars, such as *bomb* or *soldier*. So, we are more familiar with the listening materials with such topics this trimester. [FGI-vocabulary-D8]

Learner B in Gigi's class: I think it is necessary to learn vocabulary in listening classes, because we have various topics for the listening materials, such as health. If we learn the vocabulary related to each topic, we can have a better understanding of the listening materials in that topic. [FGI-vocabulary-D9]

In contrast, Amanda's learners did not treat the listening classes as a "major platform" to gain vocabulary knowledge. Instead, they pointed out they relied on their intensive reading class for vocabulary learning or used vocabulary learning apps on cell phones.

In both classes, the learners were not certain that they had gained vocabulary knowledge in the listening classes. The uncertainty is reflected in the excerpts below:

Interviewer: Do you think you reported more YES in the post task?

Learner A in Gigi's Class: Yes, we think so... (maybe) 80-90% likely due to the listening lessons? Though I think I have known one word from other sources. [RGI-vocabulary-D9]

Interviewer: Do you think your vocabulary knowledge over these 100 words [in the Yes/No task] increased after the listening lessons?

Learner A in Amanda's Class: It did, but not very significantly.

Learner B in Amanda's Class: Just a little ... maybe increased. [RGI-vocabulary-B7]

To sum up, the findings from the group interviews with the learners parallel the priorities and teaching choices made by the respective teachers. Just as Gigi focused on vocabulary more than Amanda, so her learners took vocabulary more seriously than Amanda's learners.

6.5 Vocabulary learning gains in the listening classes

The findings in this section answer the last two research questions of the thesis:

Research Question 16: What, if any, learning gains occurred for unfamiliar words met in the listening classes?

Research Question 17: What kind of role do the VREs play in the vocabulary knowledge gain?

To answer research question 16, a comparison was made between the total numbers of the YES or NO responses from the pre-task to the post-task. In total, there were 4500 responses (45 learners*100 target words). The number of YES responses increased by 447 and the number of NO responses decreased by the same number from pre- to post-task (as shown in Table 6.7). Of the 1676 potentially unknown words in the pre-task, this figure of 447 translates into a simple ratio of learning gains of around 27%. This analysis will become the

benchmark for further analysis below.

Table 6.7 *Learners' responses the pre-and-post Yes/No task*

Types of responses	N in Pre-task	N in Post-task	Plus/Minus
YES responses	2824	3271	+447
NO responses	1676	1229	-447
Total	4500	4500	n/a

To confirm the trends seen in Table 6.7, a Paired Sample T-test was used to compare the mean scores of the task results in each class. To control the overestimation of the learners' self-report results, a simplistic formula (Pellicer-Sánchez & Schmitt, 2012) was used to calculate the pre-and post-task scores (see Section 3.7.3.2 for more details). Results show that there was a significant difference in the pre- and post-task results in Gigi's Class ($M=-10.913$, $SD=6.473$), $t(22) = -8.805$, $p<0.001$, and in Amanda's Class ($M=-8.773$, $SD=5.415$), $t(21)$, $p<0.001$. The effect sizes are large for both classes ($d=-1.68$; $d=-1.62$). Table 6.8 presents the descriptive statistics of the post-lesson task results (the descriptive statistics of the pre-task results are provided in Table 5.9). This result, together with a positive learning ratio of 27%, show significant vocabulary knowledge gains by learners in the observed listening classes.

Table 6.8 *Descriptive statistics for the post-lesson Yes/No task*

Listening classes	N	Min	Max	Mean	Std. Deviation
Gigi's class	23	45	92	73.87	11.079
Amanda's class	22	51	88	69.09	10.551

The words that received more YES responses on the post-task than on the pre-task were considered as *learned*. The words that received fewer YES responses on the post-task than on the pre-task, as well as the words with the same number of response type (either YES or NO) were categorized as *not learned*. The words reported as known by all learners on both pre-and-post tasks were considered as *known*. Table 6.9 presents the number of words in these three categories across the two class.

Table 6.9 *The number of learned, known and not learned words on the post-lesson Yes/No task*

Types of the words	N in Gigi's Class	N in Amanda's Class
1. Learned	59	61
2. Not learned	18	15
3. Known	23	24
Total	100	100

As shown in the table, of the 100 target words, 59 and 61 words respectively for each class showed learning gains. These gains varied from one learner showing gains in knowledge for one word up to all the learners showing gains in knowledge for a word. For example, 20 of the 22 learners in Amanda's class identified the word *bees* as known in the pre-task, and 21 in the post task. This is a 5% increase (1/22). In contrast, three of the 22 learners in her class identified the word *wingspan* as known in the pre-task and 13 in the post-task. This is a 45% increase (10/22). Such findings indicate the learned words should be further distinguished on the basis of how many learners showed learning gains for each word. To make this distinction, I used the learning ratio of 27% (i.e., around one in four responses of unknown words in the pre-task showed learning gains) based on the findings in Table 6.7. The size of learning gains was divided into two categories: *substantial gain* which was more than 27% and *moderate gain* which was less than 27%. Table 6.10 lists the number of the learned words in each category across the two listening classes. The data shows that most learned words showed moderate gains (76% in Gigi's Class and 80% in Amanda's Class).

Table 6.10 *The size of learning gains distinguished by the 27% learning ratio*

Category of the learned words	N in Gigi's Class	N in Amanda's Class
Substantial gain (more than 27%)	14 (24%)	12 (20%)
Moderate gain (less than 27%)	45 (76%)	49 (80%)
Total	59 (100%)	61 (100%)

To answer Research Question 17, the learned words were closely examined in relation to VREs in each class. Connections between learned words and VREs were identified in both classes. In Gigi's class, 32 out of the 59 learned words were included in VREs. In Amanda's class, 30 out of the 61 learned words were included in her VREs. Furthermore, the data in Tables 6.10 and 6.11 showed that most of the words with a substantial gain had been the focus of a VRE in each class (12 out of 14 in Gigi's Class; 11 out of 12 in Amanda's Class).

Table 6.11 *Words that showed gains and were in VREs in each class*

Category of the learned words in VREs	N in Gigi's Class	N in Amanda's Class
Substantial gain (more than 27%)	12	11
Moderate gain (less than 27%)	20	19
Total	32	30

A further analysis was conducted to look more closely at the instructional techniques related to all words with a substantial gain (shown in Table 6.11). This analysis is reported in Tables 6.12 and 6.13 for the two teachers respectively. As seen in Table 6.12, all 12 words that showed substantial learning gains were dealt with by Gigi prior to the listening activities. Most of these words were glossed in the textbook. However, there is no fixed pattern for the link between the word knowledge gain and how the words were dealt with. The instructional techniques for the words in Table 6.12 are provided in Appendix I. Most words shared the same teacher-initiated behaviors and utterances (e.g., present the textbook glossary or provide L1 translation), yet they showed varied gains, from 30% to 74%.

Table 6.12 *VREs for the learned words with substantial gains in Gigi's Class*

Words	N of YES in pre-task	N of YES in post-task	Gain %	Textbook components (Where)	Listening phases (When)
1. buzzing	1	18	74%	Listening activities	Pre-listening
2. pollinate	1	15	61%	Glossaries	
3. proximity	4	16	52%		
4. pollen	0	10	43%		
5. hive	3	13	43%		
6. octagonal	0	9	39%	Listening activities	
7. wingspan	2	11	39%		
8. autopilot	6	14	35%	Glossaries	
9. flipper	7	15	35%		
10. kamikaze	0	8	35%		
11. protocol	2	10	35%	Background knowledge	
12. Swiss	5	12	30%		

The data in Table 6.13 shows that Amanda's learners did not show such strong learning gains as Gigi's learners on words addressed in VREs (45% vs. 75%). In Amanda's VREs, the

textbook glossary was still the major source of learning gains, but words from other sources such as the questions or the answers to the listening activities, also showed strong learning gains. This may be because these words were addressed in VREs when Amanda checked the answers during the while-listening phase. As in the case of the learning gains in Gigi's Class, the learning gains in Amanda's Class showed no direct effect of the vocabulary instructional techniques. The instructional techniques for the words in Table 6.13 are also provided in Appendix I.

Table 6.13 *VREs for the learned words with substantial gains in Amanda's Class*

Words	N of YES in pre-task	N of YES in post-task	Gain %	Textbook components (Where)	Listening phases (When)
1.wingspan	3	13	45%	Listening activities	Pre-listening
2.flipper	2	11	41%	Glossaries	Pre-listening
3.stinging	3	11	36%	Answers to listening activities	While-listening
4.visor	5	13	36%	Glossaries	Pre-listening
5.buzzing	2	9	32%	Spoken input	While-listening
6.supernatural	11	18	32%	Glossaries	Pre-listening
7.autopilot	10	16	27%		
8.beekeepers	6	12	27%	Listening activities	
9.chin	5	11	27%	Answers to listening activities	While-listening
10.cockpit	0	6	27%	Glossaries	Pre-listening
11.proximity	2	8	27%		

Finally, a total of 27 word and 31 words in the Yes/No task which were not addressed in VREs showed learning gains in Gigi's Class and Amanda's Class respectively. Table 6.14 lists the distribution of these words. The data shows that most these words showed moderate gains. Only two words in Gigi's Class and one word in Amanda's Class showed substantial gains. The two words in Gigi's Class both appeared in the questions and answers of the listening activities, whereas the word in Amanda's Class appeared in *Background Knowledge* section. Half of the learned words without VREs in the two classes appeared in the written texts of either the questions or answers of the listening activities (15 out of 27 in Gigi's Class; 16 out of 31 in Amanda's Class). Seven words from the spoken input were reported to be learned in both classes.

Table 6.14 *Words that showed gains but were not in VREs in each class*

Category of the learned words without VREs	N in Gigi's Class	N in Amanda's Class
Substantial gain (more than 27%)	2	1
Moderate gain (less than 27%)	25	30
Total	27	31

6.6 Major findings and emerging issues

This chapter reported on the cognition of the teachers and the learners about vocabulary in the listening classes, their classroom practices, and vocabulary learning outcomes in the listening classes. First, both teachers felt confident that the learners had sufficient vocabulary knowledge to understand the textbook, but Gigi and Amanda held different perceptions about dealing with vocabulary in listening classes. This was reflected in variations in their classroom practices and notably in the frequency and instructional techniques within VREs.

In both listening classes, all VREs were initiated by the teachers. More unplanned VREs than ones based on the textbook glossary occurred in both classes (78 vs. 22 in Gigi's Class; 45 vs. 22 in Amanda's Class). The majority of the VREs occurred prior to or during listening activities. Once the activities were completed, the number of the VRES decreased sharply. More single words than phrases (i.e., MWUs) were included in these VREs. Among the single words, mid-and-low frequency words accounted for a higher portion than high-frequency words and the words in the supplementary word lists (e.g., proper nouns).

Unlike the teachers, the learners showed concern about their insufficient vocabulary size and knowledge. Despite this, they did not initiate any VREs in the classes because they believed that they were supposed to prepare vocabulary before class. The learners welcomed explicit vocabulary instruction from the teachers and their perceptions of vocabulary learning in listening classes seemed to be influenced by the frequency of VREs they experienced in the lessons. The more VREs, the higher they valued learning vocabulary in the listening classes.

Finally, the listening classes led to vocabulary learning gains. In both classes, more than half of the 100 target words in the Yes/No task were learnt by at least one learner and often by multiple learners. VREs played a role in these gains although words that had not been

addressed in VREs were also learnt. This provides evidence that incidental vocabulary learning took place in these listening classes.

In Chapter 7, these findings will be discussed from different perspectives. First, the observations data of VREs will be discussed in Section 7.3.2 to explore its relation to completing listening activities. Additionally, the findings of VREs will be examined together with the textbook corpus analysis results and the learners' vocabulary measurement results to discuss the words addressed in the listening classes (Section 7.3.1 and 7.3.2). Third, the links between the post-Yes/No task results and VREs, as well as the words gained without VREs, will be discussed for the vocabulary learning potential in L2 listening classes (Section 7.3.3). Finally, the impact of the teacher cognition on classroom practice and the learners' perceptions of vocabulary in listening classes will be discussed in Section 7.3.4.

Chapter 7 Discussion

7.1 Introduction

The results of this study are reported across the three previous chapters (Chapters 4 to 6), each of which addressed a distinct aspect of the research. Chapter 4 reported on the results of a listening textbook content analysis, as well as the classroom practices, teacher beliefs and learner perceptions of teaching and learning listening. Chapter 5 presented the vocabulary loads and vocabulary profile of the materials in the textbook, as well as the learners' vocabulary size and receptive vocabulary knowledge of the words chosen from the textbook. Chapter 6 provided classroom observation data to show how vocabulary was dealt with in the two listening classes, as well as the connections between the observed practices and learners' post-lesson vocabulary gains. It also included the teachers' beliefs and learners' perceptions of vocabulary and listening in the classroom settings. The current chapter seeks to draw these results together to discuss two themes: (1) the nature of listening instruction in the classes, and (2) the focus of teaching and learning vocabulary in the listening classes.

7.2 The teaching of L2 listening

There has been growing interest over the past decade in how listening is actually taught in classrooms and in teacher cognition with respect to teaching listening. However, as discussed in Section 2.2.3, there is still a paucity of published research on these topics, a gap which, in part, the current study addressed. The main finding of the current study concerning the teaching of listening was that the teachers adopted an approach to teaching listening that was equivalent in many ways to *testing* listening comprehension (Field, 2008; Vandergrift & Goh, 2018). This was also prevalent in the textbook and in teachers' and learners' beliefs.

Turning first to the textbook, the analysis in Chapter 4 showed that it was structured around a “play, listen and check answers” pattern (Field, 2008, p. 83), especially in the *Listening Comprehension* section and the while-listening activities, which the teachers consistently prioritized. Overwhelmingly, textbook activities dealt with the outcome (i.e., product) of listening comprehension rather than with helping learners to develop strategic control over listening processes. For example, while-listening activities in the textbook required the learners to extract factual information from what they hear (e.g., *Listen and complete sentences*), or answer comprehension questions (e.g., *Listen and answer questions*). This is in

line with findings from previous research on L2 listening teaching materials (e.g., Ableeva & Stranks, 2013; Graham & Santos, 2015; Hill & Tomlinson, 2003; Santos, 2015).

Turning to the teachers, classroom observations showed that they followed the textbook closely and thus maintained the textbook focus on completing listening comprehension activities. Consequently, the teachers did not provide instruction on listening processes such as discovering the reasons for miscomprehensions or wrong answers (Field, 2008). This finding confirms Siegel's (2014) claim that textbooks have a strong influence on the nature of L2 listening instruction. When the teachers did make some adaptations to the textbook by either enhancing or removing activities, their choices consistently strengthened activities focused on the outcome of listening and removed activities that were more process-focused. For example, in enhancing the textbook, they both added a question preview stage in which they guided learners didactically through the comprehension questions before they played the recording (see Table 4.5 in Section 4.3). Further, they both regularly skipped the topic preparation activities that offer opportunities for a more learner-centered, process-focused emphasis on how learners can listen more effectively (see Table 4.4 in Section 4.3). Both topic preparation and question preview are considered to be effective pre-listening support for comprehension performance (e.g., Chang & Read, 2006; Elkhafaifi, 2005; Jafari & Hashim, 2012). In both cases these choices can be seen to strengthen the orientation of the listening classes towards "test-like procedures" (Siegel, 2014, p. 24) since topic preparation, which the teachers removed, is less relevant to preparing learners for listening tests, while question preview, which they added, is a widely used test preparation teaching strategy.

Second, as was evident in the interview responses, the two teachers viewed completing listening comprehension activities in the textbook as an appropriate method for teaching listening. While they were aware that the learners faced difficulties in listening skills (e.g., listen for main ideas), and in linguistic knowledge (e.g., vocabulary knowledge), their main concern was whether these difficulties prevented learners from completing the listening activities in the textbook; so long as the activities had been completed and the learners had provided the correct answers, the teachers considered that they had achieved the lesson objective. Consequently, they paid little attention to the underlying listening processes which caused listening difficulties such as the inability to mentally represent the overall meaning or difficulties with lexical segmentation of the connected speech (Field, 2003, 2008). Neither of the teachers showed interest in the process-based L2 listening instruction as advocated for in

the research literature (e.g., Graham & Santos, 2015; Vandergrift & Goh, 2012; Yeldham & Gruba, 2016) and which would involve activities that develop learners' metacognitive awareness of their listening skills. For example, although one of the teachers, Gigi, expressed some dissatisfaction with the textbook, she had no wish to shift towards a more process-oriented approach. Instead, she wanted more authentic listening materials in order to make the listening classes more interesting. Furthermore, while neither Gigi nor Amanda stated that preparing the learners for assessment was a major lesson objective, they nevertheless expressed a wish to use more test-like listening activities in order to help prepare their students for the exams, such as note-taking, which is included in the national Test for English Majors band 4 (TEM 4). Graham and Santos (2015) have reported similar findings, noting that, in school-based FL programs in the UK, high stakes assessment have a strong impact on listening instruction. The backwash effect of high stakes assessment on teaching is a widely reported educational phenomenon (e.g., Alderson & Wall, 1993; Bailey, 1996; Wall, 2000; Wiseman, 1961).

This assessment orientation also influenced how the learners in the current study viewed listening instruction. As reported in Section 4.4, the learners viewed the listening classes as a place to prepare for listening tests and saw successful completion of listening activities as a major goal. This aligns with Siegel's (2013) findings that EFL learners in Japan cared more about completing listening tasks than receiving strategy instruction. In the current study, the learners rarely expected to receive strategy instruction and had little metacognitive awareness of the process of listening comprehension. One reason for this is likely to be their experience of high stakes assessment throughout their education. The learners were first-year undergraduates in China who had just finished six years (or more) of English learning in middle schools. They were used to practicing listening exercises in the classrooms to meet the assessment requirements of the National College Entrance Examination and this testing orientation continues in their current university studies. Learners' perspectives are often overlooked in L2 listening research (cf. Siegel, 2013) and so these findings make a useful contribution to our understanding of the experience of being taught L2 listening.

Taken together, these findings highlight the mutually reinforcing influences of the prescribed textbook, teacher cognition and learner perceptions on how listening is taught in this context. All three reflected a consistent emphasis on completing listening comprehension exercises, an emphasis that is not supported in research-based recommendations (e.g., Ableeva & Stranks,

2013; Graham & Santos, 2015; Graham et al., 2014; Siegel, 2014). A unique feature of these findings is how they highlight the pivotal role that the textbook plays in these university-level EFL classes in China. Other studies have not shown this relationship between teaching materials and instructional approach. For instance, Siegel (2014) analyzed the audio-recorded verbal accounts from listening teachers from five Japanese universities. He found that comprehension questions predominated in these teachers' verbal accounts, but he did not investigate the source of these preferences. Graham et al. (2014) and Graham and Santos (2015) found that foreign language teachers in English high schools chose to set listening comprehension exercises regardless of the teaching materials they used. For these teachers, as with the teachers in the current study and in Siegel's study, effective listening teaching meant giving learners practice with such activities (Graham et al., 2014). While the teachers in the current study had to stick closely to the textbook, evidence from their stated beliefs suggests that even without the constraints of the textbook, their practices would, like the teachers in the earlier studies (Graham et al., 2014; Graham & Santos, 2015), remain focused on testing rather than teaching listening comprehension.

In summary, this section has discussed how L2 listening is taught in an EFL program at a university in China. This comprehension-focused instructional approach is so pervasive in this context that it also exerted an influence on how vocabulary was dealt with in the listening classes, which is discussed in the next section.

7.3 Vocabulary and listening in the classroom context

The complicated interplay between vocabulary and listening comprehension is influenced by the nature of listening instruction in this particular classroom context, as we have just seen in 7.2. Drawing now on the results of the textbook corpus analysis and measurement of the learners' vocabulary size reported in Chapter 5, as well as the observation and interview data in Chapter 6, this section (1) discusses the vocabulary demands of the textbook, (2) explores the possible reasons behind the way vocabulary was dealt with and evaluates the extent to which vocabulary was addressed in the listening classes, (3) explores the sources for vocabulary learning gains in the listening classes, and (4) discusses the role played by teacher cognition in teaching and learning vocabulary in the listening classes.

