



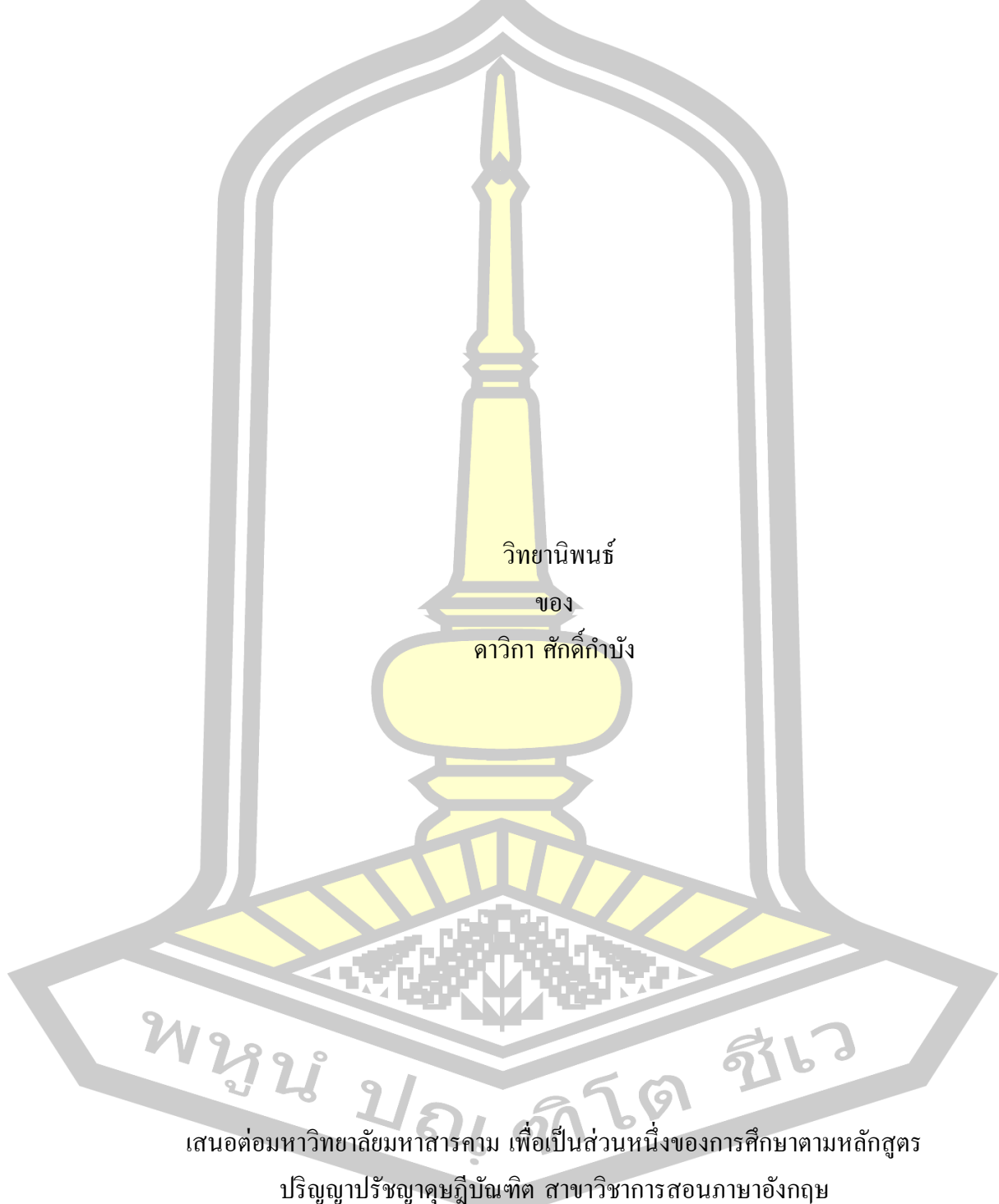
The Effects of Intergrated Digital Graded Audiobooks Activities on Listening
Comprehension and Learner Perceptions of Thai EFL Undergraduates

Davika Sakkampang

A Thesis Submitted in Partial Fulfillment of Requirements for
degree of Doctor of Philosophy in English Language Teaching
October 2025

Copyright of Mahasarakham University

ผลของกิจกรรมบูรณาการหนังสือเสียงดิจิทัลแบบปรับระดับต่อการฟังเพื่อความเข้าใจและการรับรู้
ของนักศึกษาระดับปริญญาตรีชาวไทยที่เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศ



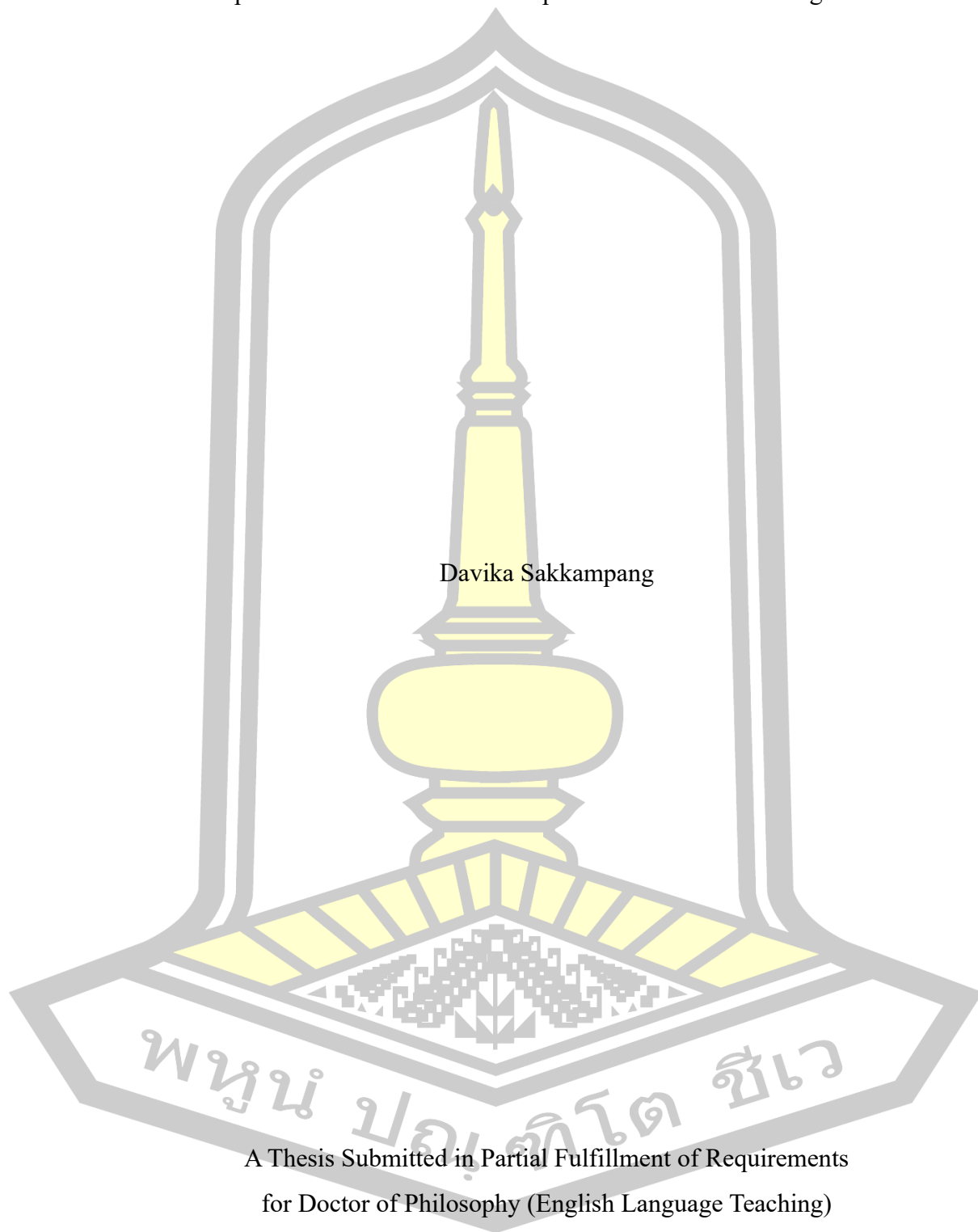
เสนอต่อมหาวิทยาลัยมหาสารคาม เพื่อเป็นส่วนหนึ่งของการศึกษาตามหลักสูตร
ปริญญาปรัชญาดุษฎีบัณฑิต สาขาวิชาการสอนภาษาอังกฤษ