7.3.1 Vocabulary demands of the listening textbook

The textbook used in the listening classrooms might be demanding for first-year undergraduates in Chinese universities such as the students in the current study. This is despite the fact that the vocabulary demands of the textbook were within the learners' written vocabulary size measured by the Vocabulary Size Test (Nation & Beglar, 2007). As reported in Chapter 5, the textbook required a vocabulary size of 3000 to 5000-word families to reach the comprehension thresholds of 95% and 98% respectively. The 95% coverage of the textbook is similar to the lexical coverage found in several other textbooks used in EFL contexts, such as the College English textbooks at intermediate level used in Taiwan's universities (Hsu, 2009), senior high school English textbooks (Sun & Dang, 2020) and cram school English textbooks (Yang & Coxhead, 2020) in mainland China. The high proportion of high-frequency words in the textbook is similar to other textbooks used in the Chinese EFL context (e.g., Hsu, 2009; Sun & Dang, 2020; Yang & Coxhead, 2020). Furthermore, spoken input in the textbook was less lexically demanding than written input in order to achieve 98% coverage (4000-word families vs. 6000-word families). This is similar to findings of previous corpus-based studies on the lexical demands of different modalities (e.g., Nation, 2006; van Zeeland & Schmitt, 2013a; Webb & Paribakht, 2015). In addition, both spoken and written genres in the textbook varied substantially in their lexical demands; among the five genres included in the textbook, more vocabulary was required to comprehend one-way listening materials (e.g., TV scripts or news items) than two-way interactions (e.g., dialogues). This finding is in line with the corpus analysis results of spoken input in English (e.g., Coxhead et al., 2017; Coxhead & Walls, 2012; Webb & Rodgers, 2009a, 2009b). Even the most lexically demanding genre required a smaller vocabulary size than the learners' written vocabulary size which ranged from 5000 to 7000-word families, as measured on the VST. However, it is important to bear in mind the possible overestimation of L2 learners' vocabulary size caused by the test design of the VST (Gyllstad et al., 2015; Schmitt et al., 2020; Stoeckel et al., 2020), as well as the further inflated test results due to the bilingual versions (Elgort, 2013; Karami, 2012; Nguyen & Nation, 2011; Quero, 2015). Therefore, it is likely that the learners could not fully understand the textbook even though their VST results showed a larger vocabulary size than the vocabulary loads identified in the textbook corpus analyses.

This likelihood is further supported by the Yes/No task results and learners' group interview responses in the current research, as well as the vocabulary knowledge of Chinese EFL learners at high school and university levels reported in previous research (e.g., Sun & Dang,

2020; Webb & Chang, 2012). Results from the pre-lesson Yes/No task in this study showed that less than half of 57 high-frequency words from Unit 6 were reported as known words by all the learners in the two classes (21 in Gigi's Class and 19 in Amanda's Class). This finding was confirmed by the learners' comments on the textbook in the post-lesson interviews in which they identified the textbook vocabulary as "demanding" or "difficult" (see Section 6.4.1). Previous studies have also shown that Chinese high school students (Sun & Dang, 2020) and university students (Webb & Chang, 2012) have limited knowledge of high-frequency words as measured on two vocabulary levels tests (the Updated VLT for Sun & Dang; the VLT for Webb & Chang). In both these studies, learners were shown to have difficulties in mastering the most frequent 3000 words (i.e., the high-frequency words defined in the current study). Therefore, the learners in the current study needed vocabulary support or scaffolding from the teachers when using this textbook in their listening classes.

The next section discusses how vocabulary was dealt with by the two participating teachers and presents the reasons they gave for their teaching practices.

7.3.2 Vocabulary-related episodes (VREs) in the listening classroom

This section discusses the findings of vocabulary-related episodes (VREs) in relation to four questions: (1) Who initiated VREs in the listening classrooms? (2) When did VREs occur? (3) What words were addressed in VREs? and (4) What aspects of word knowledge were addressed in VREs?

7.3.2.1 Who initiated VREs? In this study, all VREs were initiated by the two teachers; the learners were only involved in answering vocabulary-related questions raised by the teachers. This finding contrasts with findings on language-related episodes (LREs) in content-based classrooms in which a common pattern is for LREs to be initiated by both teachers and learners (Basturkmen & Shackleford, 2015; Hong & Basturkmen, 2020; McLaughlin & Parkinson, 2018). A similar pattern is seen in Folse's (2010) study of explicit vocabulary focus episodes (EVFs) in one week of classroom observations in an intensive English program at a North American university. Folse found that 37% of these EVFs were learner-initiated and included questions such as "What is the meaning of XXX?" or "What does XXX mean?" Such EVFs and LREs are types of incidental focus on form and, as such, are a natural feature of interaction in communicative language classrooms (Basturkmen et al., 2004; Ellis et al., 2001). One reason that VREs were initiated by the teachers in the current

study is that they viewed the listening classes as listening test practice and so the classes were less interactive and more teacher-centered. More discussion about the impact of teaching beliefs on VREs are provided later in Section 7.3.4.

This test-related concern also explains why no VREs were initiated by the learners in the current study. All the learners in the post-lesson group interviews claimed that it was their job to study the vocabulary (the glossed words in the textbook) before the listening classes. Once classes began, they were not supposed to “waste classroom time” on vocabulary. For the learners, the listening classes are for practicing listening test techniques, especially for the listening part of the English test that they were required to take in the second year of study (i.e., TEM 4, see Jin & Fan, 2011). Nevertheless, this created a dilemma for at least one of the learners:

I am very confused about whether I should pre study all the unknown words before the lessons, because if I do that, it seemed that there is no point to complete the listening activities in the class... [RGI-vocabulary-B4]

This learner thought that she should complete listening activities without previewing the textbook glossary before the class, because in a listening test such as TEM 4, there is no chance of previewing vocabulary prior to listening. If this learner and others like her were to shift their perception of the role of the listening classes from test practice to developing listening skills, they may be more motivated to initiate VREs.

Another interesting finding concerning the learners’ test-orientation is that while they welcomed vocabulary instruction from the teachers in the listening classes, they were concerned that too many VREs would distract them from listening practice. Other studies on the effect of vocabulary support in listening comprehension test performance have reported similar concerns (Berne, 1995; Chang & Read, 2006; Elkhafafi, 2005). Taken together, the priority given to test-like listening activities may have led to less interactive and more teacher-initiated VREs in the listening classrooms in this Chinese university.

7.3.2.2 When did VREs occur? The priority given to completing listening comprehension activities also influenced the timing of unplanned VREs in these listening lessons. First, in terms of the listening phases, the findings in Chapter 6 showed that both Gigi and Amanda

initiated more unplanned VREs either before listening or during the while-listening phase than in the post-listening phase (see Figure 6.1 and 6.2). This suggests that the two teachers viewed the VREs more as listening preparation than an opportunity to help learners learn new vocabulary. Similarly, in the context of British high school classrooms, Graham and Santos (2015) found that teachers used predicting the meanings of unknown words as a pre-listening activity. This approach is not without value, since it has been shown to improve listening comprehension performance (e.g., Chang, 2007; Pan et al., 2018).

Second, the two teachers were seen to prefer initiating unplanned VREs when guiding learners through written texts such as the background knowledge texts or the written answers to the listening activities rather than addressing vocabulary-related problems encountered when listening to the spoken texts. Again, this practice aligns with the teachers' preference for giving listening comprehension practice rather than helping learners with aspects of the listening process and with helping them to become more strategic listeners. Similar practices have been shown in other studies to be used by teachers to help learners develop listening test strategies (e.g., Chang, 2007; Chang & Read, 2006; Elkhafaifi, 2005).

One of the consequences of teachers spending more time on vocabulary in written texts is that important topic-related words in the listening classes were neglected. For example, when going through the options for multiple choice in the section of *Passage*, Amanda gave an L1 translation for each verb or verb phrase in the multi-choice options, such as *describe*, *release*, and *draw*. These words were in fact the multi-choice distractors and were not words that related to the topic of the text. In previous studies, effective vocabulary support for listening comprehension has been shown to be based on topic-related words (Chang & Read, 2006) or on words directly drawn from the spoken input (Chang, 2007; Pan et al., 2018). Thus, unplanned VREs in the current study appear to be giving undue attention to words that were less important for listening comprehension but useful for listening test practice. The next section addresses this issue of which words were attended to in VREs.

7.3.2.3 What words were addressed in VREs? An issue in the findings in Chapter 5 and Chapter 6 is that, while the vocabulary demands of the textbook appeared to be well within the learners' written vocabulary size (measured by the VST), half of the high-frequency words were unknown to the learners as seen in the results from the Yes/No task. Despite their prevalence, these high-frequency words in the textbook received less attention

than mid- and low-frequency words in both glossary-based and unplanned VREs. Insights from the interviews help to explain the teachers' preference for choosing mid- and low-frequency words over high-frequency words in their VREs. In the post-lesson interviews, both teachers expressed confidence that the lexical level of the textbook was suitable for their learners. Both Gigi and Amanda believed that most of the textbook vocabulary was made up of “*ordinary words*” (a term used by Amanda to refer to high-frequency words). On this basis, they chose to focus on words that they themselves were unfamiliar with or that learners would struggle with when completing listening activities. For the latter, they identified these words when checking answers for the listening activities or by observing the learners' reactions when they engaged with the listening activities. Consequently, they focused on mid-frequency words such as *crust* and low-frequency words such as *octagonal* rather than on high-frequency words such as *bee*, even though many of these high-frequency words were unfamiliar to quite a few learners. This could be problematic because Chinese EFL learners at senior high school or first-year university level may have difficulties in mastering the knowledge of the most 1000 frequent words (Sun & Dang, 2020). The inaccurate assumption that learners would know most of the high frequency textbook vocabulary confirms the finding by Graham and Santos (2015) that high school foreign language teachers in the UK tended to overestimate their learners' knowledge of words they would encounter in listening texts.

Another reason why the teachers spent less time on high-frequency words relates to the textbook glossary, which contained fewer high-frequency words than mid-frequency words (35% vs. 49%, see Table 5.6)²⁴. In Unit 6, of the 18 glossed single words²⁵, only two were high-frequency words (*govern*, *legend*), whereas ten were mid-frequency words, and the other six included five low-frequency words and one transparent compound (see Table 6.4). All of these glossed words were dealt with in glossary-based VREs in both classes, and both Gigi and Amanda used the multimedia materials provided by the textbook to give explicit instruction on them. As a result, greater attention was given to mid- and low-frequency words than high-frequency words. This finding indicates that the glossary in listening textbooks is likely to receive more attention from teachers than glossing for reading texts which can be dealt with by learners themselves during the process of reading (Nation, 2013). In listening

²⁴ The calculation of high-frequency words in Table 5.6 includes the words in multiword units (MWUs).

²⁵ These are single words only, excluding the words in MWUs.

classroom, teachers tend to rely on textbook glossary to provide explicit vocabulary instruction as a type of pre-listening support.

Taken together, the teachers' intuitions and the emphasis on mid- and low-frequency words in the glossary influenced the choices they made about what words to focus on in VREs. This raises the issue of the extent to which the VREs addressed the vocabulary needs of the learners as reflected in the lexical difficulties revealed in their performance on the pre-Yes/No task (see the discussion in Section 7.3.1). Given the high proportion of high frequency vocabulary in the textbook and the important role played by high-frequency words in listening comprehension (Matthews & Cheng, 2015), it is problematic if teachers lack awareness of how many of these words are unfamiliar to their learners. In this regard, a consistent recommendation from L2 vocabulary researchers is that learning high-frequency words needs to be a priority before giving attention to lower frequency words (e.g., Dang & Webb, 2020; Nation, 2013; Schmitt & Schmitt, 2014; Sun & Dang, 2020; Webb & Chang, 2012).

Along with high-frequency words, topic-related mid- and low-frequency words play a critical role in text comprehension as shown in a study by Laufer and Ravenhorst-Kalovski (2010). This study investigated the relationship between text coverage, learners' vocabulary size and L2 reading comprehension performance, and found a positive association between the increase in text coverage from explicit attention to mid-and low-frequency words and the learners' reading comprehension scores. The authors argued that these words "were the key words" of the texts and were "crucial for comprehension" (Laufer & Ravenhorst-Kalovski, 2010, p. 24). In the current study, VREs also covered such words. For example, VREs by both Gigi and Amanda addressed two low-frequency words: *visor* and *octagon*, from *Dialogue 2*, which were both glossed in the textbook. Both Gigi and Amanda adopted the visual and audio instructional materials in the textbook glossary to present these two words. In addition, they both adopted multiple instructional techniques on these two words in their unplanned VREs, such as providing L1 translations, spelling the words letter by letter or explaining the word parts (for *octagonal*). Such an intensive attention paid to these words can help the learners better comprehend the spoken input of this dialogue, as they were closely related to the topic of the dialogue on UFOs and outer space creatures: *visor* described how the outer-space creatures were dressed and *octagon* (*octagonal*) described the shape of their spaceship. It should be noted that, these two words were covered in VREs not only because

they were glossed but also because they were required as answers to an outline completion activity in this dialogue section. This finding indicates a dilemma that listening teachers have to face: the Catch-22 between the need to achieve comprehension of a specific text or to achieve success in completing listening activities on the one hand, and the need to prioritize attention to more generalizable learning, which would be realized by giving greater emphasis to high frequency words unfamiliar to learners on the other.

In addition to the frequency-based vocabulary, the proper nouns in the BNC/COCA's supplementary lists (Nation, 2018) were also covered in VREs in the current study. As reviewed in Section 2.4.1, the relationship between proper nouns and L2 comprehension may be complicated and needs caution (Brown, 2010; Erten & Razi, 2009; Klassen, 2018, 2021; Kobeleva, 2012). Kobeleva (2012) particularly explored this complicated relationship between vocabulary and L2 listening comprehension, by examining the effect of pre-teaching unfamiliar proper nouns in ESL learners' comprehension performance when they listened to a short news story. Her findings suggest that the extent to which unfamiliar proper nouns hinder L2 listening comprehension depended on the purpose of listening. If the purpose is to obtain the main idea of the spoken input, then Kobeleva claims that unfamiliarity with proper nouns is not a major problem. However, if a detailed listening comprehension outcome is expected, proper names matter more. The latter position is reflected in Amanda's VREs in which only one proper nouns was focused on: *Akamai*, in the section of *News item 2*, which was about the Internet and a computer business. This word appeared in the first short-answer question of this section, which required learners to identify its meaning after listening to the news item (i.e., as a listening comprehension outcome), as shown below:

Question in Student Book: What is Akamai?

Answer in Teacher Book: It is a business that provides cloud computing services.

In contrast, Gigi dealt with six proper nouns in her unplanned VREs, including *Akamai*. These six instances seemed to serve the purposes of both comprehending spoken input and completing a specific listening activity, as the proper nouns were either from the listening activity questions or the spoken input. The different vocabulary-related practices of the two teachers will be discussed in Section 7.3.4. Next, we consider what aspects of vocabulary knowledge were addressed in VREs in the two listening classes.

7.3.2.4 What aspects of word knowledge were addressed in VREs? The findings reported in Chapter 6 showed that vocabulary knowledge in the spoken form (e.g., pronunciation, syllables, or stress pattern) received little attention in VREs. Instead, the two teachers emphasized the form-and-meaning relationship of the words in the written form and heavily relied on providing L1 translations (see the occurrences of various instructional techniques presented in Table 6.5 and 6.6). Their preference for focusing on word meaning is like the approach in reading classes in the Chinese context (Xie, 2013) and in an intensive English language program for EFL learners in North America (Folse, 2010). However, knowing a word in its written form does not ensure knowledge of the spoken form (Milton & Hopkins, 2006). Phonological knowledge does a better job than the orthographic knowledge in helping L2 listeners recognize words and segments in connected speech (Cheng & Matthews, 2018; Matthews & Cheng, 2015; Milton & Hopkins, 2006) and it is more strongly correlated with listening comprehension (Matthews, 2018; McLean et al., 2015; Milton & Hopkins, 2006; Milton et al., 2010). While phonological vocabulary knowledge was mentioned by the learners in the current study as one of the major obstacles in listening, the teachers paid little attention to it in VREs. This aligns with the impact of completing listening activities on the teacher-initiated VREs. That is, the teachers were inclined to address the vocabulary which learners needed to provide correct written answers. As a result, the important role played by phonological knowledge in listening comprehension was neglected in this classroom context.

Another reason for little attention to phonological knowledge in VREs lies in the lack of bottom-up listening activities in these classes. The textbook content analysis reported in Chapter 4 showed that each listening unit contained only one phonetics section named *Stress, Intonation and Accent* (see Table 4.1). The text types of phonetics section in this volume were either single sentences or short dialogues, rather than smaller chunks such as “isolated sounds, phonemes, single words or phrases” (Graham & Santos, 2015, p. 107). Hence, the learners lacked chances to develop their ability to recognize pronunciations and identify syllables and stress pattern of a single word or words in a short phrase. Furthermore, activities that have been proposed to facilitate L2 learners’ perceptual processing skills such as identifying word boundaries, discriminating word sounds, or paying attention to the phonological properties in the connected speech of spoken input (Field, 2003, 2008; Siegel & Siegel, 2015) were absent in the phonetics section. Zhang (2020) analyzed Volume I of this

textbook series and found that listening activities required learners to identify “linkups, weak forms, sound plosives and phonetic assimilation” (p.92) in the phonetics section of this volume. However, the current study found that, when using Volume II, the learners were instead required to focus on the stressed words in sentences or short dialogues, to identify the rising or falling intonations of the sentences, or to identify different accents in spoken English. These activities do not necessarily need the teachers to provide explicit phonetics instruction or pronunciation instruction which are believed to improve L2 learners’ bottom-up processing development (Cauldwell, 1996, 2000; Kissling, 2014, 2018). Given the emphasis on completing listening comprehension activities, it is not surprising that explicit instruction for phonological knowledge rarely occurred in these two listening classes.

Taken together, this section discussed the findings related to VREs in the two listening classes. It highlights the impact of the nature of listening instruction on VREs in this classroom context. The priority given to completing listening comprehension activities led to more teacher-centered VREs, which occurred more in the pre- and while-listening phases than in the post-listening phase. Based on this instructional priority, as well as the moderate textbook vocabulary demand and teaching intuition, VREs in these listening classrooms showed a pattern in addressing more listening test practice-related words than text topic-related words, more mid- and low-frequency words than high-frequency words, and more vocabulary knowledge in the written form than in the spoken form. The next section will turn to the other important aspect of this relationship to discuss: vocabulary learning in the listening classroom.

7.3.3 Vocabulary learning gains in the listening classroom

Vocabulary learning in L2 listening classes is evident in this study. The learners reported gains in recognizing target words chosen from Unit 6 in the pre-and-post Yes/No task (see Tables 6.8 and 6.9). Despite the statistically significant increase in the post task results, less than one third of the learned words showed substantial gains in each class (see Table 6.10). This section discusses the two sources that led to these gains: teacher-initiated VREs and opportunities for incidental vocabulary learning.

First, the current study found that, in both classes, around half of the words that showed learning gains in the post Yes/No task had been explicitly addressed in VREs: 32 out of 59 learned words in Gigi’s Class and 30 out of 61 learned words in Amanda’s Class. This is even

though only a modest proportion of the tested words were explicitly taught in VREs: 41 out of 100 words in Gigi's Class and 34 out of 100 words in Amanda's Class. This finding concurs with previous studies which showed that providing explicit vocabulary instruction in listening instruction leads to vocabulary gains (e.g., Hennebry et al., 2013; Lee & Levin, 2020; Tian & Macaro, 2012; Zhang & Graham, 2019, 2020). The present study also found that the amount of elaboration in the teacher-initiated VREs influenced the likelihood that a word would be learnt. For example, while both teachers went through audio and/or visual instructional materials for the glossed words as provided for the textbook, Gigi provided substantially more information about these glossed words than Amanda. This extra information involved L1 translation, codeswitching, and contrastive focus-on-form, all of which have been found to positively affect learning vocabulary (e.g., Tian & Macaro, 2012; Zhang & Graham, 2019, 2020). As a result, nine of the words in the glossary taught by Gigi in VREs showed substantial learning gains whereas only five of the glossed words that Amanda taught showed substantial gains (see Table 6.12 and 6.13).

Both teachers initiated fewer VREs once the learners had completed listening comprehension activities and these post-listening VREs were typically briefer. In part at least, this explains why none of the VREs in the post-listening phase led to learning gains. These VREs usually occurred as the teachers displayed the scripts after a listening activity and they involved simple oral explanations of word meaning in L1 or L2. As discussed in Section 7.3.2.2, this finding shows that both teachers treated vocabulary differently in the different phases of a lesson; they taught more words and gave more elaborate explanations before listening than after listening. Interestingly, the views of one of Gigi's learners in the post-lesson group interview suggest that this was not necessarily their preferred approach. When the group was asked about which phase they preferred receiving vocabulary instruction in, the learner responded as following:

Post-listening, because I will know which words I don't know after listening, and if the teacher shows us the written scripts and picks up some words to teach, I can read the context for them, and I can remember the words for a long time [FGI-vocabulary-D15]

Two previous studies support the view expressed by this learner. In the first, Sonbul & Schmitt (2010) compared the benefits of reading a passage from an ESP textbook (read-only)

or reading followed by direct vocabulary teaching (read-plus) on EFL learners' vocabulary learning. They found that the read-plus condition enabled the learners to recall and recognize a significantly greater number of words than read-only condition. To further investigate this finding in relation to listening, Hennebry et al. (2013) adopted the same research design, but replaced reading with listening and conducted their study in an L2 (French) listening classroom. Their findings confirmed the results from the earlier study; listening followed by explicit vocabulary instruction led to better recall and recognition of words from the listening passage than just listening. On this basis, Hennebry et al. (2013) argue that it is "cost-effective" to incorporate explicit vocabulary instruction in the post-listening phase (p.295). These results suggest that the teachers in the current study may be able to do more to improve vocabulary learning from their lessons by giving learners more opportunities to pay attention to new vocabulary in context in the post-listening phase. Nevertheless, such advice comes with a trade-off; time spent teaching vocabulary is time taken from the primary focus of the lesson, in this case, developing listening skills. As Nation (2008) has pointed out, teaching the words directly is the least important job for teachers to do when they deal with vocabulary in L2 classroom (also see priorities for vocabulary learning and teaching inside the classroom in Newton, 2019).

The second source of learning was incidental learning opportunities. The current study found that half of the words that showed learning gains had not been addressed in VREs, which suggests that they were learnt incidentally. These gains confirm van Zeeland and Schmitt's (2013b) finding that form recognition of words can be improved after meaning-focused L2 listening. Also, as van Zeeland's (2017) claims, the value of listening for vocabulary learning lies in gaining "partial knowledge rather than for establishing new knowledge" (p. 148). However, it is unclear what the precise source of incidental vocabulary gains in the current study was. This is because the study took place in intact classrooms in which the learners encountered words in a variety of modes such as listening, reading, listening-while-reading and/or viewing videos (including reading the captions), and repeated listening. This context contrasts with many of the studies on incidental vocabulary learning which are either experimental or quasi-experimental in nature, and which were therefore able to carefully control the way in which learner participants were exposed to unfamiliar vocabulary (e.g., Brown et al., 2008; Montero Perez et al., 2014; Pavia et al., 2019; Peters & Webb, 2018; Vidal, 2003, 2011; Webb & Chang, 2015).

In the current study, another reason for the incidental learning gains is likely to lie in the combination of the context, the learners, and their motivation to deliberately study unknown words. Chinese English major students such as these are known to spend a lot of effort on learning vocabulary both because this is a traditional focus on instruction and because their exams require it. This context contrasts with other studies which have investigated extensive listening or viewing for pleasure outside the classroom (e.g., Pavia et al., 2019; Pujadas & Muñoz, 2019). While this rationale is supported by the learners' responses in the post-lesson group interviews (see Section 6.4), the data did not provide direct evidence of the sources of incidental vocabulary learning or of whether and how learners attended to unknown words listening classes. Further investigations of learner-directed vocabulary study in listening classes are therefore warranted (see more in Section 8.5).

In sum, this study provided evidence of vocabulary learning in listening classes through both teacher-initiated VREs and incidental encounters with unfamiliar words. This study also highlights the importance of classroom-related factors such as the quality of vocabulary instruction provided by teachers and when they provide this instruction. In the next section, I will discuss one of the important factors in both teaching and learning vocabulary in the context of L2 listening classroom: teacher cognition.

7.3.4 Teacher cognition and the teaching and learning of vocabulary in the listening classroom

The last section in this chapter discusses the impact of the teachers' beliefs on their classroom practice, and how these beliefs influence the learners' perceptions of vocabulary in listening classes. First, the current study revealed how the teachers' previous teaching experiences influenced their beliefs and in turn affected their practices regarding teaching vocabulary. As Gigi had lots of experience teaching meaning-focused listening course, she was aware of the need of linking teaching vocabulary to the spoken input that the learners encountered in the listening classes. For example, she was aware of the importance of learning vocabulary in the context of listening texts and reminded her learners to use the context as a vocabulary learning strategy. Moreover, since she hoped "that the learners can spell the words according to their pronunciation" [ROI-vocabulary-D4], she guided the learners to spell words orally rather than by writing the word on the blackboard. Amanda, on the other hand, held a "personal conviction" (Borg, 2003, p. 91) from her previous experiences in teaching intensive reading and translation courses that learners could only learn vocabulary through engaging

with translation tasks rather than through receiving explicit vocabulary instruction from teachers, especially in the context of listening classes. As a result, she initiated fewer VREs than Gigi (67 vs.100) and used a limited range of instructional techniques. These beliefs and corresponding practices highlight the impact of “experientially informed” teaching beliefs on teaching practices (Breen et al., 2001, p. 472).

In addition, the findings of this study reinforced Basturkmen et al.’s (2004) claim that the relationship between teaching beliefs and practices in L2 classrooms could be “tenuous” (p.269). As discussed above, overall, Gigi and Amanda kept consistent in what they believe and what they do in teaching vocabulary in the listening classes. This consistency is also seen in the context of Chinese university intensive reading classes, as illustrated in a study by Xie (2013), in which the four participating teachers believed that learners could only learn unknown words when they received detailed vocabulary explanations from teachers. Therefore, these teachers “paused to explain words whenever they arose” in the reading classes (Xie, 2013, p.441).

Nevertheless, inconsistency between teachers’ stated beliefs and their actual practices is also evident in the current study. For example, in the post-lesson interview, Gigi claimed that she preferred teaching vocabulary in the post-listening phase as compared to the while-listening phase. However, this preference was not reflected in the observation data as more VREs occurred during the while-listening phase than the post-listening phase in her classes. Such a complex tension between teachers’ beliefs and practices is also reported in earlier teacher cognition research. Basturkmen et al. (2004) found that both congruence (e.g., in responding to learners’ problems) and incongruence (e.g., in dealing with grammar issues) existed between teachers’ beliefs and practices in focus-on-form instruction. Phipps and Borg (2009) investigated what teachers believed and did in teaching grammar in a Turkish EFL context, and they found that the teachers’ classroom practices aligned with their core beliefs (e.g., beliefs related to grammar pedagogy) but diverged from peripheral beliefs (e.g., beliefs related to a specific grammar point).

Another aspect of this topic concerns the relationship between how each of the two teachers taught vocabulary and how learners in their respective classes valued vocabulary. As discussed above, Gigi initiated many more and more elaborate VREs than Amanda. Gigi’s students noticed and welcomed this amount of vocabulary teaching, as reported in the group

interviews (see Section 6.4.3). They gave examples of how they had recently encountered words that Gigi had taught them in earlier lessons. They attributed the ongoing benefits of knowing these words to Gigi's instruction. By contrast, Amanda's students did not think that their listening classes were a useful place to learn vocabulary, and this view correlated with Amanda's more limited approach to teaching vocabulary. These learners reported that they relied on intensive reading classes or self-study to learn vocabulary. This finding highlights the powerful role that a teacher's modelling can have on learners' perceptions and learning behaviors.

7.4 Summary

This chapter has discussed two main themes drawn from the findings of this thesis. The first theme (the nature of listening instruction) highlights the emphasis on completing listening activities in the listening classrooms included in the study. This approach influences the way in which vocabulary is taught and learnt in this particular classroom context (the second theme). In the next chapter, I will conclude the thesis by summarizing the main research and overall contributions of this study, as well as its pedagogical implications, limitations, and recommendations for future research.

Chapter 8 Conclusion

8.1 Introduction

This chapter begins with a summary of the major findings from the study, and presents the main contributions this research makes to L2 listening pedagogy and the interplay between vocabulary and listening in classrooms. Then it discusses the pedagogical implications for the teaching and learning of L2 listening and vocabulary. The penultimate section identifies limitations of the study and suggests directions for future research. The chapter concludes with a reflection on the PhD journey.

8.2 Summary of major findings

This thesis investigated the teaching and learning of listening in EFL classrooms at a university in southeast China with a particular focus on the relationship between vocabulary and listening. This research focused on the teaching materials and beliefs and teaching practices of two teachers who taught two listening classes at this university, and on the perceptions of learners in their classes and the vocabulary size of these and the wider cohort of learners in the program. Three topics were addressed in the thesis: (1) how L2 listening is taught and learnt in this context, (2) the vocabulary profile of the textbook and how this relates to the learners' vocabulary size and knowledge, and (3) how vocabulary is taught and learnt in these listening classes. In this section, I will review the major findings on each of the issues.

In addressing the topic of teaching and learning L2 listening, the current study showed that the teachers emphasized the outcome of listening comprehension rather than the processes by which learners can make sense of what they hear. In adopting this approach, they were closely following the mandatory listening textbook which reflected a similar emphasis. Consistent with teaching practice, both the teachers and learners perceived this emphasis on comprehension to be the main function of listening classes. For the learners, this view reflects the test-oriented focus established throughout their school-based experience of learning English. In practice, this meant that the majority of while-listening activities in the classrooms required learners to extract factual information from scripted listening texts. Furthermore, the post-listening stage was rarely used to diagnose listening problems or discuss ways of listening more effectively (i.e., strategy-focused teaching). Consequently, the process of listening comprehension and any possible problems that the learners encountered

in this process were rarely discussed by teachers and learners. In sum, the approach to teaching listening in these classes was closer to testing than teaching (Field, 2008).

Concerning the topic of textbook vocabulary, the study found that around 92% of the vocabulary in the textbook was made up of high-frequency words (i.e., the most frequent 3000 words). Given such a large proportion of high-frequency words, this textbook required 3000-word families for acceptable comprehension (reach 95% lexical coverage) and 5000 word families for good comprehension (reach 98% lexical coverage). The spoken input was less lexically demanding than the written texts (3000 to 4000-word families vs. 3000 to 6000-word families) in this textbook. Furthermore, vocabulary demands varied across the different genres of spoken input in the textbook. For example, news items were more demanding than dialogues. Regarding the learners' vocabulary related to the textbook, as measured with the Vocabulary Size Test (Nation & Beglar, 2007), the learners had an average written vocabulary size ranging from 5000 to 7000-word families. However, in data collected from the Yes/No pre-task, the learners reported not knowing a substantial number of words in the textbook unit that was the focus of observed lessons in this study. Many of these words were high-frequency.

With regard to the teaching and learning vocabulary in the listening classes, explicit vocabulary instruction on word meaning or form took place in these classes in the form of teacher-initiated VREs. These included glossary-based and unplanned VREs and were primarily used to provide pre-listening support or to explain the answers to written comprehension questions. Most of the target words in unplanned VREs were mid- and low-frequency words in the questions or answers for the listening activities. In the VREs, the teachers focused on the written form rather than spoken form of vocabulary knowledge. They typically did so by providing L1 translations to explain word meaning. Explicit instruction about the spoken form of target words (e.g., pronunciation and syllable stress) was rare. Along with this shared pattern by both teachers, there were variations in their approach to vocabulary. Interview data showed that Gigi valued vocabulary more than Amanda and thus adopted a wider range of instructional techniques. Gigi's instruction also covered more aspects of vocabulary knowledge (e.g., word parts) and involved more vocabulary learning strategies (e.g., look up in dictionary). Both teachers spent little additional time on vocabulary, once the learners had completed the listening activities.

The learners viewed vocabulary support as a way to facilitate listening comprehension performance. They described the textbook as lexically demanding, especially when they did not preview the words in the textbook glossary before class. Therefore, they perceived previewing glossed words before class as a mandatory preparation task. They welcomed explicit vocabulary instruction from the teachers, as they believed that this enabled them to better complete listening activities in the textbook. Furthermore, the group interview responses from the learners showed that the more emphasis their teacher placed on the relationship between vocabulary and listening, the more seriously learners took vocabulary learning opportunities in the listening classes. This evidence of the influence of teachers' beliefs and behaviors on learners' approach to their learning warrants further investigation.

Finally, the study provided clear evidence that vocabulary learning occurred through listening-based activities in the two classes. When words were targeted in VREs, there was a higher likelihood that they would be learnt, although words that received no deliberate attention from the teachers also showed learning gains. Despite these positive findings, neither the teachers nor the learners fully acknowledged the value of listening classes for vocabulary learning.

8.3 Contributions of the study

This research contributes to L2 listening pedagogy and the interplay between vocabulary and listening in the classroom context in three ways. First, drawing on textbook analysis, classroom observations, and self-reported teacher and learner perceptions, the findings of the study add empirical support from the Chinese context to claims that a product-based comprehension-approach dominates the teaching of L2 listening (Graham & Santos, 2015; Siegel, 2014). The multi-dimensional data set in this study offers evidence of how this approach is implemented in these Chinese EFL classrooms and provides insight into the factors that influence teachers' practices.

Second, drawing on VST results from 205 first-year English major learners at a normal university ranked around 360 among 800 universities in mainland China (see more information on <https://weibo.com/ttarticle/p/show?id=2309404620539435286688>), the study provides empirical evidence that the typical vocabulary size of comparable groups of Chinese university EFL learners is around 5000 to 7000 words. This is slightly higher than Nation's (n.d.) estimation of non-native undergraduates' vocabulary size measured by using

the monologue version of the VST (i.e., 5000-6000 word families). This is most likely because a bilingual version of the VST was adopted in the study, which may lead to higher test scores (Elgort, 2013; Karami, 2012; Nguyen & Nation, 2011; Quero, 2015). Furthermore, the textbook corpus analysis results shed light on the vocabulary demands of the listening materials of various genres (e.g., dialogues, news items, TV scripts), and of the written texts for listening activities (e.g., short answer questions, multiple choice items). The vocabulary profile results also provide insight into what types of vocabulary (i.e., high-frequency words) that learners are most likely to encounter when using a mandatory textbook such as the one analyzed in this study.

Thirdly, the study provides empirical evidence of how vocabulary is addressed in EFL listening classrooms. Most of the previous research on vocabulary pedagogy was conducted in intensive reading classes, as reading is believed to be most closely related to vocabulary teaching and learning (e.g., Xie, 2013). The current study found that lesson objectives played an important role in determining the purpose of VREs in the listening classroom, and that, for both teachers and learners, the role that vocabulary plays in listening and the role of listening in vocabulary learning are undervalued. Conversely, the results highlight the rich vocabulary learning opportunities available in listening classes, opportunities that the current study shows are not being taken up efficiently or effectively by teachers and learners.

8.4 Pedagogical implications

The findings of the study provide several implications for teaching and learning in L2 listening classes and for writing L2 listening textbooks. While these implications are drawn from the data collected in only two listening classes at a Chinese university, they offer insights which may be transferable to other L2 or EFL listening classrooms, especially ones where a mandatory textbook is used.

8.4.1 Implications for L2 listening textbook writers

Given the central role played by the textbook in guiding teaching listening and attention to vocabulary in this study, the first implication is for L2 listening textbook writers. First, they may need to clarify the purpose of the textbook they are writing, focusing on the extent to which it is designed for test preparation and/or L2 listening development. If the latter, they need to include activities that offer learners opportunities to build their strategic listening skills. When listening activities place too much emphasis on the product of listening

comprehension (i.e., an emphasis on testing listening) at the expense of attention to learning about how to listen effectively, they fail to address the listening skills and strategies that can benefit long-term L2 listening development. Secondly, writers may need to be mindful when providing vocabulary support in listening textbooks. In the current study, the vocabulary support was limited in the form of glossing. This could be problematic for two reasons. First, glossing for listening text is different from glossing for reading text. When learners listen to spoken input in the textbook, they cannot see the glossed words as they would when reading (see the function of glossing for reading passages in Nation, 2013). So glossing unknown words for listening text is not as helpful as for reading text in terms of increasing lexical coverage/improving comprehension. Second, words that assumed to be unfamiliar to learners are the focus of glossing, such as the mid- and low-frequency words in the textbook glossary in the current study. However, other words also need vocabulary support in the listening classes, such as high-frequency words and listening topic-related words. Therefore, textbook writers may consider providing vocabulary support in addition to glossing unknown words. It would be helpful if textbook writers follow Nation's (2013) recommendation to incorporate vocabulary in the written input when designing listening tasks (e.g., the "receptive information transfer activities" in Nation, 2013, p.117).

8.4.2 Implications for teaching L2 listening

The study offers two implications for teaching L2 listening and specifically for addressing both the vocabulary demand of listening and the opportunities that listening offers for vocabulary learning. The first implication concerns principles to follow, plans to make and practices to implement in teaching L2 listening, as presented in Table 8.1.

Table 8.1 *Suggestions for teaching listening and dealing with vocabulary in the listening classroom*²⁶

Principles	Planning	Teaching
Establish teaching expectations which relates to what L2 listening entails	Read through the textbook to identify its focus of teaching listening (e.g., product or process of listening comprehension)	Increase opportunities for post-listening reflections on the problems during the process of listening (Goh, 2018) ²⁷
Develop learners' listening skills and/or listening strategies in addition to their listening testing skills	Collaborate with peer teachers and make plans to adapt the textbook if it is product-oriented while the teaching expectation is more process-oriented	Check with learners about the words they struggle with in form or meaning in written and/or spoken form
Focus on sound of words in spoken language when providing vocabulary support	Use the Updated Vocabulary Levels Test (Webb et al., 2017) and/or Listening Vocabulary Levels Test (McLean et al., 2015) to measure learners' vocabulary level in written form and/or spoken form at the beginning of teaching semester	Include bottom-up activities which focus on perception and parsing process for the spoken language (e.g., lexical segmentations; word boundaries) (Field, 2003; Siegel & Siegel, 2015) and incorporate pronunciation instruction into VREs (e.g., Kissling, 2018)
Avoid being biased towards the textbook glossary and identify learners' lexical difficulties in the teaching materials/classes	Design pre-lesson vocabulary tasks (e.g., Yes/No tests or recognition and recall tests used in Hennebry et al., 2013) to measure learners' vocabulary knowledge on the words from the textbook	

A second implication from the study concerns L2 listening teacher development. It was clear from the findings that the beliefs and practices of the two participating teachers did not consistently align with currently recognized research-based principles for teaching L2 listening and supporting vocabulary learning. Furthermore, the nature of the textbook reinforced ways of teaching (i.e., listening test-oriented approach) that are not supported by research. While it may be difficult to change the textbook, it is possible to improve teachers' understanding of principles by which they can then implement textbooks in ways that align

²⁶ These suggestions are optional, not compulsory.

²⁷ Goh (2018) provided several process-based pedagogical sequences/models, see details on pp.151-154

more closely with research. In the Chinese EFL context, it may be unrealistic to require or expect teachers to keep up to date with the latest research (Nassaji, 2012). However, it is more realistic for them to keep abreast of current scholarship through attending teaching conferences, workshops and forums, such as events organized by foreign language education presses (for example, see the conference information on <http://www.sflep.com> or <https://www.fltrp.com/>). Nevertheless, to my knowledge, listening is still a neglected theme in conferences and professional seminars for teachers. This is a gap which needs to be addressed if we are to see the improvement of teachers' understanding and practices in teaching listening.

The case is different for vocabulary, as more research on L2 vocabulary pedagogy has been conducted and presented to teachers in China. In spite of this, the connection between vocabulary and listening is neglected, not least because of the research focus on vocabulary and reading (e.g., Gao & Ma, 2011; Xie, 2013). As a result, teachers may lack awareness of how to address vocabulary when teaching listening and of how to help learners develop lexical segmentations skills, which are one of the fundamental building blocks of effective L2 listening (Cauldwell, 1996, 2000; Field, 2008). In sum there is a need for vocabulary researchers to pay more attention to listening, and conversely, for listening researchers to engage with the findings from vocabulary research.

8.4.3 Implications for L2 learners

For L2 learners, two implications emerge from this study. The first is to shift their primary expectations in listening classes from preparing for listening tests to developing a broader, more functional and communicatively useful suite of L2 listening skills²⁸. Secondly, learners would benefit from greater awareness of and training in skills to build their vocabulary through listening. Evidence from the study shows that vocabulary learning gains are possible from these listening classes. However, findings from the group interviews showed that the learners had a strong preference for learning words through intensive reading or through learning apps on their cell phones but seemed to minimize the value of vocabulary learning through listening. The assumption that learning vocabulary is primarily a reading-based activity is likely to result in an unwillingness to invest in vocabulary learning through listening, either in or outside classrooms. As a result, learners will lack opportunities to build

²⁸ Although teachers play an important role in driving this shift.

their vocabulary knowledge in the spoken form, which is crucial for developing lexical segmentation skills and, through the role of the phonological loop, for developing their listening skills (Cauldwell, 1996, 2000; Field, 2008).

8.5 Limitations of the study and recommendations for future research

This research was limited in several ways. First, this study investigated only two listening classes at a Chinese university and this limits the generalizability of the findings. However, the rich, multi-dimensional data provided in the study offers researchers and teachers the opportunity to consider the transferability of the findings to other contexts, and especially to similar classroom contexts in China. Second, it was not possible to obtain specific measures of the learner participants' language proficiency because they had not sat any externally validated English proficiency examinations. For this reason, I relied on the teachers' estimates of their students' proficiency and my own experience of teaching students in this program over ten years. This limitation had no effect on the quality of the results as the current study focused on the learners' perceptions of listening lessons rather than their listening comprehension performance. However, I acknowledge that it is considered to be good practice to provide more objective measures of proficiency.

A further limitation relates to how the vocabulary knowledge and vocabulary learning by learners in the study was measured. By using the Vocabulary Size Test (Nation & Beglar, 2007), the current study provides a total vocabulary size across the 14 frequency levels in the written form of the learner participants. However, their vocabulary knowledge at each frequency level (e.g., the most frequent 1000 words) and the extent to which this knowledge applied to the spoken form of words are unknown. As to the issues of how vocabulary learning was measured, the pre-and-post Yes/No vocabulary recognition task adopted in the study allowed for fast and efficient data collection. However, it too provides no information on vocabulary knowledge that related to the spoken form of words. While the Yes/No task results support van Zeeland and Schmitt's (2013b) claim that increase in form recognition can be gained through listening, learning gains for other aspects of vocabulary knowledge, such as lexicogrammar and collocational knowledge remain unclear.

With these limitations in mind, the findings of the study provide recommendations for future research in three areas. The first relates to teacher cognition and learner perceptions in Chinese university classrooms. A major finding of the study was that teacher cognition

influenced how listening was taught and how vocabulary was dealt with in listening classes. This suggests that there would be value in further research involving a larger number of teachers and perhaps adopting quantitative data collection, such as through survey-based research, to explore Chinese university teachers' beliefs about teaching listening and dealing with vocabulary in listening classes. The findings from the present study offer a set of claims which can serve as reference points for the development of survey items. An example of one such claim is that the teachers considered the vocabulary demands of the textbook to be unproblematic. Similarly, the group interview responses provided by the learners in the current study can be used to develop survey questions on learners' perceptions of the experience of and beliefs about listening instruction in other contexts.