ตุลาคม 2568

ลิขสิทธิ์เป็นของมหาวิทยาลัยมหาสารคาม

The Effects of Intergrated Digital Graded Audiobooks Activities on Listening
Comprehension and Learner Perceptions of Thai EFL Undergraduates

Davika Sakkampang



A Thesis Submitted in Partial Fulfillment of Requirements
for Doctor of Philosophy (English Language Teaching)

October 2025

Copyright of Mahasarakham University



The examining committee has unanimously approved this Thesis, submitted by Mrs. Davika Sakkampang , as a partial fulfillment of the requirements for the Doctor of Philosophy English Language Teaching at Mahasarakham University

Examining Committee

Chairman

(Assoc. Prof. Supong
Tangkiengsirisin , Ph.D.)

Advisor

(Pilanut Phusawisot , Ph.D.)

Committee

(Asst. Prof. Apisak Sukying , Ph.D.)

Committee

(Eric A. Ambele , Ph.D.)

External Committee

(Assoc. Prof. Atipat Boonmoh ,
Ph.D.)

Mahasarakham University has granted approval to accept this Thesis as a partial fulfillment of the requirements for the Doctor of Philosophy English Language Teaching

(Assoc. Prof. Kittiphong Praphan ,
Ph.D.)

Dean of The Faculty of Humanities and
Social Sciences

(Asst. Prof. Pondej Chaowarat , Ph.D.)
Dean of Graduate School

TITLE	The Effects of Intergrated Digital Graded Audiobooks Activities on Listening Comprehension and Learner Perceptions of Thai EFL Undergraduates		
AUTHOR	Davika Sakkampang		
ADVISORS	Pilanut Phusawisot , Ph.D.		
DEGREE	Doctor of Philosophy	MAJOR	English Language Teaching
UNIVERSITY	Maharakham University	YEAR	2025

ABSTRACT

This study investigated the effects of digital graded audiobooks on Thai EFL undergraduate students' listening comprehension and explored their perceptions of audiobook features and benefits. Seventy-four second-year non-English major students at a government university in northeastern Thailand participated in a 12-week quasi-experimental intervention. Two intact classes were assigned as control (n=36) and experimental (n=38) groups. The experimental group engaged in digital graded audiobook instruction combining in-class guided listening with out-of-class independent practice using Oxford Bookworms Library audiobooks, while the control group received traditional textbook-based instruction. Quantitative data from listening comprehension pretests and posttests were analyzed using paired and independent samples t-tests. Results showed the experimental group's posttest scores ($M=17.68$, $SD=2.76$) significantly exceeded the control group's ($M=14.86$, $SD=3.39$), $t(72)=3.937$, $p<.001$, $d=0.92$, demonstrating substantial effectiveness of audiobook-based learning. Qualitative analysis of semi-structured interviews with 12 purposively selected participants revealed five interconnected themes: audiobook features (focused vocabulary input, level-appropriate scaffolding, multimodal presentation, supportive listening functions, and flexible accessibility) corresponded to five perceived benefits (enhanced story understanding, improved sound discrimination, accent familiarity, vocabulary acquisition, and real-life language learning). Findings validate theoretical frameworks including Krashen's Input Hypothesis, Cognitive Load Theory, and Vygotsky's Zone of Proximal Development. This study contributes evidence-based guidance for implementing digital graded audiobooks in low-input EFL environments, addressing critical gaps in research on low-proficiency learners and technology-mediated listening development in resource-constrained Thai educational settings.