To develop a better understanding of the sources of vocabulary learning in L2 listening classes, the extent to which this is incidental or relies on learners' deliberate attention on word meaning needs further investigation (Webb, 2019). Options for addressing this point include collecting L2 learners' verbal protocols or the notes they take on vocabulary under different instructional conditions. Importantly, while the current study was naturalistic and sought to understand listening instruction in intact classrooms, the relationship between different kinds of listening instruction and vocabulary learning warrants being tested in more tightly controlled experimental or quasi-experimental studies.

The study also has implications for measuring learners' vocabulary knowledge in relation to L2 listening. Recently updated vocabulary levels tests in both written form such as the Updated Vocabulary Level Test (Webb et al., 2017) and spoken form such as Listening Vocabulary Level Test (McLean et al., 2015) offer promising forms of vocabulary assessment. Furthermore, alternative kinds of pre- and post-tests and delayed post-tests such as recall tests (e.g., Hennebry et al., 2013; Matthews & Chen 2015) could be used. For example, learners could be invited to recall the written and spoken form and meaning of the target words chosen from the classroom teaching materials (e.g., a partial dictation, see Matthews & Chen 2015, for more).

The third future area for research is to expand the scope of vocabulary analysis of EFL listening textbooks. In the current study, more comprehensive data could have been provided if units had been sampled from across the whole textbook series, as Yang and Coxhead (2020) did in investigating the New Concept English textbooks in the Chinese EFL context.

Since vocabulary demands are likely to increase across textbook levels (as shown in Yang & Coxhead, 2020), knowing more precisely the nature of the progression of lexical difficulty of the textbooks would be valuable for curriculum planning. Two additional aspects of lexical profiling that warrant further investigation are the number of repetitions of words in a textbook (Sun & Dang, 2020), and information about the occurrence and frequency of multi-word units/formulaic language in the textbook (Coxhead et al., 2017).

8.6 Closing remarks: Reflecting on the PhD journey

This research was motivated by my listening teaching experiences in a Chinese university. Having taught listening courses for years, I wondered about what I should teach in listening classes from time to time. In addition, I constantly received informal feedback from learners that they seemed to have learnt very little about how to listen after two years of an exclusive listening skills course, especially when they were exposed to the authentic spoken input in English. I was also frustrated about learners' lack of progress in learning vocabulary after my deliberate efforts in teaching vocabulary in listening classes. Before I started the PhD journey, I had no understanding of how I might address these frustrations.

This journey enriched me, as a listening teacher, with research knowledge regarding the cognitive nature of the listening comprehension process, good practices in teaching listening, as well as the complex relationship between vocabulary and listening. I now realize that the main reason behind inadequate listening skill development may lie in the lack of attention paid to the process of listening comprehension. The research also highlighted for me the importance of identifying vocabulary thresholds and the learners' vocabulary levels before implementing any vocabulary teaching practices in listening classes.

The PhD journey also helped me, as a novice researcher in applied linguistics, understand that various factors could contribute to the divergence between research literature and actual practices in L2/EFL classrooms. While empirical research findings suggest that a process-based approach is a better alternative to the product-based approach to teaching listening, contextual factors such as the use of prescribed textbooks and long-lasting test-oriented cognition among teachers and learners in the Chinese EFL context would make it difficult to realize this shift. Furthermore, as long as the product-based approach dominates listening pedagogy, both teachers and learners are likely to struggle to allocate time and effort to vocabulary in listening classes in a systematic manner. Increasing the dialogue between

research and practitioners in terms of exploring the process and factors in teaching and learning in L2/EFL classroom settings would be invaluable in this regard.

References

- Ableeva, R., & Stranks, J. (2013). Listening in another language: Research and materials. In B. Tomlinson (Ed.), *Applied linguistics and materials development* (pp. 199-211). Bloomsbury.
- Alderson, J.C., & Wall, D. (1993). Does washback exist? *Applied Linguistics* 14(2), 115-129.
- Anderson, J. R. (1995). *Cognitive psychology and its implications* (2nd ed.). Freeman.
- Anderson, R. C., & Freebody, P. (1983). Reading comprehension and the assessment and acquisition of word knowledge. *Advances in Reading Language Research*, 2, 231-256.
- Bailey, K. (1996). Working for washback: a review of the washback concept in language testing. *Language Testing* 13(3), 257-279.
- Basturkmen, H., & Ellis, R. (2004). Teachers' stated beliefs about incidental focus on form and their classroom practices. *Applied Linguistics*, 25(2), 243-272.
<https://doi.org/10.1093/applin/25.2.243>
- Basturkmen, H., & Schackelfor, N. (2015). How content lecturers help students with language: An observation study of language-related episodes in interaction in first year accounting classrooms. *English for Specific Purposes*, 37, 87-97.
<https://doi.org/10.1016/j.esp.2014.08.001>
- Bauer, L., & Nation, P. (1993). Word families. *International Journal of Lexicography*, 6(4), 253-279. <https://doi.org/10.1093/ijl/6.4.253>
- Beglar, D. (2010). A Rasch-based validation of the Vocabulary Size Test. *Language Testing*, 27(1), 101-118. <https://doi.org/10.1177/0265532209340194>
- Berne, J. E. (1995). How does varying pre-listening activities affect second language listening comprehension? *Hispania*, 78(2), 316-329. <https://doi.org/10.2307/345428>
- Bonk, W. J. (2000). Second language lexical knowledge and listening comprehension. *International Journal of Listening*, 14(1), 14-31.
<https://doi.org/10.1080/10904018.2000.10499033>
- Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, 36(2), 81-109.
<https://doi.org/10.1017/S0261444803001903>
- Borg, S. (2019). Language teacher cognition: Perspectives and debates. In X. Gao (Ed.), *Second handbook of English language teaching* (pp.1149-1170). Springer.
https://doi.org/10.1007/978-3-030-02899-2_59
- Breen, M. P., Hird, B., Milton, M., Oliver, R., & Thwaite, A. (2001). Making sense of

- language teaching: Teachers' principles and classroom practices. *Applied Linguistics*, 22(4), 470-501. <https://doi.org/10.1093/applin/22.4.470>
- Brown, D. (2010). An improper assumption? The treatment of proper nouns in text coverage counts. *Reading in a Foreign Language*, 22(2), 355-361.
- Brown, G. (1987). Twenty-five years of teaching listening comprehension. *English Teaching Forum*, 25(4), 11-15.
- Brown, R., Waring, R., & Donkaewbua, S. (2008). Incidental vocabulary acquisition from reading, reading-while-listening, and listening to stories. *Reading in a Foreign Language*, 20(2), 136-163.
- Buck, G. (2001). *Assessing Listening*. Cambridge University Press.
- Cauldwell, R.T. (1996). Direct encounters with fast speech on CD Audio to teach listening. *System*, 24(4), 521-528.
- Cauldwell, R.T. (2000). *Grasping the nettle: The importance of perception work in listening comprehension*. The Academia Pages. https://www.academia.edu/568613/Grasping_the_nettle_The_importance_of_perception_work_in_listening_comprehension?
- Chang, A. C. S. (2007). The impact of vocabulary preparation on L2 listening comprehension, confidence and strategy use. *System*, 35(4), 534-550. <https://doi.org/10.1016/j.system.2007.06.003>
- Chang, A. C. S., & Read, J. (2006). The effects of listening support on the listening performance of EFL learners. *TESOL Quarterly*, 40(2), 375-397. <https://onlinelibrary.wiley.com/doi/abs/10.2307/40264527>
- Chen, Y. (2021). Comparing incidental vocabulary learning from reading-only and reading-while-listening. *System*, 97, Article 102442. <https://doi.org/10.1016/j.system.2020.102442>
- Cheng, J., & Matthews, J. (2018). The relationship between three measures of L2 vocabulary knowledge and L2 listening and reading. *Language Testing*, 35(1), 3-25. <https://doi.org/10.1177/0265532216676851>
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213-238. <https://doi.org/10.2307/3587951>
- Coxhead, A., Dang, T.N.Y., & Mukai, S. (2017). Single and multi-word unit vocabulary in university tutorials and laboratories: Evidence from corpora and textbooks. *Journal of English for Academic Purposes*, 30, 66-78. <https://doi.org/10.1016/j.jeap.2017.11.001>
- Coxhead, A., Nation, P. & Sim, D. (2014). Creating and trialling six forms of the Vocabulary

- Size Test. *TESOLANZ Journal*, 22, 13-26.
- Coxhead, A., Stevens, L., & Tinkle, J. (2010). Why might secondary science textbooks be difficult to read? *New Zealand Studies in Applied Linguistics*, 16(2), 37-52.
<https://search.informit.org/doi/10.3316/INFORMIT.893694181605406>
- Coxhead, A., & Walls, R. (2012). TED Talks, vocabulary, and listening for EAP. *TESOLANZ Journal*, 20(1), 55-67.
- Coxhead, A., Rahmat, Y., & Yang, L. (2020). Academic single and multiword vocabulary in EFL textbooks: Case studies from Indonesia and China. *TESOLANZ Journal*, 28, 75-88.
- Cross, J. (2010). Metacognitive instruction for helping less-skilled listeners. *ELT Journal*, 65(4), 408-416. <https://doi.org/10.1093/elt/ccq073>
- Dang, T. N. Y., & Webb, S. (2014). The lexical profile of academic spoken English. *English for Specific Purposes*, 33, 66-76. <https://doi.org/10.1016/j.esp.2013.08.001>
- Dang, T. N. Y., & Webb, S. (2020). Vocabulary instruction and good language teachers In C. Criffliths, Z. Tajeddin, & A. Brown (Eds.), *Lessons from good language teachers* (pp. 203-218). Cambridge University Press.
- Dobinson, T. (2001). Do learners learn from classroom interaction and does the teacher have a role to play? *Language Teaching Research*, 4, 189-211.
<https://doi.org/10.1177/136216880100500302>
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.
- Duff, P. A. (2014). Case study research on language learning and use. *Annual Review of Applied Linguistics*, 34, 233-255. <https://doi.org/10.1017/S0267190514000051>
- Elgort, I. (2013). Effects of L1 definitions and cognate status of test items on the vocabulary size test. *Language Testing*, 30(2), 253-272.
<https://doi.org/10.1177/0265532212459028>
- Elkhafaifi, H. (2005). The effects of prelistening activities on listening comprehension in Arabic learners. *Foreign Language Annals*, 38(4), 505-513.
<https://doi.org/10.1111/j.1944-9720.2005.tb02517.x>
- Ellis, R. (1994). Factors in the incidental acquisition of second language vocabulary from oral input: a review essay. *Applied Language Learning*, 5, 1-32.
- Ellis, R., Basturkmen, H., & Loewen, S. (2001). Preemptive focus on form in the ESL classroom. *TESOL Quarterly*, 35(3), 407-432. <https://doi.org/10.2307/3588029>
- Erten, I. H., & Razi, S. (2009). The effects of cultural familiarity on reading comprehension. *Reading in a Foreign Language*, 21(1), 60-77.

- Feng, Y., & Webb, S. (2019). Learning vocabulary through reading, listening, and viewing. *Studies in Second Language Acquisition* 42, 499-523.
<https://doi.org/doi:10.1017/S0272263119000494>
- Field, J. (2003). Promoting perception: Lexical segmentation in L2 listening. *ELT Journal*, 57(4), 325-334. <https://doi.org/10.1093/elt/57.4.325>
- Field, J. (2008). *Listening in the language classroom*. Cambridge University Press.
- Flavell, J. (1979). Metacognition and cognitive monitoring: A new area of cognitive development inquiry. *American Psychologist*, 34(10), 906-911.
- Flowerdew, J., & Miller, L. (2005). *Second language listening*. Cambridge University Press.
- Folse, K. (2010). Is explicit vocabulary focus the reading teacher's job? *Reading in a Foreign Language*, 22(1), 139. <http://hdl.handle.net/10125/66643>
- Gan, Z. (2009). 'Asian learners' re-examined: An empirical study of language learning attitudes, strategies and motivation among mainland Chinese and Hong Kong students. *Journal of Multilingual and Multicultural Development*, 30(1), 41-58.
<https://doi.org/10.1080/01434630802307890>
- Gao, X. S., & Ma, Q. (2011). Vocabulary learning and teaching beliefs of pre-service and in-service teachers in Hong Kong and mainland China. *Language Awareness*, 20(4), 327-342. <https://doi.org/10.1080/09658416.2011.579977>
- Goh, C. (2000). A cognitive perspective on language learners' listening comprehension problems. *System*, 28(1), 55-75. [https://doi.org/10.1016/S0346-251X\(99\)00060-3](https://doi.org/10.1016/S0346-251X(99)00060-3)
- Goh, C. (2014). Second language listening comprehension: Process and Pedagogy. In D. B. M.Celce-Murcia & M. Snow (Eds.), *Teaching English as a second of foreign language* (4th ed., pp. 72-89). Heinle Cengage/National Geographic Learning.
- Goh, C. (2008). Metacognitive instruction for second language listening development: Theory, practice and research implications. *RELC Journal*, 39(2), 188-213.
<https://doi.org/10.1177/0033688208092184>
- Goh, C. (2018). Building a listening curriculum. In J. M. Newton, D. R. Ferris, C. C. Goh, W. Grabe, F. L. Stoller & L. Vandergrift (Eds.), *Teaching English to Second Language Learners in Academic Contexts* (pp. 145-162). Routledge.
- Goh, C., & Taib, Y. (2006). Metacognitive instruction in listening for young learners. *ELT Journal*, 60(3), 222-232. <https://doi.org/10.1093/elt/ccl002>
- Graham, S. (2006). Listening comprehension: The learners' perspective. *System*, 34(2), 165-182. <https://doi.org/10.1016/j.system.2005.11.001>
- Graham, S. (2017). Research into practice: Listening strategies in an instructed classroom

- setting. *Language Teaching*, 50(1), 107-109.
<https://doi.org/10.1017/S0261444816000306>
- Graham, S., & Macaro, E. (2008). Strategy instruction in listening for lower-intermediate learners of French. *Language Learning*, 58(4), 747-783.
- Graham, S., & Santos, D. (2015). *Strategies for second language listening: Current scenarios and improved pedagogy*. Palgrave Macmillan.
- Graham, S., Santos, D., & Francis-Brophy, E. (2014). Teacher beliefs about listening in a foreign language. *Teaching and Teacher Education*, 40, 44-60.
<https://doi.org/10.1016/j.tate.2014.01.007>
- Graham, S., Santos, D., & Vanderplank, R. (2010). Strategy clusters and sources of knowledge in French L2 listening comprehension. *Innovation in Language Learning and Teaching*, 4(1), 1-20. <https://doi.org/10.1080/17501220802385866>
- Graham, S., Santos, D., & Vanderplank, R. (2011). Exploring the relationship between listening development and strategy use. *Language Teaching Research*, 15(4), 435-456. <https://doi.org/10.1177/1362168811412026>
- Gyllstad, H., Vilkaite, L., & Schmitt, N. (2015). Assessing vocabulary size through multiple-choice formats: Issues with guessing and sampling rates. *International Journal of Applied Linguistics*, 166(2), 278-306. <https://doi.org/10.1075/itl.166.2.04gyl>
- Hasan, A. S. (2010). Learners' perceptions of listening comprehension problems. *Language, Culture and Curriculum*, 13(2), 137-153.
<https://doi.org/10.1080/07908310008666595>
- Haslett, E. (2020). Practitioners respond to Suzanne Graham's 'Research into practice: Listening strategies in an instructed classroom setting'. (2017). *Language Teaching*, 53, 374-377. <https://doi.org/10.1017/S0261444820000142>
- Heatley, A., Nation, I. S. P., & Coxhead, A. (2002). Range: A program for the analysis of vocabulary in texts [software]. Available at
<https://www.wgtn.ac.nz/lals/resources/paul-nations-resources/vocabulary-analysis-programs>
- Hennebry, M., Rodgers, V., Macaro, E., & Murphy, V. (2013). Direct teaching of vocabulary after listening: is it worth the effort and what method is best? *The Language Learning Journal*, 45(3), 282-300. <https://doi.org/10.1080/09571736.2013.849751>
- Hill, D., & Tomlinson, B. (2003). Coursebook listening activities. In B. Tomlinson (Ed.), *Developing materials for language teaching* (pp. 364-374). Bloomsbury.
- Hirsh, D., & Nation, P. (1992). What vocabulary size is needed to read unsimplified texts for

- pleasure? *Reading in a Foreign Language*, 8(2), 689-696.
- Hong, J., & Basturkmen, H. (2020). Incidental attention to academic language during content teaching in two EMI classes in South Korean high schools. *Journal of English for Academic Purposes*, 48, Article 100921. <https://doi.org/10.1016/j.jeap.2020.100921>
- Hsu, W. (2009). College English textbooks for general purposes: A corpus-based analysis of lexical coverage. *Electronic Journal of Foreign Language Teaching*, 6(1), 42-62.
- Hsu, W. (2011). The vocabulary thresholds of business textbooks and business research articles for EFL learners. *English for Specific Purposes*, 30(4), 247-257. <https://doi.org/10.1016/j.esp.2011.04.005>
- Hsu, W. (2014). Measuring the vocabulary load of engineering textbooks for EFL undergraduates. *English for Specific Purposes*, 33, 54-65. <https://doi.org/10.1016/j.esp.2013.07.001>
- Hu, M., & Nation, I. S. P. (2000). Vocabulary density and reading comprehension. *Reading in a Foreign Language*, 13(1), 403-430.
- Huibregtse, I., Admiraal, W., & Meara, P. (2002). Scores on a yes-no vocabulary test: correction for guessing and response style. *Language Testing*, 19(3), 227-245. <https://doi.org/10.1191/0265532202lt229oa>
- Jafari, K., & Hashim, F. (2012). The effects of using advance organizers on improving EFL learners' listening comprehension: A mixed method study. *System*, 40, 270-281. <https://doi.org/10.1016/j.system.2012.04.009>
- Jin, Y., & Fan, J. (2011). Test for English majors (TEM) in China. *Language Testing*, 28(4), 589-596. <https://doi.org/10.1177/0265532211414852>
- Johnson, K. E. (1992). The relationship between teachers' beliefs and practices during literacy instruction for non-native speakers of English. *Journal of reading behavior*, 24(1), 83-108. <https://doi.org/10.1080/10862969209547763>
- Karami, H. (2012). The development and validation of a bilingual version of the Vocabulary Size Test. *RELC journal*, 43(1), 53-67. <https://doi.org/10.1177/0033688212439359>
- Keuleers, E., & Brysbaert, M. (2010). Wuggy: A multilingual pseudoword generator. *Behavior Research Methods*, 42(3), 627-633. <https://link.springer.com/article/10.3758/BRM.42.3.627>
- Kissling, E. M. (2014). Phonetics instruction improves learners' perception of L2 sounds. *Language Teaching Research*, 19(3), 254-275. <https://doi.org/10.1177/1362168814541735>
- Kissling, E. M. (2018). Pronunciation instruction can improve L2 Learners' bottom-up

- processing for listening. *The Modern Language Journal*, 102(4), 653-675.
<https://doi.org/10.1111/modl.12512>
- Klassen, K. (2018). Investigating the lexical load of proper names for L2 English readers [Unpublished PhD Thesis]. Cardiff University. <http://orca.cf.ac.uk/id/eprint/115343>
- Klassen, K. (2021). Proper name theory and implications for second language reading. *Language Teaching*, 1-7. <http://doi:10.1017/S026144482100015X>
- Kobeleva, P. P. (2012). Second language listening and unfamiliar proper names: Comprehension barrier? *RELC Journal*, 43(1), 83-98.
<https://doi.org/10.1177/0033688212440637>
- König, J., Calude, A.S., & Coxhead, A. (2019). Using character-grams to automatically generate pseudowords and how to evaluate them. *Applied Linguistics*, 41(6), 1-24.
<https://doi.org/10.1093/applin/amz045>
- Laufer, B. (1989). How much lexis is necessary for reading comprehension? In P.J.L. Arnaud & H. Béjoint (Eds.), *Vocabulary and applied linguistics* (pp. 126-132). Springer.
- Laufer, B., & Girsai, N. (2008). Form-focused instruction in second language vocabulary learning: a case for contrastive analysis and translation. *Applied Linguistics*, 29(4), 694-716. <https://doi.org/10.1093/applin/amn018>
- Laufer, B., & Ravenhorst-Kalovski, G. C. (2010). Lexical threshold revisited: Lexical text coverage, learners' vocabulary size and reading comprehension. *Reading in a Foreign Language*, 22(1), 15-30. <http://hdl.handle.net/10125/66648>
- Lee, J. H., & Levine, G. S. (2020). The effects of instructor language choice on second language vocabulary learning and listening comprehension. *Language Teaching Research*, 24(2), 250-272. <https://doi.org/10.1177/1362168818770910>
- Macalister, J. (2012). Pre-service teacher cognition and vocabulary teaching. *RELC journal*, 43(1), 99-111. <https://doi.org/10.1177/0033688212439312>
- Mackey, A., & Gass, S. M. (2015). *Second language research: Methodology and design*. Routledge.
- Madarbakus, N. (2021). *Using metacognitive strategy instruction in a TED Talks-based L2 listening programme* [Unpublished PhD Thesis]. Victoria University of Wellington.
- Matsuoka, W., & Hirsh, D. (2010). Vocabulary learning through reading: Does an ELT course book provide good opportunities? *Reading in a Foreign Language*, 22(1), 56-70.
- Matthews, J. (2018). Vocabulary for listening: Emerging evidence for high and mid-frequency vocabulary knowledge. *System*, 72, 23-36.
<https://doi.org/10.1016/j.system.2017.10.005>