Keyword : digital graded audiobooks, listening comprehension, perceptions, Thai EFL learners, features

ACKNOWLEDGEMENTS

I would like to express my heartfelt appreciation to everyone who supported and contributed to the completion of this dissertation. This achievement would not have been possible without the guidance, encouragement, and generous help of many individuals.

First and foremost, I am profoundly grateful to my dissertation advisor, Dr. Pilanut Phusawisot, for her unwavering support, expert guidance, and continuous encouragement throughout every stage of this journey. She was the first to introduce me to the field of English Language Teaching, offering a rich and comprehensive perspective that went beyond linguistic theories to show how language can serve as a powerful agent of social change which is an idea that has since become a core part of my own teaching philosophy. Her warm encouragement and personal support laid a foundation of trust and inspiration from the very beginning. I know there were many nights she barely slept, working tirelessly to guide her students and give us the support we needed. I will never forget her words during my first year: “If you feel like you are swimming in the ocean, just keep swimming.” And now, as I complete this dissertation, I feel that she has gently and patiently guided me to the shore with wisdom, kindness, and what feels like a warm hug of support.

My sincere thanks also go to my committee members, Assoc. Prof. Supong Tangkiengsirisin, Assoc. Prof. Atipat Boonmoh, Assistant Professor Dr. Apisak Sukying, and Dr. Eric A. Ambele, for their significant contributions to this study. Their diverse expertise, insightful suggestions, and thoughtful critiques have enriched the quality of my research and helped sharpen its academic rigor. I am particularly thankful for their attention to detail and generous support throughout the revision process.

I am especially grateful to Assistant Professor Dr. Apisak Sukying, who always brought positive energy into every room and inspired us not only as students but as individuals. His cheerful encouragement pushed us to pursue success with confidence, and his belief in our potential reminded us that learning is not only about knowledge but also about growth. He never gave up on us no matter how lost or stressed we felt and somehow always knew how to lift our spirits with just the right words. I would also like to thank Dr. Eric A. Ambele for his valuable suggestions. He often offered brief

comments that carried deep meaning which us insightful, thought-provoking, and exactly what I needed to hear. I always looked forward to his feedback, knowing that even a few words from him could open up new ways of thinking and meaningfully improve my work.

To my fellow ELT colleagues, thank you for the shared moments of collaboration and friendship throughout this academic journey. The discussions, teamwork, and mutual encouragement made this experience not only more productive but also genuinely enjoyable. I am especially grateful for the friendships we formed, which provided both comfort and motivation during challenging times. Some of you have shown remarkable determination and success, becoming role models whose paths I truly admire and hope to follow. These shared experiences and inspirations have added lasting meaning to this dissertation process.

Finally, I would like to extend my deepest appreciation to my husband, my daughters, and my entire family for their unconditional love, patience, and unwavering support. You have truly been the wind beneath my wings, always by my side whenever I needed encouragement the most. Your love and belief in me have helped me navigate both the challenges and triumphs of this journey, keeping me grounded and focused on my goals. I am especially grateful to my husband for his constant presence and for accompanying me to campus throughout these five years. He never once let me go alone and would patiently wait in front of the building until my classes ended. His quiet sacrifices, steady encouragement, and devoted support have meant more to me than words can express. I will always carry with me his heartfelt words: "If someone in the family wants to pursue education, I will do everything I can to support them." That promise gave me strength and reminded me that I was never alone on this journey.