- Matthews, J., & Cheng, J. (2015). Recognition of high frequency words from speech as a predictor of L2 listening comprehension. *System*, 52, 1-13.
<https://doi.org/10.1016/j.system.2015.04.015>
- McAndrews, M. (2020). Practitioners respond to Suzanne Graham's 'Research into practice: Listening strategies in an instructed classroom setting'. (2017). *Language Teaching*, 53, 371-373. <https://doi.org/10.1017/S0261444820000130>
- McLaughlin, E., & Parkinson, J. (2018). 'We learn as we go': How acquisition of a technical vocabulary is supported during vocational training. *English for Specific Purposes*, 50, 14-27. <https://doi.org/10.1016/j.esp.2017.11.003>
- McLean, S., Kramer, B., & Beglar, D. (2015). The creation and validation of a listening vocabulary levels test. *Language Teaching Research*, 19(6), 741-760.
<https://doi.org/10.1177/1362168814567889>
- Meara, P., & Buxton, B. (1987). An alternative to multiple choice vocabulary tests. *Language Testing*, 4(2), 142-154. <https://doi.org/10.1177/026553228700400202>
- Mecartty, F. H. (2000). Lexical and grammatical knowledge in reading and listening comprehension by foreign language learners of Spanish. *Applied Language Learning*, 11(2), 323-348.
- Milton, J., & Hopkins, N. (2006). Comparing phonological and orthographic vocabulary size: Do vocabulary tests underestimate the knowledge of some learners? *Canadian Modern Language Review*, 63(1), 127-147. <https://doi.org/10.3138/cmlr.63.1.127>
- Milton, J., Wade, J., & Hopkins, N. (2010). Aural word recognition and oral competence in a foreign language. In R. Chacón-Beltrán, C. Abello-Contesse, M. Torreblanca-López, & M.D. López-Jiménez (Eds.), *Further insights into nonnative vocabulary teaching and learning* (pp.83–97). Multilingual Matters.
- Miralpeix, I., & Muñoz, C. (2018). Receptive vocabulary size and its relationship to EFL language skills. *International Review of Applied Linguistics in Language Teaching*, 56(1), 1-24. <https://doi.org/10.1515/iral-2017-0016>
- Mochida, K., & Harrington, M. (2006). The Yes/No test as a measure of receptive vocabulary knowledge. *Language Testing*, 23(1), 73-98.
<https://doi.org/10.1191/0265532206lt321oa>
- Montero Perez, M., Peters, E., Clarebout, G., & Desmet, P. (2014). Effects of captioning on video comprehension and incidental vocabulary learning. *Language Learning & Technology*, 18(1), 118-141. <https://lirias.kuleuven.be/108770?limo=0>
- Moir, J., & Nation, I. S. P. (2002). Learners' use of strategies for effective vocabulary

- learning. *Prospect*, 17(1), 15-35.
- Nassaji, H. (2012). The relationship between SLA research and language pedagogy: Teachers' perspectives. *Language Teaching Research*, 16(3), 337-365.
<https://doi.org/10.1177/1362168812436903>
- Nation, I. S. P. (n.d). *Vocabulary size test instructions and description*.
<https://www.wgtn.ac.nz/lals/resources/paul-nations-resources/vocabulary-tests>
- Nation, I.S.P. (1983). Testing and teaching vocabulary. *Guidelines*, 5(1), 12-24.
- Nation, I. S. P. (2004). A study of the most frequent word families in the British National Corpus. In Bogaards, P., & Laufer, B (Eds.), *Vocabulary in a second language: Selection, acquisition, and testing* (pp.3-13). John Benjamins Publishing Company.
- Nation, I. S. P. (2006). How large a vocabulary is needed for reading and listening? *Canadian Modern Language Review*, 63(1), 59-82. <https://doi.org/10.3138/cmlr.63.1.59>
- Nation, I. S. P. (2008). *Teaching vocabulary: Strategies and techniques*. Heinle Cengage Learning.
- Nation, I. S. P. (2018). The BNC/COCA word family lists [Data File]. Available from
https://www.wgtn.ac.nz/_data/assets/pdf_file/0004/1689349/Information-on-the-BNC_COCA-word-family-lists-20180705.pdf
- Nation. I. S. P. (2013). *Learning vocabulary in another language*. Cambridge University Press.
- Nation, I. S. P. (2016). *Making and using word lists for language learning and testing*. John Benjamins Publishing Company.
- Nation, I. S. P., & Beglar, D. (2007). A vocabulary size test. *The Language Teacher*, 31(7), 9-13.
- Nation, I. S. P. & Coxhead, A. (2021). *Measuring native-speaker vocabulary size*. John Benjamins Publishing Company.
- Nation, I.S.P., & Wang, K. (1999). Graded readers and vocabulary. *Reading in a Foreign Language*, 12(2), 355-380.
- Nation, I. S. P., & Webb, S. A. (2011). *Researching and analyzing vocabulary*. Heinle, Cengage Learning.
- Newton, J. (2019). Approaches to learning vocabulary inside the classroom. In S. Webb (Ed.), *The Routledge handbook of vocabulary studies* (pp. 255-270). Routledge.
- Nguyen, L. T. C., & Nation, I. S. P. (2011). A bilingual vocabulary size test of English for Vietnamese learners. *RELC Journal*, 42(1), 86-99.
<https://doi.org/10.1177/0033688210390264>

- Nural, S. (2014). *EAP teachers' cognitions and practices in teaching lexis in two Turkish private universities: an exploratory qualitative study* [Unpublished PhD Thesis]. University of Leicester.
- Pan, Y. C., Tsai, T. H., Huang, Y. K., & Liu, D. (2018). Effects of expanded vocabulary support on L2 listening comprehension. *Language Teaching Research*, 22(2), 189-207. <https://doi.org/10.1177/1362168816668895>
- Pavia, N., Webb, S., & Faez, F. (2019). Incidental vocabulary learning through listening to songs. *Second Language Acquisition*, 41, 745-768. <https://doi.org/10.1017/S0272263119000020>
- Pellicer-Sánchez, A., & Schmitt, N. (2012). Scoring Yes–No vocabulary tests: Reaction time vs. nonword approaches. *Language Testing*, 29(4), 489-509. <https://doi.org/10.1177/0265532212438053>
- Peters, E., & Webb, S. (2018). Incidental vocabulary acquisition through viewing L2 television and factors that affect learning. *Studies in Second Language Acquisition*, 40, 551-577. <https://doi.org/10.1017/S0272263117000407>
- Phipps, S., & Borg, S. (2009). Exploring tensions between teachers' grammar teaching beliefs and practices. *System*, 37(3), 380-390. <https://doi.org/10.1016/j.system.2009.03.002>
- Pujadas, G., & Muñoz, C. (2019). Extensive viewing of captioned and subtitled TV series: a study of L2 vocabulary learning by adolescents. *The Language Learning Journal*, 47(4), 479-496. <https://doi.org/10.1080/09571736.2019.1616806>
- Quero, B. (2015). *Estimating the vocabulary size of L1 Spanish ESP learners and the vocabulary load of medical textbooks* [Doctoral thesis, Victoria University of Wellington]. ResearchArchive. <http://researcharchive.vuw.ac.nz/handle/10063/8754>
- Read, J. (1993). The development of a new measure of L2 vocabulary knowledge. *Language Testing*, 10(3), 355-371. <https://doi.org/10.1177/026553229301000308>
- Read, J. (2000). *Assessing vocabulary*. Cambridge University Press.
- Richards, J. (1983). Listening comprehension: Approach, Design, Procedure. *TESOL Quarterly*, 17(2), 219-240. <https://doi.org/10.2307/3586651>
- Rost, M. (2011). *Teaching and researching: Listening* (2nd ed.). Pearson Education Limited.
- Santos, D. (2015). Revising listening materials: What remains, what is changed and why. *The European Journal of Applied Linguistics and TEFL*, 4(2), 19-36.
- Schmidt, R. W. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129-158. <https://doi.org/10.1093/applin/11.2.129>
- Schmitt, N. (2008). Instructed second language vocabulary learning. *Language Teaching*

- Research*, 12(3), 329-363. <https://doi.org/10.1177/1362168808089921>
- Schmitt, N., Jiang, X., & Grabe, W. (2011). The percentage of words known in a text and reading comprehension. *The Modern Language Journal*, 95(1), 26-43.
<https://doi.org/10.1111/j.1540-4781.2011.01146.x>
- Schmitt, N., Nation, I. S. P., & Kremmel, B. (2020). Moving the field of vocabulary assessment forward: The need for more rigorous test development and validation. *Language teaching*, 53(1), 109-120. <https://doi.org/10.1017/S0261444819000326>
- Schmitt, N., & Schmitt, D. (2014). A reassessment of frequency and vocabulary size in L2 vocabulary teaching. *Language Teaching*, 47(4), 484-503.
<https://doi.org/10.1017/S0261444812000018>
- Schmitt, N., Schmitt, D., & Clapham, C. (2001). Developing and exploring the behaviour of two new versions of the Vocabulary Levels Test. *Language Testing*, 18(1), 55-88.
<https://doi.org/10.1177/026553220101800103>
- She, H. C. (2000). The interplay of a biology teacher's beliefs, teaching practices and gender-based student-teacher classroom interaction. *Educational Research*, 42(1), 100-111.
<https://doi.org/10.1080/001318800363953>
- Siegel, J. (2013). Second language learners' perceptions of listening strategy instruction. *Innovation in Language Learning and Teaching*, 7(1), 1-18.
<https://doi.org/10.1080/17501229.2011.653110>
- Siegel, J. (2014). Exploring L2 listening instruction: Examinations of practice. *ELT Journal*, 68(1), 22-30. <https://doi.org/10.1093/elt/cct058>
- Siegel, J., & Siegel, A. (2015). Getting to the bottom of L2 listening instruction: Making a case for bottom-up activities. *Studies in Second Language Learning and Teaching*, 5(4), 637-662. <https://www.ceeol.com/search/article-detail?id=330127>
- Simpson, K. (2021). Practitioners respond to Suzanne Graham's 'Research into practice: Listening strategies in an instructed classroom setting'. *Language Teaching*, 54(1), 152-155. <https://doi.org/10.1017/S0261444820000531>
- Sonbul, S., & Schmitt, N. (2010). Direct teaching of vocabulary after reading: is it worth the effort? *ELT Journal*, 64(3), 253-260. <https://doi.org/10.1093/elt/ccp059>
- Stæhr, L. S. (2008). Vocabulary size and the skills of listening, reading and writing. *Language Learning Journal*, 36(2), 139-152. <https://doi.org/10.1080/09571730802389975>
- Stæhr, L. S. (2009). Vocabulary knowledge and advanced listening comprehension in English as a foreign language. *Studies in Second Language Acquisition*, 31(4), 577-607.
<https://www.jstor.org/stable/44485886>

- Stoeckel, T., McLean, S., & Nation, P. (2020). Limitations of size and levels tests of written receptive vocabulary knowledge. *Studies in Second Language Acquisition*, 1-23.
<https://doi.org/10.1017/S027226312000025X>
- Sun, Y., & Dang, T. N. Y. (2020). Vocabulary in high-school EFL textbooks: Texts and learner knowledge. *System*, 93, Article 102279.
<https://doi.org/10.1016/j.system.2020.102279>
- Swan, M., & Walter, C. (2017). Misunderstanding comprehension. *ELT Journal*, 71(2), 228-236. <https://doi.org/10.1093/elt/ccw094>
- Tegge, F. (2017). The lexical coverage of popular songs in English language teaching. *System*, 67, 87-98. <https://doi.org/10.1016/j.system.2017.04.016>
- Tian, L., & Macaro, E. (2012). Comparing the effect of teacher codeswitching with English-only explanations on the vocabulary acquisition of Chinese university students: a lexical Focus-on-Form study. *Language Teaching Research*, 16(3), 367-391.
<https://doi.org/10.1177/1362168812436909>
- van Zeeland, H. (2017). Four studies on vocabulary knowledge in and from listening: findings and implications for future research. *Language teaching*, 50(1), 143-150.
<https://doi.org/10.1017/S0261444816000318>
- van Zeeland, H., & Schmitt, N. (2013a). Lexical coverage in L1 and L2 listening comprehension: The same or different from reading comprehension? *Applied Linguistics*, 34(4), 457-479. <https://doi.org/10.1093/applin/ams074>
- van Zeeland, H., & Schmitt, N. (2013b). Incidental vocabulary acquisition through L2 listening: A dimensions approach. *System*, 41(3), 609-624.
<https://doi.org/10.1016/j.system.2013.07.012>
- Vandergrift, L., & Goh, C. (2018). How listening comprehension works. In J. M. Newton, D. R. Ferris, C. C. Goh, W. Grabe, F. L. Stoller, & L. Vandergrift (Eds.), *Teaching English to Second Language Learners in Academic Context* (pp. 125-144). Routledge.
- Vandergrift, L. (2004). Listening to learn or learning to listen? *Annual Review of Applied Linguistics*, 24, 3-25. <https://doi.org/10.1017/S0267190504000017>
- Vandergrift, L., & Baker, S. (2015). Learner variables in second language listening comprehension: an exploratory path analysis. *Language Learning*, 65(2), 390-416.
<https://doi.org/10.1111/lang.12105>
- Vandergrift, L., & Goh, C. (2012). *Teaching and learning second language listening: Metacognition in action*. Routledge.
- Vandergrift, L., & Tafaghodtari, M. H. (2010). Teaching L2 learners how to listen does make

- a difference: An empirical study. *Language Learning*, 60(2), 470-497.
<https://doi.org/10.1111/j.1467-9922.2009.00559.x>
- Vidal, K. (2003). Academic listening: A source of vocabulary acquisition? *Applied Linguistics*, 24(1), 56-89. <https://doi.org/10.1093/applin/24.1.56>
- Vidal, K. (2011). A comparison of the effects of reading and listening on incidental vocabulary acquisition. *Language Learning*, 61(1), 219-258.
<https://doi.org/10.1111/j.1467-9922.2010.00593.x>
- Wall, D. (2000). The impact of high-stakes testing on teaching and learning: can this be predicted or controlled? *System*, 28(4), 499-509.
- Wallace, M. P. (2020). Individual differences in second language listening: Examining the role of knowledge, metacognitive awareness, memory, and attention. *Language Learning*, 00(0), 1- 40. <https://doi.org/10.1111/lang.12424>
- Webb, S. A. (2019). Incidental vocabulary learning. In S. Webb (Ed.), *The Routledge handbook of vocabulary studies* (pp. 225-239). Routledge.
- Webb, S. A., & Chang, A. C. S. (2012). Second language vocabulary growth. *RELC journal*, 43(1), 113-126. <https://doi.org/10.1177/0033688212439367>
- Webb, S. A., & Chang, A. C. S. (2015). Second language vocabulary learning through extensive reading with audio support: How do frequency and distribution of occurrence affect learning? *Language Teaching Research*, 19(6), 667-686.
<https://doi.org/10.1177/1362168814559800>
- Webb, S. A., & Nation, I. S. P. (2008). Evaluating the vocabulary load of written text. *TESOLANZ Journal*, 16, 1-10.
- Webb, S. A., & Rodgers, M. P. H. (2009a). The lexical coverage of movies. *Applied Linguistics*, 30(3), 407-427. <https://doi.org/10.1093/applin/amp010>
- Webb, S. A., & Rodgers, M. P. H. (2009b). Vocabulary demands of television programs. *Language Learning*, 59(2), 335-366. <https://doi.org/10.1111/j.1467-9922.2009.00509.x>
- Webb, S. A. & Paribakht, T. S. (2015). What is the relationship between the lexical profile of test items and performance on a standardized English proficiency test? *English for Specific Purposes*, 38, 34-43. <https://doi.org/10.1016/j.esp.2014.11.001>
- Webb, S. A, Sasao, Y., & Ballance, O. (2017). The updated vocabulary level test: developing and validating two new forms of the VLT. *International Journal of Applied Linguistics*, 168(1), 33-69. <https://doi.org/10.1075/itl.168.1.02web>
- West, M. (1953). *A general service list of English words: with semantic frequencies and a*

- supplementary word-list for the writing of popular science and technology*. Addison-Wesley Longman Limited.
- Wilson, M. (2003). Discovery listening - improving perceptual processing. *ELT Journal*, 57(4), 335-343. <https://doi.org/10.1093/elt/57.4.335>
- Wiseman, S. (1961). *Examinations and English Education*. Manchester University Press.
- Xie, X. Y. (2013). Vocabulary explanation in English-major university classrooms in China. *ELT Journal*, 67(4), 435-445. <https://doi.org/10.1093/elt/cct031>
- Yang, L., & Coxhead, A. (2020). A corpus-based study of vocabulary in the New Concept English textbook series. *RELC Journal*, Article 0033688220964162. <https://doi.org/10.1177/0033688220964162>
- Yeldham, M. (2016). Second language listening instruction: comparing a strategies-based approach with an interactive, strategies/bottom-up skills approach. *TESOL Quarterly*, 50(2), 394-420. <https://doi.org/10.1002/tesq.233>
- Yeldham, M., & Gruba, P. (2014). Toward an instructional approach to developing interactive second language listening. *Language Teaching Research*, 18(1), 33-53. <https://doi.org/10.1177/1362168813505395>
- Yeldham, M., & Gruba, P. (2016). The development of individual learners in an L2 listening strategies course. *Language Teaching Research*, 20(1), 9-34. <https://doi.org/10.1177/1362168814541723>
- Zhang, P., & Graham, S. (2019). Vocabulary learning through listening: comparing L2 explanations, teacher codeswitching, contrastive focus-on-form and incidental learning. *Language Teaching Research*, 1-20. <https://doi.org/10.1177/1362168819829022>
- Zhang, P., & Graham, S. (2020). Learning vocabulary through listening: the role of vocabulary knowledge and listening proficiency. *Language Learning*, 00(0), 1-37. <https://doi.org/10.1111/lang.12411>
- Zhang, X. (2020). Evaluation of suitability of a listening textbook for English Majors in universities of China. *Advances in Language and Literary Studies*, 11(4), 87-94. <http://doi.org/10.7575/aiac.all.v.11n.4p.87>

Appendices

Appendix A. Ethics approval and amendments

Ethics Approval



Phone 0-4-463 6028
Email judith.loveridge@vuw.ac.nz

MEMORANDUM

TO	Judy Wei
FROM	Dr Judith Loveridge, Convenor, Human Ethics Committee
DATE	9 November 2018
PAGES	1
SUBJECT	Ethics Approval Number: 26631 Title: Investigating English listening classes in a Chinese university from the perspective of vocabulary

Thank you for your application for ethical approval, which has now been considered by the Human Ethics Committee.

Your application has been approved from the above date and this approval is valid for three years. If your data collection is not completed by this date you should apply to the Human Ethics Committee for an extension to this approval.

Best wishes with the research.

Kind regards,



Judith Loveridge
Convenor, Victoria University of Wellington Human Ethics Committee

Summary of ethics amendments

Amendments	Date of application	Date of approval	Reason for amendments
1 st amendment	22 Jan 2019	28 Jan 2019	Piloting Yes/No task in Wellington
2 nd amendment	11 Mar 2019	20 Mar 2019	A part related to Yes/No task is added into the interview schedule
3 rd amendment	2 May 2019	14 May, 2019	Extend the time length of interviews and focus group discussions
4 th amendment	19 Mar 2021	23 Mar 2021	Invite raters for inter-rater analysis Change thesis title

Appendix B. Samples of information sheets and consent forms



Information Sheet for Teacher Participants

School of Linguistics and Applied Language Studies, Victoria University of Wellington

Research project: An Investigation on EFL listening classes for English-major undergraduates of a Chinese University

Researcher: Wei Wei (Judy)

I would like to invite you to take part in a research project which aims to investigate English as Foreign Language (EFL) listening classes for Chinese students at the university level in China. You are invited because you are teaching such listening classes in your university. This research project is work towards my thesis, and it has been approved by the Human Ethics Committee of Victoria University of Wellington, New Zealand (Application number: 0000026631).

If you decide to participate, your participation will be in the form of classroom observation, recall interview and follow-up individual interview. First of all, I will enter into your listening classrooms, observe and videotape your teaching sessions for one or two listening units.

Then I will invite you to take part in a 10-15 minute recall interview within 2 days after the observed listening lessons for one unit (it will be twice if two units are observed). Finally, I will invite you to take part in a 30-minute follow-up interview one week after all observations and recall interviews are completed. During the recall interviews, I will invite you to watch the recorded clips of observed classes and ask you questions about your behaviors in the observed listening classes. I will also invite you to share with me your teaching plans or instructional slides for the recall interview. During the follow-up interview, I will ask you about your beliefs in language teaching in listening classes. I may request to use your office to conduct the recall interviews and follow-up interviews, and your interaction during these interviews will be audiotaped.