To everyone mentioned here, and to many others who supported me in ways both large and small, I offer my sincerest thanks. Your kindness, encouragement, and contributions have played an essential role in bringing this dissertation to completion. This work is not only the result of my own efforts but also a reflection of the remarkable community that has stood beside me throughout this journey.

Davika Sakkampang

TABLE OF CONTENTS

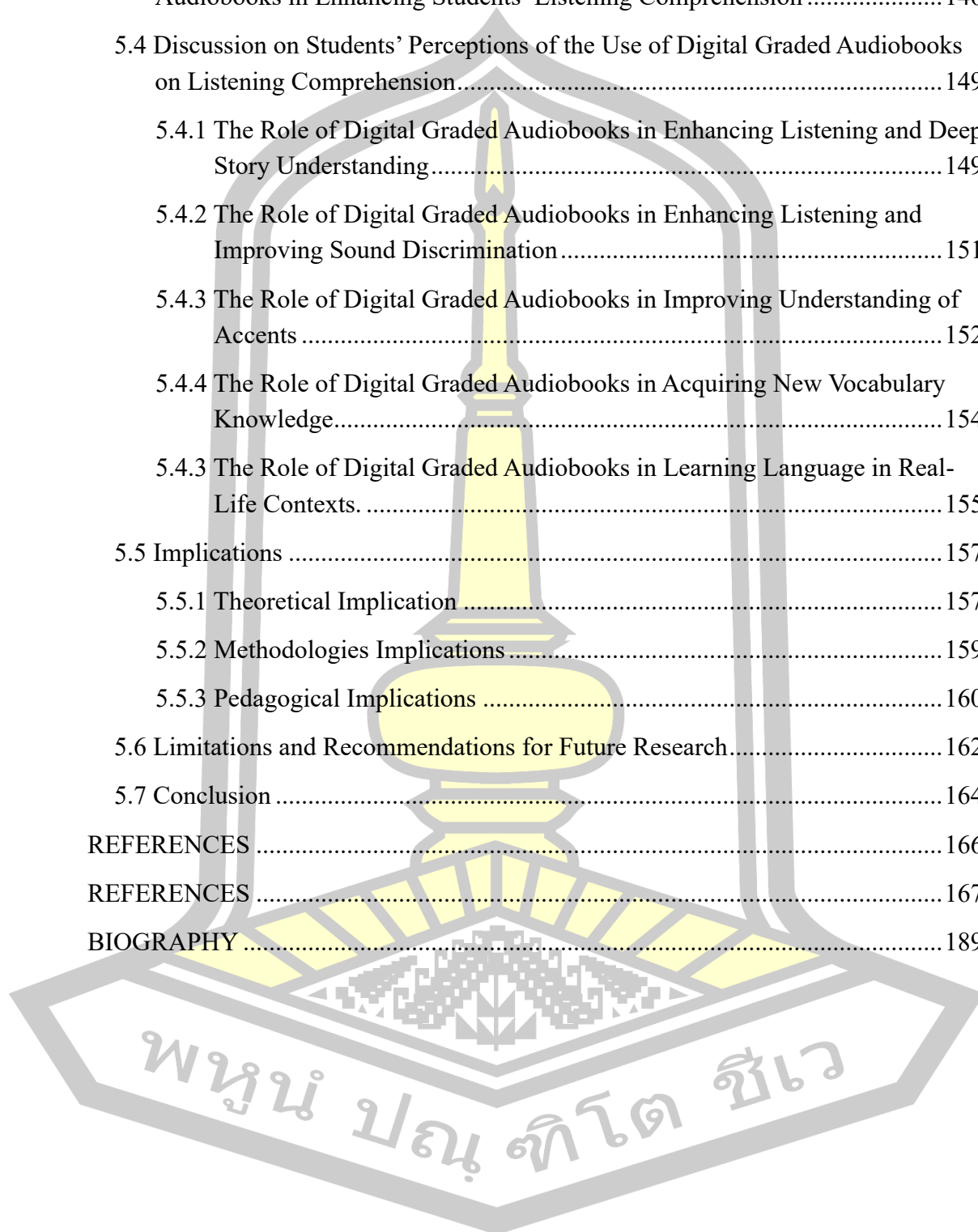
	Page
ABSTRACT.....	D
ACKNOWLEDGEMENTS.....	E
TABLE OF CONTENTS.....	G
LIST OF TABLES	L
LIST OF FIGURES	N
CHAPTER ONE INTRODUCTION.....	1
1.1 Rationale and Background.....	1
1.2 Objectives of the study	11
1.3 Significance of the Study.....	12
1.4 Scope of the Study	13
1.5 Definition of Keys Terms.....	14
1.5.1 Digital Graded Audiobooks.....	15
1.5.2 Listening Comprehension.....	15
1.5.3 Listening Fluency	15
1.5.4 Students' Perception.....	16
1.5.5 Thai EFL undergraduate students.....	16
1.5.6 Integrated Digital Graded Audiobook Listening Activities.....	16
1.5.7 In-class Guided Listening Activities	17
1.5.8 Out-of-class Independent Listening Practice.....	17
1.5.9 Listening Guidance for Digital Graded Audiobooks.....	17
1.6 Structure of the Thesis	18
CHAPTER TWO LITERATURE REVIEWS	19
2.1 The Concept of Listening	19
2.2 Types of Listening.....	22
2.2.1 Informational Listening.....	23