Your participation in this research is entirely voluntary. You are free to decline or withdraw from the study at any time without giving any reasons. If you withdraw in the middle of the study, the information you provided will be destroyed or returned to you. The recordings of classroom clips as well as your interactions in recall interviews and follow-up interviews will be destroyed as soon as I finish the transcriptions. You can also withdraw any information you have provided by contacting me at any time before 30 June, 2019.

If you agree to participate, you have the rights to ask any questions about the study at any time and to ask for the video/audio recorder to be turned off at any time during the observation, recall and follow-up interviews. You will receive a voucher at up to 20 NZ dollars as a token of appreciation for your participation regardless whether you withdraw in the middle of these interviews. Also, you will receive written summaries of your classroom observation, recall and follow-up interviews as well as the research findings to reflect on your listening teaching, on request.

This research is confidential. This means no other person besides me and my supervisors will be aware of your identity but the research data will be combined and your identity will not be revealed in any reports, presentations, or public documentation. All the identifiable data you provided will be kept securely until 31 December, 2020 (the end date of my PhD research project) and then it will turn to de-identifiable data which will be kept securely and destroyed after 31 December, 2025 (i.e., 5 years after my PhD study ends, for the purpose of future research). All the collected data will only be used in my PhD dissertation and/or academic publications and conference presentations. Whenever data from this study are published, your name will not be used.

If you do decide to participate, please sign the consent form below.

Thank you very much for your time. If you have any questions, either now or in the future, please feel free to contact:

Wei Wei (Judy)
Role: PhD student

Associate Professor Jonathan Newton
Role: Primary Supervisor

School of Linguistics and Applied Language
Studies

Victoria University of Wellington

PO Box 600, Wellington 6140, New Zealand

Phone: +64 21 087 34415/ +86 13870930286

Email: Judy.Wei@vuw.ac.nz

School of Linguistics and Applied Language
Studies

Victoria University of Wellington

PO Box 600, Wellington 6140, New Zealand

Phone: +64 4 463 5622

Email: Jonathan.Newton@vuw.ac.nz

Human Ethics Committee information

If you have any concerns about the ethical conduct of the research you may contact the

Victoria University HEC Convenor: Dr Judith Loveridge. Email hec@vuw.ac.nz or telephone
+64-4-463 6028.



研究情况说明

(教师参与者使用)

惠灵顿维多利亚大学 语言学与应用语言学学院

研究项目名称：基于中国高校英语专业听力课程的课堂研究

研究人：魏薇

今邀请你参加一项研究，其目的在于探索中国高校英语专业的听力课堂。你被邀请是因为你是本学期教授了为英语专业学生开设的听力课程。此项研究为我正在进行的博士项目，并已得到惠灵顿维多利亚大学人伦道德委员会的批准（申请编号：0000026631）。

如果你选择参加，我将会在你的听力课堂内及课后安排以下一系列数据收集：课程观察，刺激回忆访谈和个人访谈。首先，我会观察并录像你所教授的一或两个单元的听力课程。每个单元的课程结束两天内，我会邀请你观看所拍摄的课堂录像，请你分享所使用的教案或可见，并以此请你对听力课堂实践进行回忆和解释。如果所观察的课程为两个单元，则进行两次回忆访谈。所有回忆访谈结束一周后，我将会对你进行大约 30 分钟的个人访谈，邀请你对听力课程的教学发表看法。所有访谈将会被现场录音。

参与本次数据收集完全出于自愿。你有权拒绝参加，亦有权在数据收集过程中随时退出。如果你选择中途退出，你所提供的所有信息将会返还给你或者销毁。所有摄像及录音材料将在数据转换完成之后销毁。你亦可以在 2019 年 6 月 30 日之前随时联系我提出请求收回你所提供的数据。

如果你同意参加，你有权在数据收集过程中随时提出疑问，也有权随时要求关闭课程观察中的摄录机和访谈中的录音机。不论你是否中途退出，你都将会收到价值 20 元新

西兰币的购物券作为感谢。此外，你亦可通过提出要求，收到一份课程观察，回忆访谈和焦点小组的总结报告，帮助你进一步思考自己在听力课堂中的教学过程。

你在该项研究中所提供的所有数据均为保密信息。只有研究人本人及其导师有权接触你的个人信息以及你所提供的数据，且仅用于学术研究用途。你的个人信息不会出现在任何公开发表的报告，讲座或论文中。你所提供的数据将在 2020 年 12 月 31 日（博士项目拟结束时）之后转为不带个人信息的数据，并在 2025 年 12 月 31 日（博士项目结束后五年）之后彻底销毁。所有数据在销毁前将会安全保存，并仅用于研究人的博士论文，学术期刊发表和学术会议演讲等学术用途。

若你决定参加此项测试，请签署下方的数据收集同意书。

非常感谢你的配合。如有任何问题，请随时联系：

魏薇

博士研究生

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PO Box 600, Wellington 6140, New Zealand

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邮箱: Judy.Wei@vuw.ac.nz

副教授 Jonathan Newton

博士生导师

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学学院

PO Box 600, Wellington 6140, New Zealand

电话: +64 4 463 5622

邮箱: Jonathan.Newton@vuw.ac.nz

人伦道德委员会信息

如您对该项研究的人伦道德规范有任何疑问，亦可联系惠灵顿维多利亚大学人伦道德委员会主席 Judith Loveridge 博士，邮箱: hec@vuw.ac.nz；电话: +64-4-463 6028。



**Information Sheet for Learner Participants for Stimulated Recall and Focus Group
School of Linguistics and Applied Language Studies, Victoria University of Wellington**

**Research project: An Investigation on EFL listening classes for English-major
undergraduates of a Chinese University**

Researcher: Wei Wei (Judy)

I would like to invite you to take part in a research project which aims to investigate English as Foreign Language (EFL) listening classes for Chinese students at university in China. You are invited because you are attending such listening classes in your university. This research project is working towards my thesis, and it has been approved by the Human Ethics Committee of Victoria University of Wellington, New Zealand (Application number: 0000026631).

If you decide to participate, your participation will be in the form of stimulated recall interviews and focus group discussions. First of all, I will invite you to take part in a 10-15 minute recall interview within 2 days after the observed listening lessons for one unit (it will be twice if two units are observed). I may request you to watch recorded clips of observed listening classes and share your listening textbook for the recall interview, and then ask you questions about the observed listening classes. Then, I will invite you and other participants to attend a 30-minute's focus group discussion one week after the recall interviews. During the focus group discussion, I will ask you and other participants questions about your beliefs about learning in your listening classes. The recall interview and focus group will be conducted in one of your teacher's offices and they will be audiotaped.

Your participation in this research project is entirely voluntary. You do not have to accept this invitation if you don't want to. You are free to leave the study at any time without any reasons. Your decision will not affect your course performances in the university. If you withdraw, the information you provided will be destroyed or returned to you. However, it will not be possible to withdraw the information you have provided up to certain point during the

process of focus group as it will be part of a discussion with other participants. You can also ask for the recorder to be turned off at any time of the recall interviews and / or focus group discussions. The recordings of your interactions in recall interviews and focus group discussions will be destroyed as soon as I finish the transcriptions and you can withdraw any information you have provided by contacting me at any time before 30 June, 2019.

If you agree to participate, you have the rights to ask any questions about the study at any time and to ask for the audio recorder to be turned off at any time during the recall interview and focus group. You will receive a voucher at up to 20 NZ dollars as a token of appreciation for your participation regardless whether you withdraw in the middle of the recall interviews and focus group discussions. Also, you will receive written summaries of the recall interviews and focus group discussion to improve your awareness about your learning in listening classes, on request.

This research is confidential. This means no other person besides me and my supervisors will be aware of your identity but the research data will be combined and your identity will not be revealed in any reports, presentations, or public documentation. All the identifiable data you provided will be kept securely until 31 December, 2020 (the end date of my PhD research project) and then it will turn to de-identifiable data which will be kept securely and destroyed after 31 December, 2025 (i.e. 5 years after my PhD study ends, for the purpose of future research). All the collected data will only be used in my PhD dissertation and/or academic publications and conference presentations. Whenever data from this study are published, your name will not be used.

If you do decide to participate, please sign the consent form below.

Thank you very much for your time. If you have any questions, either now or in the future, please feel free to contact:

Human Ethics Committee information

If you have any concerns about the ethical conduct of the research you may contact the Victoria University HEC Convenor: Dr Judith Loveridge. Email hec@vuw.ac.nz or telephone +64-4-463 6028.



研究情况说明

(参与刺激回忆访谈和焦点小组的学生使用)

惠灵顿维多利亚大学 语言学与应用语言学学院

研究项目名称：基于中国高校英语专业听力课程的课堂研究

研究人：魏薇

今邀请你参加一项研究，其目的在于探索中国高校英语专业的听力课堂。你被邀请是因为你是本学期参加了听力课堂的英语专业学生。此项研究为我正在进行的博士项目，并已得到惠灵顿维多利亚大学人伦道德委员会的批准（申请编号：0000026631）。

若你决定参加，我将会邀请你在听力课程结束后参与刺激性回忆访谈和焦点小组讨论。首先，回忆行访谈在一个单元的听力课程观察结束两天内进行（若观察了两个单元的课程，则进行两次），时长大约为 10-15 分钟。我将会邀请你观看所拍摄的听力课堂片段，提供你的听力教材，并以此为参考请你们进行对该你的听力课堂实践进行回忆及解释。回忆性访谈结束一周后，我将会邀请你与其他同学进行大约 30 分钟的焦点小组讨论，组织大家就听力课堂中的语言学习观念进行讨论。所有访谈及讨论将在教师办公室里进行，并会进行现场录音。

参与本次数据收集完全出于自愿。你有权拒绝参加，亦有权在数据收集过程中随时退出。你的决定不会影响到你在本校任何课程的成绩。如果你选择中途退出，你所提供的所有信息将会返还给你或者销毁。需要注意的是，如果你在焦点小组讨论开始之后选择中途退出，你之前所提供的数据则需要保留，因为那属于小组讨论的一部分。你有权在访谈和讨论过程中提出关闭录音的要求。所有录音材料将在数据转换完成之后销毁。你亦可以在 2019 年 6 月 30 日之前随时联系我提出请求收回你所提供的数据。

如果你同意参加，你有权在数据收集过程中随时提出疑问，也有权随时要求关闭录音

机。不论你是否中途退出，你都将会收到价值 20 元新西兰币的购物券作为感谢。此外，你亦可通过提出要求，收到一份回忆访谈和焦点小组的总结报告，帮助你进一步思考自己在听力课堂中的学习过程。

你在该项研究中所提供的所有数据均为保密信息。只有研究人本人及其导师有权接触你的个人信息以及你所提供的数据，且仅用于学术研究用途。你的个人信息不会出现在任何公开发表的报告，讲座或论文中。你所提供的数据将在 2020 年 12 月 31 日（博士项目拟结束时）之后转为不带个人信息的数据，并在 2025 年 12 月 31 日（博士项目结束后五年）之后彻底销毁。所有数据在销毁前将会安全保存，并仅用于研究人的博士论文，学术期刊发表和学术会议演讲等学术用途。

若你决定参加此项测试，请签署下方的数据收集同意书。

非常感谢你的配合。如有任何问题，请随时联系：

魏薇

博士研究生

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副教授 Jonathan Newton

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电话: +64 4 463 5622

邮箱: Jonathan.Newton@vuw.ac.nz

人伦道德委员会信息

如您对该项研究的人伦道德规范有任何疑问，亦可联系惠灵顿维多利亚大学人伦道德委员会主席 Judith Loveridge 博士，邮箱: hec@vuw.ac.nz；电话: +64-4-463 6028



教师参与者同意书

该同意书可保存五年

惠灵顿维多利亚大学 语言学与应用语言学学院
研究项目名称： 基于中国高校英语专业听力课程的课堂研究
研究人： 魏薇

我已对该研究项目的数据收集细节有了充分的了解。我的疑问都得到了满意的回答。我明白如有任何其他疑问，可以在任何时候想研究人提出。我亦明白我可以中途随时退出研究而不会因此受到任何影响。

我同意研究人以学术研究为目的进入我的听力课堂进行观察。

我同意提供我的听力课堂教案或课件。

我同意在我的听力课堂内录像。

我同意参加回忆性访谈和个人访谈。

我同意在访谈过程中录音。

关于该项数据收集，我明白：

- 我可以在 2019 年 6 月 30 日之前提出请求撤回我所提供的任何数据，这些数据和信息将会返还给我或销毁。
- 数据中有关我的个人信息将会在 2020 年 12 月 31 日之后抹去，转为不可识别个人信息的数据。
- 我所提供的任何信息均为保密信息，仅为研究人及其导师可以接触。不可识别个人信息的数据将在 2025 年 12 月 31 日之后全部销毁。
- 我所提供的数据结果仅用于研究人的博士论文，学术期刊发表或学术会议演讲等学术用途。

请选择:

我愿意收到一份课堂观察的总结报告。 ☒ 是 ☐ 否

我同意收到一份回忆性访谈和个人访谈的总结报告。 ☒ 是 ☐ 否

签名: 

姓名: _____

联系邮箱: 

日期: 2018.5.7



学生参与者同意书（回忆访谈及焦点小组）

该同意书可保存五年

惠灵顿维多利亚大学 语言学与应用语言学学院
研究项目名称： 基于中国高校英语专业听力课程的课堂研究
研究人： 魏薇

我已对该项刺激回忆访谈和焦点小组的细节有了充分的了解。我的疑问都得到了满意的回答。我明白如有任何其他疑问，可以在任何时候想研究人提出。我亦明白我可以中途随时退出研究而不会因此受到任何影响。

我同意参加回忆性访谈和焦点小组讨论。

我同意在访谈和小组讨论期间录音。

我同意提供我的听力教材供研究人复印使用。

关于该项访谈和焦点小组讨论，我明白：

- 我可以在 2019 年 6 月 30 日之前提出请求撤回我所提供的任何数据。这些数据和信息将会返还给我或销毁。
- 数据中有关我的个人信息将会在 2020 年 12 月 31 日之后抹去，转为不可识别个人信息的数据。
- 我所提供的任何信息均为保密信息。仅为研究人及其导师可以接触。不可识别个人信息的数据将在 2025 年 12 月 31 日之后全部销毁。
- 我所提供的数据结果仅用于研究人的博士论文，学术期刊发表或学术会议演讲等学术用途。

请选择：

我愿意收到一份回忆性访谈和焦点小组讨论的总结报告。 ☒ 否

签名：

姓名：

Appendix C. A sample of feedback to learner participants

English Language Test Results and Feedback Debriefing (A sample)

英语语言测试结果及说明反馈

Thank you very much for attending this English language test. I appreciate your participation.
非常感谢你参与本次英语语言测试，感谢你的积极配合。

Your test score on this test is: xx

你的测试结果为：XX

以下是对本次测试及测试结果的解释说明：

The English language test you took is called Vocabulary Size Test, which is designed to measure your written receptive vocabulary size in English. In other words, how many English words you've known for your English reading comprehension can be tested. The test only measures your vocabulary knowledge over single words rather than the knowledge over multiword, proper nouns, transparent compounds, marginal words, and homonyms and homographs. What is more, vocabulary knowledge and size used for listening, writing and speaking are not measured by this test.

这是一个英语词汇量测试，主要测试你们的书面输入性英语词汇量，即：你们对书面文字的英语进行阅读理解时所拥有的英语词汇量。请注意，该词汇量测试仅能测试出你对英语单词的知识，而并不能反映你对词组搭配，专有名词（如，国家名称），合成词（如：spaceship），边缘词汇（如：语气助词），以及同义词同音词的知识。此外，该词汇量测试仅针对你用于英语阅读理解的词汇量，而不包括其他三大技能（即：听力，写作和口语）所需要和掌握的词汇量知识。

Word families are used as a unit to your English vocabulary size in this test, so that your test results can indicate how many word families you have known. You have completed 140 multiple choice items, which covers a range of English word frequency levels from the most 1,000 frequent word families to the 14th 1,000 word level. 10 items representing 1000-word families at each frequency level were selected and drawn into this test, so your test score on these 140 items will be multiplied by 100 to generate your total English vocabulary size counted in word families. For example, if your get 50 items correct out of the total 140 test items, your test score is xx, and your written receptive English vocabulary size is xxxx word families.

你在本次测试中完成了 140 道选择题，涵盖了 14 个英语词汇等级，每个等级包含了 1000 个词汇家族，这些等级是维多利亚惠灵顿大学应用语言学教授 Paul Nation 根据这些词汇家族在英国国家语料库（British National Corpus）中出现的频率高低划分的，出现频率最高的划分在第一等级，出现频率最低的划分在最后一个等级，即第十四等级。该测试从中挑选出来具有代表性的 140 个词汇家族，即每个等级挑选了 10 个词汇家族。所谓“词汇家族”，是指包含了同词根下所有变形形式的词汇总合。例如：agree 是一个“词汇家族”的词根，而 agreeable, agreeably, agreed, agreeing, agreement, agreement, agreements, agrees 则都是这个“词汇家族”的成员。倘若你在词汇量测试中，正确选择了 agree 所代表的中文意思，则表示你有可能认识它的整个“词汇家族”。因此，以“词汇家族”为计量单位，用你在本测试中的最终分数乘以 100，就能体现你在这 14 个英语词汇等级中所拥有的词汇量。你的测试结果为 XX，你的书面输入性英语词汇量则是 xxxx。

Vocabulary size has been considered as one of the major indicators of your English proficiency level. Research findings show that different English vocabulary sizes are required to comprehend different types of written discourse in English. For example, a study conducted by Nation in 2006 suggests that you may need a vocabulary size of 9,000-word families to understand English novels while 8,000-word families for newspapers without any assistance such as looking into dictionaries or asking help from English teachers, and a goal of 8,000-word families is supposed to set up for English learners to achieve to comprehend various spoken and written texts in English without simplifications.

英语词汇量是英语语言水平的一个重要指标。研究表明，当你在阅读不同类型的英语文本时，需要拥有不同的词汇量水平。例如，Nation 教授在 2006 年的一项研究中发现，毫无障碍地阅读英文小说需要 9000 个词汇家族的词汇量，而阅读英文报纸则需要 8000 个词汇家族的词汇量。Nation 教授同时建议英语学习者应以 8000 词汇家族的词汇量为目标，这样才有可能无障碍地理解没有经过简化的原版英文书面文本（如：英文报纸）和口头文本（如：英文演讲稿）。

以下是一些关于提高英语词汇量的建议，供大家参考：

You may want to increase your vocabulary size, here are some suggestions:

1. Increase the amount of your English reading and listening. For example, develop habits of

reading and listening to authentic English input (e.g., internet websites of newspapers in English speaking countries, and podcasts, video programs, etc)

2. Choose graded readers which are designed based on frequency word levels and record the difficulty levels of your readers (find the free graded readers Professor Paul Nation's website: <https://www.victoria.ac.nz/lals/about/staff/paul-nation>)
 3. Use internet-based resources of vocabulary learning (e.g., www.lextutor.ca) or free downloaded programs to guide your vocabulary learning (e.g., <https://www.victoria.ac.nz/lals/about/staff/paul-nation>)
 4. Pay more attention to English vocabulary when you are engaged with various English learning activities (e.g., reading, listening, writing and speaking) in English classrooms. For instance, looking up unknown words in dictionaries before the classes and / or reviewing the vocabulary you have met during the instructional sessions.
1. 多读多听。尝试养成阅读和听原版英文语料的习惯（如，阅读英语国家媒体的官方网站，听英语博客等）；
 2. 选择根据频率等级划分词汇量的分级阅读材料进行阅读（具体读物可参考 Paul Nation 教授的官方网站：<https://www.victoria.ac.nz/lals/about/staff/paul-nation>）
 3. 利用网络资源学习词汇，积累词汇知识（如：www.lextutor.ca），亦可参考 Paul Nation 教授官方网站的免费下载资源（如：<https://www.victoria.ac.nz/lals/about/staff/paul-nation>）
 4. 在各种英语课程（如：听说读写）中注意对词汇的系统学习，例如，课前通过查字典进行预习，课后进行总结复习等。

You are welcome to talk with me about your results by contacting me through phone calls and emails, and I am glad to give your more detailed explanations and/or further learning suggestions.

如你对本次测试及其情况说明有任何疑问，或对英语学习有任何想法，欢迎大家通过邮件的形式与我交流讨论，我很乐意为大家提供更详细的说明与建议。

Thank you very much again!

再次感谢大家的参与！

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Appendix D. The full list of target words in the Yes/No task

Real words chosen from Unit 6

1. photographs	21. proved	41. accurate	61. monster	81. proximity
2. police	22. characteristics	42. chin	62. academy	82. protocol
3. people	23. disadvantages	43. crust	63. devices	83. legend
4. picture	24. apeline	44. mosquitoes	64. retrieval	84. carbon
5. system	25. cockpit	45. grapes	65. solar	85. fiber
6. world	26. supernatural	46. rum	66. buzzing	86. cell
7. irresponsible	27. America	47. culprit	67. stinging	87. govern
8. criminals	28. particular	48. hive	68. elusive	88. pollen
9. well	29. electronic	49. lemonade	69. tablets	89. prehistoric
10. we	30. experimental	50. kamikaze	70. pollinate	90. Photofit
11. believe	31. circumnavigation	51. Swiss	71. octagonal	91. administration
12. ice	32. psychiatrist	52. airplane	72. visor	92. aeronautics
13. company	33. ceiling	53. neighborhood	73. abominable	93. fascinating
14. Rice	34. convincing	54. mysteriously	74. flipper	94. hypothesis
15. Column	35. existence	55. approximate	75. Scotland	95. considerable
16. urban	36. plane	56. international	76. spaceship	96. whisky
17. finished	37. connected	57. volunteers	77. autopilot	97. internet
18. sightings	38. bees	58. elementary	78. wingspan	98. scattering
19. long	39. identifying	59. experts	79. beekeepers	99. witnesses
20. afraid	40. descriptions	60. likeness	80. businessman	100. nectar

Pseudowords

1. glown	11. insanized
2. thian	12. breatment
3. cominnuy	13. glor
4. buttry	14. exerbal
5. smenic	15. treal
6. pernal	16. schotic
7. fiscular	17. criage
8. pation	18. hereakdown
9. volation	19. lunance
10. classifical	20. verbility

Appendix E. The full interview schedules

Retrospective interview schedule with teachers (ROI)

Time:

Date:

Place:

Participant:

Interviewer:

Categories of questions

Marco-level questions

- Tell me about your expected purpose of each section / the purpose of each section designed by the textbook in your opinion (including the listening skills you want your learners to develop in each section) one by one.
 - Phonetics:
 - Listening and note-taking:
 - Identifying sentences:
 - Dialogues:
 - Passage:
 - News items:
 - Video:
- What do you think of the difficulty in each section? One by one
 - Phonetics:
 - Listening and note-taking:
 - Identifying sentences:
 - Dialogues:
 - Passage:
 - News items:
 - Video:
- How do you decide the times of listening in each section?
- Tell me about your decision on going through the pre-while-post listening phases in each listening section: When do you decide to have they whole pre-or post- listening phases? When you do only have while-listening phase?

Questions for each listening phase

● ***Pre-listening phase:***

- Your pre-listening practices are organized in the table below. My question is: How do you decide on the type of pre-listening practices in each section?

Pre-listening practices	Listening Section	Location in the videotape

- Why did you guide learners to ... in the ...section?
- What do you think of the background information provided by the textbook? For example, the background information in ...?
- What do you think of the vocabulary support provided by the textbook?

● ***While-listening phase:***

- Your typical teaching procedure during the while-listening phase is categorized as follows (provide the teachers with a brief summary of while-listening practices). My question is: Why do you follow such a teaching procedure? Can you tell me your purpose of each step?

Questions on specific while-listening practices

- Why did you ...?(e.g., in the section of ...)

● ***Post-listening phase:***

Your post-listening activities are categorized in the table below. My question is: what is your purpose of doing this?

Post-listening practices	Listening Section	Location in the videotape

Vocabulary focus

- What do you think of the vocabulary demand of this unit (textbook)?
- Your vocabulary instruction is organized in the table below. My questions are: How do you choose words to emphasize? Why do you choose these words rather than others?

Vocabulary-related practices	Listening Section	Location in the videotape

Questions on specific vocabulary-related practices

- When you are showing the script, you also pick up words or phrase to explain, what is your criteria of choosing the words or phrases to explain? For example....
- You usually give L1 translation to the teach vocabulary, why do you do this? For example...
- You also write the vocabulary down on the board or screen? For example... What is your purpose?
- You also teach about the word-part, for example.... What do you think of the purpose of doing this?

Follow-up interview schedule with teachers (FOI)

Time:

Date:

Place:

Participants:

Length of time:

- **Warm-up questions**

- How long have you taught English courses to English-major learners?
- How long have you taught listening courses to English-major learners?

- **About listening comprehension:**

- Tell me about your opinions / knowledge in the process of listening comprehension?
- How much do you know about listening comprehension? (e.g., top-down or bottom-up processing)
- Which one do you think is more difficult for learners to realize: top-down or bottom-up?

- **About listening lessons:**

- Now let's come to the listening course, tell me about your goal of teaching / learning listening to /as first-year English-major learner? (e.g., comprehend the listening script, complete listening tasks, develop listening skills)
- Why do you think it is necessary to attend a listening course rather than doing listening exercise at home by themselves? Is listening teachable?
- Are you satisfied with your listening teaching / learning practices in the classroom context? Why or why not?
- What do you think of developing 'listening strategies' in listening classes? (e.g., prediction during pre-listening; evaluation or critical thinking during post-listening)
- What do you think of developing "effective listening skills" in listening classes? (e.g., listen selectively, listen for main ideas, listen for global understanding)

- **About the listening textbook:**

- What do you think of the length of listening scripts in this textbook?
- What do you think of the genres (e.g., dialogue, news items) provided by this

textbook?

- What do you think of the listening activity design in this textbook? For example, multiple choices, gap fillings? Do you think they can effectively develop learners' listening skills?

- **About vocabulary and listening:**

- Tell me about your opinions / knowledge in the relationship between vocabulary and listening comprehension.
- How is it when compared with the vocabulary in reading comprehension?

- **About vocabulary teaching and learning in listening lessons:**

- Follow-up question: you've mentioned your opinion in the vocabulary demand of this textbook in previous retrospective interview.
- What do you think of 'knowing a word'? Give me an example?
- Do you think teaching vocabulary is a listening teacher's job? If not, whose job is it?
- What are the most important things to do in teaching vocabulary?
- When do you think is the best time to explicitly teach vocabulary in the listening class?
- When else do you think you need to focus on vocabulary in listening classes?
- What do you think of the ways of teaching vocabulary in listening classes? How do you decide the way of teaching for different vocabulary?
- Why didn't you give more opportunities to your learners to negotiate in the classrooms?
- Have you taken the frequency level into account when you are making decisions of vocabulary teaching?
- Summary: What factors may affect your vocabulary focus in the listening classes?
- Do you think learners can actually acquire new vocabulary in their listening classes?

- **What is the source of your belief and cognition in teaching?**

- What do you think of the factors which are related to your teaching practices? (e.g., your own learning experiences, your teaching experiences, contextual issues, learners' proficiency level)

Retrospective interview schedule with learners (RGI)

Time:

Date:

Place:

Participant:

Interviewer:

Questions about Yes/No task

- c) Can you write down the meaning of these words? The ones you choose YES in post-task last night.
- d) Have you noticed any words encountered in your pre-test when you are receiving instructions on / engaging with the listening activities? If yes, did you pay special attention to them when you are receiving instructions on / engaging with the listening activities?
- e) Can you highlight the words which you think you have received explicit instructions in the listening classes?
- f) Can you highlight the words which you think you have used to complete listening activities in the listening classes?
- g) What do you think of the role of instructed listening activities in your vocabulary learning on these words?

Marco-level questions

- Tell me about your expectations of each section / the purpose of each section designed by the textbook in your opinion (including the listening skills you to develop in each section) one by one.
 - Phonetics:
 - Listening and note-taking:
 - Identifying sentences:
 - Dialogues:
 - Passage:
 - News items:
 - Video:
- What do you think of the difficulty in each section? Mark the difficulty of each section one by one from 1-10.
 - Phonetics:
 - Listening and note-taking:
 - Identifying sentences:

- Dialogues:
- Passage:
- News items:
- Video:
- You have experienced multiple times of listening in each section (showing the summary chart?) Is it necessary / enough for you?
- As I observed, your teacher has gone through pre-while-post listening phases in most sections. What do you think of the role of pre-listening and post-listening? Would you like to receive instructions at these two phases in your listening class?

Questions for each listening phase

- **Pre-listening phase:** Your teacher's pre-listening activities are organized in the table below.

Pre-listening practices	Listening Section	Location in the videotape

My questions are:

- What do you think of receiving such pre-listening instruction? What else do you want to get in this phase?
- What do you think of the background information provided by the textbook? For example,...? What do you think the instruction on background here? Is it enough? What do you want to know about its background?
- What do you think of the vocabulary support provided by the textbook? Do you know these vocabulary before the listening class? Does the list cover all the unknown words in the listening input?
- **While-listening phase:** Your teacher's typical teaching procedure is ... (provide the learners with a brief summary of the observed while-listening teaching practices). My question is: What do you think of such a teaching procedure? Let's takefor example, here is your while-listening procedure, Tell me what you did during each time of listening:
- **Post-listening phase:** Your teacher sometimes provided ... after you finish the listening activities, such as ...

Post-listening practices	Listening Section	Location in the videotape

My questions are:

- What do you think of that?
- Why do you read after speaker?
- What do you think you can learn from reading the script in your listening classes?
- Do you think you can restore the story like what the teacher did? What is your difficulty?

Vocabulary focus

- What do you think of the vocabulary demand of this unit (textbook)?
- Here are some examples of the vocabulary-related practices that I observed in your classes:

Vocabulary-related practices	Listening Section	Location in the videotape

My questions are:

- Do you know this word before? Do you think it is necessary for teacher to emphasize some words when checking the answers?
- When your teacher were showing the script, she also picked up words or phrase to explain, For example, What do you think of her choices? Is it necessary to receive vocabulary instruction at this point?
- Your teacher usually give L1 translation to the teach vocabulary, For example,What do you think of this instructional approach? What else do you want?
- Your teacher write the vocabulary down on the board or screen? For example... What do you think?
- Your teacher also teach about the word-formation, for example..... what do you think?

Follow-up focus group interview schedule with learners (FGI)

Time:

Place:

Participants:

Length of time:

● **Warm-up questions:**

- How long have you learnt English?
- What do you think of the difficulty of English listening, as one of the four major skills in English language learning (i.e., reading, listening, writing and speaking?)

● **About listening comprehension:**

- Tell me about your opinions / knowledge in the process of listening comprehension?
- How much do you know about listening comprehension? (e.g., top-down or bottom-up processing)
- Which one do you think is more difficult for you to realize: top-down or bottom-up?

● **About listening lessons:**

- Tell me about your goal of learning listening to /as first-year English-major learner?
- What do you think of the overall purpose of having a listening course like this?
- What do you expect to learn /get from such listening classes? Have you reached your expectations?
- Why do you think it is necessary to attend a listening course rather than doing listening exercise at home by yourself?)
- Are you satisfied with your listening teaching / learning practices in the classroom context? Why or why not?
- Which one do you prefer doing in your listening classes: follow the textbook and complete the tasks or engage with listening activities which may require you to do prediction, evaluation, problem solving?

● **About the listening textbook:**

- What do you think of the length, genre and vocabulary demand of the listening script / texts on textbook?
- What do you think of the genres of the listening scripts in your textbook? Which one do you like the best? (e.g., dialogue, news item)

- How do you feel the listening tasks in your textbook?

- **About vocabulary and listening:**
 - Tell me about your opinions / knowledge in the relationship between vocabulary and listening comprehension.
 - How is it when compared with the vocabulary in reading comprehension?

- **About vocabulary teaching and learning in listening lessons:**
 - What do you think of ‘knowing a word’? Give me an example? Refer back to your Yes/No tasks.
 - What do you think of the necessity of receiving vocabulary support in the listening classes? How much? When?
 - What kind of vocabulary instruction do you expect to receive? Explicit instruction or guessing the meaning of words in the context?
 - Do you think listening class can provide a good opportunity for you to accumulate vocabulary?
 - Why don’t you initiate vocabulary focus in the classroom context? (e.g., ask teachers to explain an unknown word)
 - Would you like to have more negotiating opportunities or you just like being taught in this way?)

Appendix F. Codebook for listening textbook content analysis

Types of listening activities from initial to merged coding

Initial codes	Example of the instructions	Merged codes
Complete sentences (while-listening)	Listen to the dialogue again and complete the following arguments.	Listen and complete sentences/dialogues /passages
Complete dialogues	Listen to an extract from the dialogue and complete the following sentences (in the dialogue) with the missing words	
Complete passages	Listen to the dialogue again and complete the following passage	
Short answer question (written)	Listen to the dialogue and answer the following questions	Listen and answer questions
Short answer question (oral)	Listen to the passage again and discuss the following questions	Listen and discuss questions
Multiple choice	Listen to the passage and choose the best answer to each of the questions you will hear	Listen and choice the correct answer
Summarize the new items	Listen to the news item ..., (and) then give a brief summary of the news item.	Listen and summarize the main idea
Chart/Forms / completion	Listen to the dialogue and complete the following chart	Listen and complete charts/forms /tables / pictures
Tick the box in the tables	Listen to the first part of the survey and tick the right box	
Take notes and tick the box in the tables	Listen to the dialogue, tick the right box and fill in the relevant information	
Circle the labels in the picture	Alejandro is a student from Canary Islands. He is talking to some people. What does he want to know? And also look at the picture. Which of the following cases belong to Alejandro? Circle the right case.	
Take notes and complete outline / summary	Listen to a talk about identifying criminals. Take notes and complete the following outline.	Listen, take notes and complete outlines/ summaries
True or False	Listen to the news item and decide whether the following statements are true (T) or false (F).	Listen and decide true or false
Identify sentence structure	Identify each sentence as simple (S), compound (CP), complex	Listen and identify sentence structure

Initial codes	Example of the instructions	Merged codes
	(CPL) or compound-complex (C-C). You will hear each sentence twice. Write the corresponding letter(s) in the space provided.	
Matching	Listen to some short conversations and match each gesture and meaning with the country. There is one example given in the first line of the following chart.	Listen and match
Listing	Listen to the passage again and list the skills children need to succeed in life	Listen and list
Complete sentence after prediction	Listen to some sentences or short conversations and predict the speakers is going to say. Fill in the blanks with the possible answers	Listen and predict
Write sentences	Listen to the passage. A policeman is asking people about the accident. Write down what the speaker says without the hesitation words.	Listen and write sentences
Provide the meaning of words / phrases according to the context	Listen to the passages and find out the meaning of the following words or phrases from the context	Listen and provide meanings of words / phrases
Oral discussion (pre-listening)	Pre-listening questions	Warm up discussion before listening
Complete sentences with memory	Complete the following sentences with what you can remember	Recall activities after listening
Retell the story (oral)	Listen to a story and then retell it in your own words. You will hear the story only once. You can write down some key words and phrases	Listen and retell the story

Categories of learning support provided in the textbook

Learning support types	Examples
Vocabulary support	<ul style="list-style-type: none"> ● cockpit ● autopilot ● carbon-fiber ● solar cell
Learning tips (Lead-in)	A speaker usually finishes his sentence with a falling tone. If a sentence ends with a rising tone, that means the speaker has not finished his sentence and he wants to add something.
Background knowledge	Solar Impulse is a Swiss long-range experimental solar-powered aircraft project, and also the name of the project's two operational aircrafts, Solar Impulse 1 and Solar Impulse 2. The privately financed project is led by Swiss engineer and businessman Andre Borschberg and Swiss psychiatrist and the balloonist Bertrand Piccard. The Solar Impulse project's goals were to make the first circumnavigation of the Earth (环球航行) by a piloted fixed-wing aircraft using only solar power and to bring attention to clean technologies.
Grammatical support (Language in use)	figure out = find the solution to (a problem or question)

Types of the notes for teachers

Types of notes	Examples
Draw the learners' attention to phonetic features	A strong stress on a word may give a clue to what the speaker is likely to say. The stressed word or words in the speech may also indicate that the speaker is making a correction. In the following exercise, the word or digit in bold has the most stress.
Draw the learners' attention to linguistic features	This passage is about the use of credit cards. After students listen to the talk, ask them if they know the meaning of the term like "outstanding balance" and "the extended repayment facility", and the meaning of the sentence "it is a customer's previous relationship with his bank that is used as a guide to the amount of credit he will be extended".
Draw the learners' attention to contexts	This is an exercise for inference from contextual analysis. Ask students: What are the situations? What is the key word or phrase in the dialogue to help decide the situation?
Draw the learners' attention to specific information	In the dialogue the speakers talk about the importance of credit cards. Why does the speaker say if a person has a credit card, he is a trustworthy human being? What does "everybody's insured against everybody else" mean?
Draw the learners' attention to global understanding	Before students listen to the whole passage, ask them to study the outline frame carefully. What are the main ideas or important points for each part? When taking notes, students should be able to organize their notes according to the general headings.
Draw the learners' attention to listening scripts' outlines	Before students listen to the whole passage, ask them to study the outline carefully. What are the main ideas or important points for each part? When taking notes, students should be able to organize their notes according to the general headings.
Draw the learners' attention to potential difficulties	This is an interview. The interviewees are two children. It's not an easy thing to understand children talking, because they sometimes do not speak very clearly. That's exactly what happens in the interview, especially when there are hesitations and repetitions in the conversation. As students are listening to the dialogue, ask them to pay attention to these things.
Remind the learners of making inferences	The people in the dialogue are talking about some supernatural things. Before students listen to the dialogue, ask them to study the background information first. Have they ever heard of things like snowman, UFO, etc? Do they believe in ghost stories? They have to use the listening strategy of inference to answer the questions. They should give reasons for their answers.
Involve the learners into pre-and-post listening discussion	Before listening to the talk, students can be given more information about the Food Guide Pyramid and the Nutrition Facts Panel. After listening to the talk, students can discuss the tips on healthy eating mentioned in the talk. What is the

Types of notes	Examples
Guide the learners to take notes while listening	key to healthy eating? Before listening to the whole passage, students should study the unfinished summary carefully. The missing parts are the important points in the passage. As students are listening to the recording, ask them to pay attention to the important points and take notes.
Activate the learners' topic-related background knowledge	Gesture or body language is very important in communication. What do students know about gestures? Are there any universal gestures? Do they know the same gesture may mean different things in different countries?
Prepare the learners with vocabulary	Students might find it a little difficult to understand the passage. Ask them to study vocabulary first. Make sure they understand the meanings of the medical terms in the passage and exercises.

Appendix G. Codebook for instructional techniques in the VREs

Category	Definition	Examples
1. Spell a word	The teachers spell or guide the learners to spell the word letter by letter (either orally or in written form)	"convicted of crimes, convicted 会写吧? C-o-n-v-i-c-t ...
2. Expand on an acronym	The teachers provide the full name of acronyms	FRAME "Yes, there is a full name for this abbreviation" this word is provided as glossed word in textbook "我们来看一下这里有个关键词" (the teacher clicked on the screen) "这个词其实用被动语态用的比较多, 比如说, the house is a haunted one, 这房子是鬼屋, 闹鬼, the house is visited by ghosts"
3. Provide a sample sentence	The teachers use the words to make sentences, which are not from the textbook materials. And the function of sample sentence is to show how to use a word.	"What is abominable? 令人讨厌的? 可恶的。为什么是讨厌的雪人? 不觉得很奇怪吗? I'd like to show you some pictures... when came to this word : "what is chin?". Then she touched and pointed to her own chin: "This is chin". "下巴, 你们不知道这是下巴 (的意思) 吗? " (大部分学生摇头) "是和 cheek, 脸颊搞混了吗? c-h-e-e-k, cheek, 这是脸颊的意思"
4. Use non-verbal explanation	The teachers use body language, pictures or any other non-verbal explanations to show the word meaning	This is a word in the background information, "Elusive, remember this word, it is very important, it means something we can not catch, we can not touch, you can not even see. What else in your life is elusive? (Learners: money, time) we don't use elusive to describe time or money, we use it describe natural things, animals, or ghosts
5. Provide L1 translation	Teachers translate the word into Chinese (i.e., give L1 equivalent), or provide a definition to the word in Chinese	This word is provided as glossed word in textbook "我们来看一下这里有个关键词" (the teacher clicked on the screen) "这个词其实用被动语态用的比较多, 比如说, the house is a haunted one, 这房子是鬼屋, 闹鬼, the house is visited by ghosts"
6. Give an English explanation	Teachers provide a definition to the word in English	
7. Present the textbook glossary	The teachers the audio-visual instructional materials to present the textbook glossary, including clicking on the pronunciations, English or Chinese explanations, or sample sentences of the word	

Category	Definition	Examples
8. Ask learners questions about a word	The teachers ask the learners to provide the meaning, to pronounce and to spell the target word. Or require them to provide a synonym of a word	<p>This word is provided in sentence 3, when the teacher checked the answers of this sentence, she picked up the word and asked in Chinese: "Culprit, what is culprit?"</p> <p>Learners answered in Chinese: 犯人, the teacher agreed and moved on.</p> <p>This is a word included in the full name provided in the task item "so what's that? Retrieval 是检索, 匹配 (的意思) 吗? 它是什么意思? (有学生小声说: 获取) 查一下嘛 (学生开始查手机字典) what's 'retrieve'? Retrieve, 挽回, 有查到吗? 检索, 恢复, OK...so, (这是) 面部检索与匹配系统</p> <p>“首先请大家根据语境猜一下这个词是什么意思, 在什么样的空气里面动物们会发出这样的 (声音)? 热, 对不对, 没错, 这个词就是翻译成闷热。好我还想给大家一些近义词, 大家能想到什么近义词吗? 比较闷热的, 这个词大家可能没有见过 (转身写在黑板上) 原型叫 stifle, 使某人停滞, 所以就有空气全部都凝固在这里 (的意思)”</p>
9. Highlight vocabulary learning strategies	The teachers encourage the learners to use vocabulary learning strategies for a word, such as looking up in a dictionary, guessing meaning from the context (predicting), or establish a link to a previously learnt word	<p>Do you know what is 'pitch'? P-i-t-c-h (most learners can spell it orally) 我们讲过这个词的, 音高, 对不对? 我们在 (前面某个单元) 做 cd 的里面见过的对吧? (所以文中这句话的意思是) 我听到了一个音调特别高的声音”</p> <p>“首先请大家根据语境猜一下这个词是什么意思, 在什么样的空气里面动物们会发出这样的 (声音)? 热, 对不对, 没错, 这个词就是翻译成闷热。好我还想给大家一些近义词, 大家能想到什么近义词吗? 比较闷热的, 这个词大家可能没有见过 (转身写在黑板上) 原型叫 stifle, 使某人停滞, 所以就有空气全部都凝固在这里 (的意思)”</p>
10. Write on the blackboard	The teachers write the target word, its definition, related knowledge, or sample sentence on the blackboard	