2.2.2 Critical Listening.....	23
2.2.3 Therapeutic and Empathetic Listening.....	23
2.3 Components of Listening Skill.....	24
2.3.1 Listening Comprehension.....	24
2.3.2 Listening Fluency.....	26
2.4 Approaches to Teaching Listening.....	28
2.5 Assessing Listening Skill.....	31
2.5.1 Assessing Listening Comprehension.....	32
2.5.2 Assessing Listening Fluency.....	35
2.5.2.1 Timed Multiple-Choice Listening.....	35
2.5.2.2 Speeded Gap-Fill and Paraphrasing.....	35
2.5.2.3 Shadowing.....	35
2.5.2.4 Timed Summary.....	36
2.5.2.5 Real-Time Sentence Completion.....	36
2.6. Graded Audiobooks.....	38
2.6.1 History of Graded Audiobooks.....	38
2.6.2. Theoretical Explanations for Graded Audiobooks.....	40
2.6.2.1 Input Hypothesis (Krashen, 1982).....	40
2.6.2.2 Cognitive Load Theory (Sweller, 1988).....	42
2.6.2.3 Automaticity Theory (LaBerge & Samuels, 1974).....	43
2.6.2.4 Noticing Theory (Schmidt, 1990).....	44
2.6.2.5 Dual Coding Theory (Paivio, 1971).....	45
2.6.3 Roles of Graded Audiobooks in Language Acquisition.....	46
2.6.4 The Advantages and Disadvantages of Graded Audiobooks.....	48
2.7 Previous Studies.....	50
2.7.1.1 Previous Studies on the Use of Graded Audiobooks and Listening Comprehension.....	51
2.7.1.2 Previous Studies on the Use of Graded Audiobooks and Listening Fluency.....	53

2.7.2 Previous Studies in the Thai Context	55
2.8 Conceptual Framework.....	58
2.9 Summary of the Chapter.....	59
CHAPTER THREE RESEARCH METHODOLOGY	61
3.1 Research Design	61
3.2 Participants and Setting	63
3.2 Digital Graded Audiobooks	66
3.4 Research Instruments.....	70
3.4.1 Listening Comprehension Pretest and Posttest	70
3.4.2 Semi-Structured Interview Questions	73
3.5 Data Collection Procedure	76
3.5.1 Pilot Study	76
3.5.2 The Main Study	76
3.5.2.1 Pre-intervention phase.....	77
3.5.2.2 While-intervention phase.....	77
3.5.2.3 Post-intervention phase	82
3.6 Data analysis	83
3.6.1 Data analysis for Research Questions 1: To what extent do digital graded audiobooks affect Thai EFL undergraduate students' listening comprehension?.....	83
3.6.2 Data Analysis for Research Questions 2 and 3: What are the perceptions of Thai EFL undergraduate students toward the features and use of digital graded audiobooks on their listening comprehension?	84
3.7 Instrument Validation.....	96
3.8 Trustworthiness of Qualitative Data	99
3.9 Ethical Considerations	101
3.10 Summary of the Chapter.....	103
CHAPTER FOUR RESULTS OF THE STUDY.....	105
4.1 The Effect of Digital Graded Audiobooks on Students' Listening Comprehension.....	105

4.1.1 Tests of Normality of the Pretest and Posttest Scores on the Listening Comprehension.....	105
4.1.2 Overview of Descriptive Statistical Data of Listening Comprehension Test Scores.....	107
4.1.3.1 Paired Samples T-Test Analysis (Within-Group Differences) of the Pretest and Posttest Scores on the Listening Comprehension	108
4.1.3.2 Independent Samples T-Test Analysis (Between-Group Differences) of the Pretest and Posttest Scores on the Listening Comprehension.....	109
4.2 Perceptions toward the Features of Digital Graded Audiobooks in Enhancing Students' Listening Comprehension.....	110
4.3.1 Theme 1: Vocabulary Development through Focused Input and Recycling	110
4.3.2 Theme 2: Structured and Level-appropriate Scaffolding	113
4.3.3 Theme 3: Engaging and Multimodal Learning Experience	116
4.3.4 Theme 4: Supportive Listening Features for Comprehension and Confidence.....	119
4.3.5 Theme 5: Motivation and Learner Engagement Stimulated by Audiobook Accessibility and Flexibility.....	122
4.4 Perceptions toward the Use of Digital Graded Audiobooks in Developing Students' Listening Comprehension.....	124
4.4.1 Theme 1: Enhancing Listening and Deep Story Understanding	124
4.4.2 Theme 2: Improving Sound Discrimination.....	128
4.4.3 Theme 3: Improving Understanding of Accents	130
4.4.4 Theme 4: Acquiring New Vocabulary Knowledge.....	132
4.4.5 Theme 5: Learning Language in Real-Life Contexts.....	134
4.5 Summary of the Chapter.....	137
CHAPTER FIVE DISCUSSIONS AND CONCLUSION	139
5.1 Overview of the Findings	139
5.2 Discussion on Effects of Digital Graded Audiobooks on Listening Comprehension of Thai EFL Undergraduates	140