Category	Definition	Examples
11. Explain about orthographical knowledge of a word	The teachers provide explicit instructions on orthographic knowledge of the lexical items (e.g., part of speech, word family, word formation, tense, singular or plural forms, synonym, homonym, collocation, usage, polysemy)	<p>This is a word in the background information, "Elusive, remember this word, it is very important, it means something we cannot catch, we cannot touch, you cannot even see. What else in your life is elusive? (Learners: money, time) we don't use elusive to describe time or money, we use it describe natural things, animals, or ghosts</p> <p>This is a word in the background information, "... and mal..ma.. This word is very difficult, (she guided the learners to pronounce this word), remember the stress lies on 'o', so what is 'malodorous'? (some learners tried to give meaning) actually you can divide this word into two parts, 'mal', which a pre-fix, which means bad (write on the blackboard) for example, practice, malpractice, meaning you didn't do something well. Odorous means smell, so bad smell...很臭的</p>
12. Explain about phonological knowledge of a word	The teachers provide explicit instructions on phonological knowledge of the lexical items (e.g., explicit instructions on syllabuses or stress)	<p>This is a word in the background information, "... and mal..ma.. This word is very difficult, (she guided the learners to pronounce this word) , remember the stress lies on 'o', so what is 'malodorous'? (some learners tried to give meaning) actually you can divide this word into two parts, 'mal', which a pre-fix, which means bad (write on the blackboard) for example, practice, malpractice, meaning you didn't do something well. Odorous means smell, so bad smell...很臭的</p>
13. Provide world knowledge of a word	The teachers provide non-lexical knowledge (world knowledge) related/associated to the word, or establish link to non-lexical context of the word	<p>After checking the answers, the teacher showed the scripts on the screen and replayed the recordings. 13. Provide world knowledge related/associated to the lexical items (non-lexical knowledge).00 "大家稍微注意一下，这有几个词，（是）不同的小动物小昆虫的叫声，bees buzzed, mosquitoes whined, and fat flies droned, droned, 也是嗡嗡声，非常低沉的。Whine 是什么意思啊？其实它的本意是抱怨的意思，但是在这里呢，很明显，也是嗡嗡叫” (she immediately answered herself, not giving chance to learners to answer the questions)</p>

Appendix H. Coding processes of interviews

Initial coding and second-level coding for the one-on-one interviews with the teachers related to listening

A1) initial coding for the ROIs

1. Expected purpose of each section in the listening unit
2. Teacher's estimated difficulty level & potential problems for each section
3. Teacher's comments on the listening task type
4. The decisions on the repeated listening and listening phases;
5. Explain about the teaching procedures /practices in pre-listening phase (stimulus were provided in this part)
6. Explain about the teaching procedures /practices in while-listening phase; (stimulus were provided in this part)
7. Explain about the teaching procedures /practices in post-listening phase; (stimulus were provided in this part)

A2) Initial coding for the FOIs

1. Understandings of the process of listening comprehension
2. Overall goals of teaching listening courses
3. Perceptions of the listening textbook;
4. Teacher's self-evaluation & dilemmas in teaching listening
5. Factors affecting teacher's teaching practices
6. Explain why not referring to teaching tips on teacher's book

B) The list of second-level coding for one-one-one interview data with the teachers in listening

1. Guide learners to predict before listening
2. Perceptions of schemata knowledge
3. Perceptions of the background knowledge in the textbook
4. Perceptions of vocabulary in the textbook
5. Teach vocabulary
6. External factors
7. Peer teacher influence
8. Teacher's education

9. Bottom-up textbook activities
10. Follow the textbook
11. Limited by the textbook design
12. Perceptions of listening texts
13. Rare top-down textbook activities
14. Classroom monitoring
15. Guiding & helping learners
16. Listening is teachable
17. Estimations on learners' difficulties
18. Learners rely on bottom-up
19. Mention explicitly about processing
20. Emphasis on key points
21. Emphasis on main ideas
22. Emphasis on pronunciations and intonations
23. Emphasis on structure
24. Emphasis on task completion
25. Consider affective factors
26. Consider learners' reactions
27. Consider listening texts
28. Consider other language skills
29. Exam requirement
30. Limited classroom time
31. Rely on teaching experiences
32. Aim for comprehension abilities
33. Aim for learner autonomy
34. Aim or expect for developing skills
35. Expect learners ready for authentic context
36. Expect learners to learn extra-linguistic knowledge
37. Intend to have more top-down
38. Perceptions of pre-listening
39. Understanding of skills and strategies
40. Understandings of product and process
41. Visual stimulus

C) Themes identified for the listening-related interview data from the teachers

Theme 1: Priority in completing listening comprehension activities

Theme 2: Main lesson objectives in L2 listening class

Theme 3: Knowledge about L2 listening comprehension

Theme 4: Perceptions of the linguistic and non-linguistic knowledge in L2 listening class

Theme 5: Perceptions of skills and strategies in L2 listening class

Theme 6: Factors in teaching and learning listening in the classroom context

Initial coding and second-level coding for the interviews with the teachers related to vocabulary

A1) Initial coding for the ROIs

Type of data	Amanda	Gigi
Reponses to the pre-set questions	1. Teacher's awareness of the vocabulary demand	1. Teacher's awareness of the vocabulary demand
	2. Teachers' justifications of the 'content'	2. Teachers' justifications of the 'content'
	3. Teachers' justifications of the 'format and presentation'	3. Teachers' justifications of the 'format and presentation'
Newly emerged responses	4. Justifications on the awareness of the vocabulary demand	n/a

A2) Initial coding for the FOIs

Type of data	Amanda	Gigi
Reponses to the pre-set questions	1. Beliefs in the role of VLT	1. Beliefs in the role of VLT
	2. Beliefs in the format and presentation of VLT	2. Beliefs in the time of VLT in listening class
	3. Knowledge of Vocabulary Knowledge	3. Beliefs in the format and presentation of VLT
	4. Assumptions of learners' vocabulary learning in listening class	4. Knowledge of Vocabulary Knowledge
	5. Cognition of the factors in EFL teaching	5. Cognition of the factors in EFL teaching
	6. Justifications on beliefs in the role of VLT	6. Justifications on beliefs in the role of VLT
Newly emerged responses	7. Assumptions of the learners' vocabulary level for listening	7. Assumptions of the learners' vocabulary level for listening
	8. Knowledge of text /lexical coverage	8. Beliefs in the vocabulary learning opportunities provided in listening class
	9. Perception of the lexical coverage in listening class	9. Justifications on format and presentation
	10. Justifications of the perceived lexical coverage in listening class	10. Working / teaching hypothesis
	11. Perceptions of the learners' vocabulary level for listening	

B1) The list of second-level coding for Amanda:

1. Confidence in the learners' vocabulary knowledge
2. Assume the learners may have questions for the lexical items based on teacher's own vocabulary knowledge
3. Consider the classroom time / choose the most efficient way
4. Only receptive vocabulary knowledge is needed in listening class / no need to emphasize a lot in vocabulary in listening class
5. Confidence in the learners' ability to receive the instruction
6. Vocabulary is not closely related to listening;
7. As long as learners have got high-frequency words, they will be fine in listening class (including listening class);
8. No need to emphasize in vocab a lot in listening class;
9. Knowing a word: meaning (core meaning) regardless of spoken or written form ; use of the word; association of the words;
10. confidence in the learners' vocabulary knowledge;
11. only receptive vocabulary knowledge for high-frequency words is needed in listening class;
12. Lack the knowledge / awareness in lexical coverage;
13. The learners know most of the vocabulary in the listening textbook;
14. new meaning in context might be the problem;
15. The learners know most of the vocabulary in the listening textbook;
16. Use teaching experiences and observe learners' reactions to decide the lexical gap;
17. 'Moderate level' of vocabulary will be for any language class (including listening class)
18. Not listening teacher's responsibility to teach vocabulary
19. Get vocabulary ready for listening class is the learners' job;
20. Vocabulary knowledge can be gained by deep processing tasks such as translation task;
21. Need to teach the new meaning related to the context for a particular word;
22. Save classroom time for listening' ;
23. Model the vocabulary learning strategy (e.g., guessing from the context) rather than direct teaching of a particular word;
24. Time in listening class should allocated to listening itself
25. Learners can gain vocabulary knowledge because they invest much time and energy in vocab/ because they think very high of vocabulary (which is not approved)

26. Strongly recommend / approve teaching vocabulary via translation task (deep processing task) rather than direct instruction of the words
27. personal attitudes; learners' reactions; Autonomy in teaching English majors / not much impacted by the syllabus; Frustration due to the efforts in vein

B2) The list of second-level coding for Gigi:

1. Admit the lexical difficulty of the listening textbook;
2. Use teaching experiences to decide the vocabulary unknown to learners;
3. Assume about the frequency level of the vocabulary;
4. Awareness in the associations of the lexical items;
5. Awareness in the spoken form of the vocabulary in listening class
6. Awareness in the written form in listening class (what does the word look like)
7. It is important to have sufficient vocabulary knowledge
8. larger vocabulary size means more capacity for listening comprehension
9. the nature of listening determines that vocabulary knowledge is more important for listening comprehension;
10. it is more difficulty to guess the meaning in the listening context
11. It is necessary to teach vocabulary in listening class
12. Confident in the learners' vocabulary size based on teaching intuition
13. Knowing a word: meaning, but not use in the listening class
14. Rely on the process of listening task completion to decide which words are unknown to learners
15. The need to teach unknown words in the post-listening phase
16. Vocabulary knowledge serves for listening comprehension;
17. Take classroom time into consideration when deciding how much is focused on the vocabulary
18. Listening class should be used as a platform to accumulate vocab / Every type of language class should be used as a platform to accumulate vocab
19. There is no fixed rule in teaching vocabulary in listening class;
20. It depends on the characteristics of the vocabulary and the context in which the vocabulary occurs;
21. Provide opportunities for learners to guess the meaning in the context
22. Consider the classroom time / emphasize in the efficiency of 'immediate learning'

23. Research-based influence; peer teachers' influence; learners' influence; teaching experiences' influence; the classroom facilities; Not too much impact from the curriculum and syllabus
24. Never test working hypothesis

C) Key themes of vocabulary-related interview data from the teachers

Theme 1: Teachers' perceptions of the relationship between vocabulary knowledge and listening

Theme 2: Teachers' perceptions of learners' lexical difficulties in listening lessons

Theme 3: VREs from the teachers' perspective

Theme 4: Teachers' perceptions of vocabulary learning in the listening classes

Initial coding and second-level coding for the group interviews with the learners related to listening

A1) Initial coding for the RGIs

- Learners' expectations / Comments on each listening section
- Learners' expectations/perceptions on completing listening tasks
- Difficulties in each listening section perceived by the learners
- Learners' expectations on the repeated listening in the listening classes & on the three-listening-phase
- Learners' perceptions of the teaching practices in pre-listening-phase
- Learners' stated behaviors / perceptions / expectations during the while-listening-phase
- Learners' perceptions on the post-listening-phase

A2) Initial coding for the FGIs

1. Difficulty of four language skills in English
2. Reasons of ranking the four skills
3. Understandings of listening comprehension process
4. Perceptions of having listening course
5. Evaluating the listening textbook

B) The list of second-level coding for group interview data with the learners in listening

1. Perception of listening texts
2. Reactions to teaching practices
3. Pre-and-post listening
4. Rely on teacher's instruction and modelling
5. Purposeful listening
6. Prepare for exams
7. Know better about structure
8. Interest and motivation
9. Improve writing speed
10. Improve vocabulary
11. Improve understanding or listening comprehension abilities
12. Improve short-term memory
13. Improve pronunciations
14. Improve phonetics
15. Improve other language skills
16. Improve grammar
17. Gain extra-linguistic knowledge
18. Enter into listening context
19. Communicative context
20. Be exposed to authentic context
21. Summarizing is important
22. Short-hand note-taking
23. Develop listening strategies
24. Develop listening skills
25. Difficulties in listening
26. Focus on words
27. Focus on main ideas
28. Focus on form
29. Complete tasks
30. Awareness of listening process
31. Need vocabulary knowledge
32. Need concentration
33. Need background knowledge

C) Key themes of listening-related interview data from the learners

Theme 1: Priority in completing listening comprehension activities

Theme 2: Main lesson objectives in L2 listening class

Theme 3: Knowledge about L2 listening comprehension

Theme 4: Perceptions of the linguistic and non-linguistic knowledge in L2 listening class

Theme 5: Perceptions of skills and strategies in L2 listening class

Theme 6: Factors in teaching and learning listening in the classroom context

Initial coding and second-level coding for group interviews with the learners related to vocabulary

A1) Initial coding for the RGIs

Type of data	Amanda's learners	Gigi's learners
Reponses to the pre-set questions	<ol style="list-style-type: none"> 1. Awareness of vocabulary demand; 2. Perceptions or expectations of the 'format and presentation' 	<ol style="list-style-type: none"> 1. Awareness of vocabulary demand; 2. Perceptions of the 'content' (what vocabulary is focused on by the listening teacher) 3. Perceptions or expectations of the 'format and presentation'
Newly emerged responses	<ol style="list-style-type: none"> 3. Emphasize the importance of doing pre-view job before class 4. Indicate the priority of listening task completion 5. Consider the vocabulary knowledge as an obstacle of developing listening skills 6. Show the dilemma in pre-viewing vocabulary due to the task completion priority 7. Emphasize the importance of review vocabulary after class; 	

A2) Initial coding for the FGIs

Type of data	Amanda's learners	Gigi's learners
Reponses to the pre-set questions	1. Perceptions of the relationship between listening and vocabulary 2. Perceptions of 'knowing a word' 3. Perceptions of the role of vocabulary in listening class 4. Perceptions of vocabulary learning in listening class 5. Explanations on classroom behavior; 6. Expectations on vocabulary instructions in listening class 7. Perceptions of the lexical gap based on their definitions of 'knowing a word'; 8. Necessity of receiving vocabulary instruction in listening class;	1. Perceptions of the relationship between listening and vocabulary 2. Perceptions of 'knowing a word' 3. Perceptions of the role of vocabulary in listening class 4. Perceptions of vocabulary learning in listening class; 5. Explanations on classroom behavior; 6. Expectations on vocabulary instructions in listening class 7. Perceptions of the lexical gap based on their definitions of 'knowing a word'; 8. Necessity of receiving vocabulary instruction in listening class
Newly emerged responses	9. Learners' job to get the vocabulary ready 10. Priority in listening class / limited classroom time 11. Explanations on little gain in vocabulary (e.g. review after class, listening as the priority)	

B1) The list of second-level coding for Amanda's learners:

- 1) The vocabulary of the listening textbook is demanding so we need to do pre-view job before class;
- 2) Listening task completion is the priority in the listening class;
- 3) Insufficient vocabulary knowledge brings negative impact on this priority;
- 4) If pre-view the vocabulary, it seems to compromise the task completion performance (you can't preview vocabulary in listening testing);
- 5) One of the reasons why we did not gain vocabulary was lack of review jobs after class;
- 6) Another reason lies in the teacher's 'brief' focus on vocabulary, as a by-product of checking listening task completion;
- 7) Expected repetitions in vocabulary instruction to strengthen memory of the words;
- 8) Expect English explanations and sample sentences;

- 9) Expect writing on the board for the written forms of the words;
- 10) 'Knowing a word' means: spoken form (can pronounce it), form and meaning, word parts, associations (misunderstood as use); basically receptive knowledge is mentioned;
- 11) Indicate the importance of pre-viewing vocabulary before listening class (e.g., looking up in dictionaries);
- 12) Indicate the occurrence of vocabulary (low occurrence means low level of importance);
- 13) We need vocabulary knowledge, for example, the spoken form of the words in the listening class;
- 14) Vocabulary knowledge is less needed in listening class than in reading class;
- 15) Teacher's instructions are needed even if we look up in the dictionary, we need them both;
- 16) We do not expect too much explicit vocabulary instruction in listening class (compared to the intensive reading class) due to the priority of listening tasks;
- 17) Consider the limited classroom time; classroom time is limited (wasting of time to initiate lexical enquiries)
- 18) It is our job to get the vocabulary ready;
- 19) We can hardly retain the memory due to the teacher's brief focus on vocabulary / our individual learning ability;
- 20) We paid more attention to listening than vocabulary in class;
- 21) There is a need to review vocabulary after class if we want to gain vocabulary knowledge;
- 22) I paid much attention to listening so may miss teacher's vocabulary instruction;
- 23) We rely on the teachers' instructional style rather than initiate lexical enquiries for unknown words in class
- 24) We do not expect to learn vocabulary in listening class;
- 25) We expect to learn vocabulary in intensive reading class or other sources such as vocabulary learning apps;
- 26) We need to review after class or engage with vocabulary tasks such as dictation to gain vocabulary knowledge in listening class;
- 27) We need vocabulary knowledge in the listening class but it is our job to get them ready rather than expecting to receive instructions from the teacher in the class;

B2) The list of second-level coding for Gigi's learners:

- 1) Vocabulary of the textbook is demanding to some extent, compared to our vocabulary size
- 2) We would like to receive different vocabulary instructions based on the characteristics of

the words

- 3) Whether writing on board or not doesn't matter
- 4) Welcome the instruction in the word part / word formation
- 5) Teacher's instructions are needed even if we look up in the dictionary, we need them both;
- 6) We would like to learn vocabulary in the context rather than decontextualized teaching;
- 7) The words chosen by the teacher are mostly unknown to us
- 8) 'Knowing a word' means: word parts, meaning, associations, use;
- 9) Acknowledge the lexical gap;
- 10) Learning topic-related vocabulary in listening class for better understanding of the listening materials;
- 11) Insufficient vocabulary knowledge means worse for listening than for reading;
- 12) Insufficient vocabulary knowledge means worse for listening than for reading, due to the different nature of their contexts;
- 13) Insufficient vocabulary knowledge means worse for listening than for reading, due to the different nature of tasks (task completion priority);
- 14) It's necessary to receive vocabulary instruction in listening class;
- 15) Expect to receive vocabulary instruction after completing listening tasks because it is more specific (unknown words) and related to the context (rather than decontextualized instruction);
- 16) Unknown words are individual problem rather than classroom problem / not wasting time;
- 17) Expect explicit vocabulary instruction in the context to strengthen the memory of the words

C) Key themes of vocabulary-related interview data from the learners

Theme 1: Reports of lexical difficulties in the listening classes

Theme 2: Evaluations on VREs in the listening class

Theme 3: Perceptions of vocabulary learning in the listening class

Appendix I. Instructional techniques for the words that received substantial gains in the listening classes

Gigi's Class

Words	% of increase	Instructional techniques in Gigi's Class
1.buzzing	74%	Highlight vocabulary learning strategies (link to previously learnt word); Ask learners questions about a word
2.pollinate	61%	Present the textbook glossary; Provide L1 translation
3.proximity	52%	Present the textbook glossary; Provide L1 translation; Give an English explanation; Explain about orthographical knowledge (synonym)
4. pollen	43%	Present the textbook glossary; Provide L1 translation
5. hive	43%	Present the textbook glossary; Provide L1 translation; Provide world knowledge
6. octagonal	39%	Spell it letter by letter orally; Present the textbook glossary; Ask learners questions for word meaning
7. wingspan	39%	Provide L1 translation; Ask learners questions for word meaning; Explain about orthographical knowledge (use)
8. autopilot	35%	Present the textbook glossary; Provide L1 translation
9. flipper	35%	Present the textbook glossary; Provide world knowledge
10. kamikaze	35%	Present the textbook glossary; Provide L1 translation; Provide world knowledge; Ask learners questions for word meaning; Highlight vocabulary learning strategies (use dictionary)
11.protocol	35%	Present the textbook glossary
12.Swiss	30%	Provide L1 translation

Amanda's Class

Words	% of increase	Instructional techniques in Amanda's Class
1.wingspan	45%	Highlight vocabulary learning strategies (link to previously learnt word);
2.flipper	41%	Provide L1 translation
3.stinging	36%	Present the textbook glossary; Provide L1 translation
4.visor	36%	Spell it letter by letter orally; Provide L1 translation
5.buzzing	32%	Present the textbook glossary; Provide L1 translation
6.supernatural	32%	Provide L1 translation; Provide world knowledge
7.autopilot	27%	Provide L1 translation; Provide world knowledge
8.beekeepers	27%	Present the textbook glossary; Explain about orthographical knowledge (word parts); Provide L1 translation
9.chin	27%	Ask learners questions for word meaning
10.cockpit	27%	Spell it letter by letter orally; Provide L1 translation
11.proximity	27%	Present the textbook glossary; Provide L1 translation
		Present the textbook glossary; Explain about orthographical knowledge (part of speech; use);Provide L1 translation