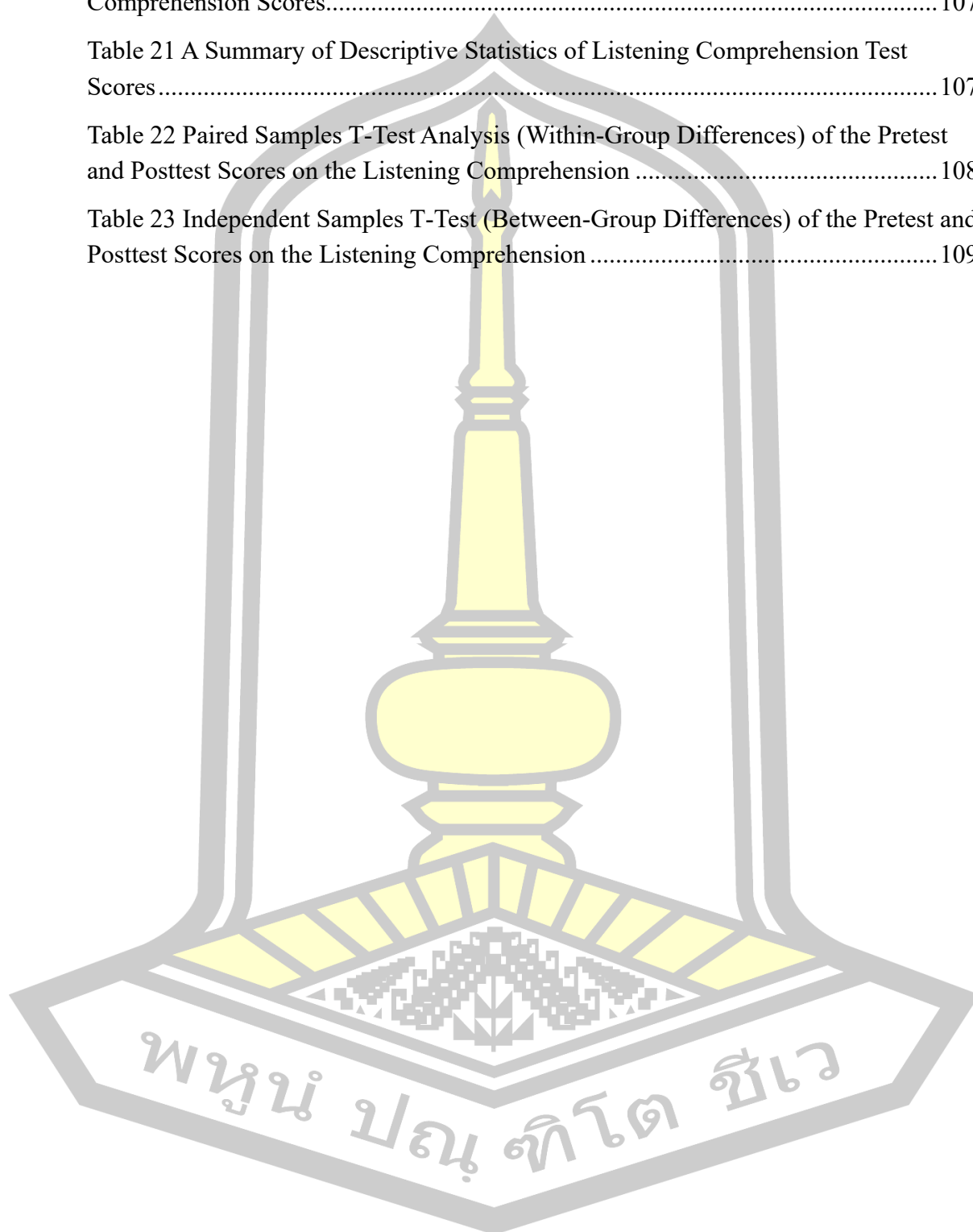
5.3 Discussion on Students' Perceptions on the Features of Digital Graded Audiobooks in Enhancing Students' Listening Comprehension	146
5.4 Discussion on Students' Perceptions of the Use of Digital Graded Audiobooks on Listening Comprehension.....	149
5.4.1 The Role of Digital Graded Audiobooks in Enhancing Listening and Deep Story Understanding	149
5.4.2 The Role of Digital Graded Audiobooks in Enhancing Listening and Improving Sound Discrimination	151
5.4.3 The Role of Digital Graded Audiobooks in Improving Understanding of Accents	152
5.4.4 The Role of Digital Graded Audiobooks in Acquiring New Vocabulary Knowledge.....	154
5.4.3 The Role of Digital Graded Audiobooks in Learning Language in Real-Life Contexts.	155
5.5 Implications	157
5.5.1 Theoretical Implication	157
5.5.2 Methodologies Implications	159
5.5.3 Pedagogical Implications	160
5.6 Limitations and Recommendations for Future Research.....	162
5.7 Conclusion	164
REFERENCES	166
REFERENCES	167
BIOGRAPHY	189



LIST OF TABLES

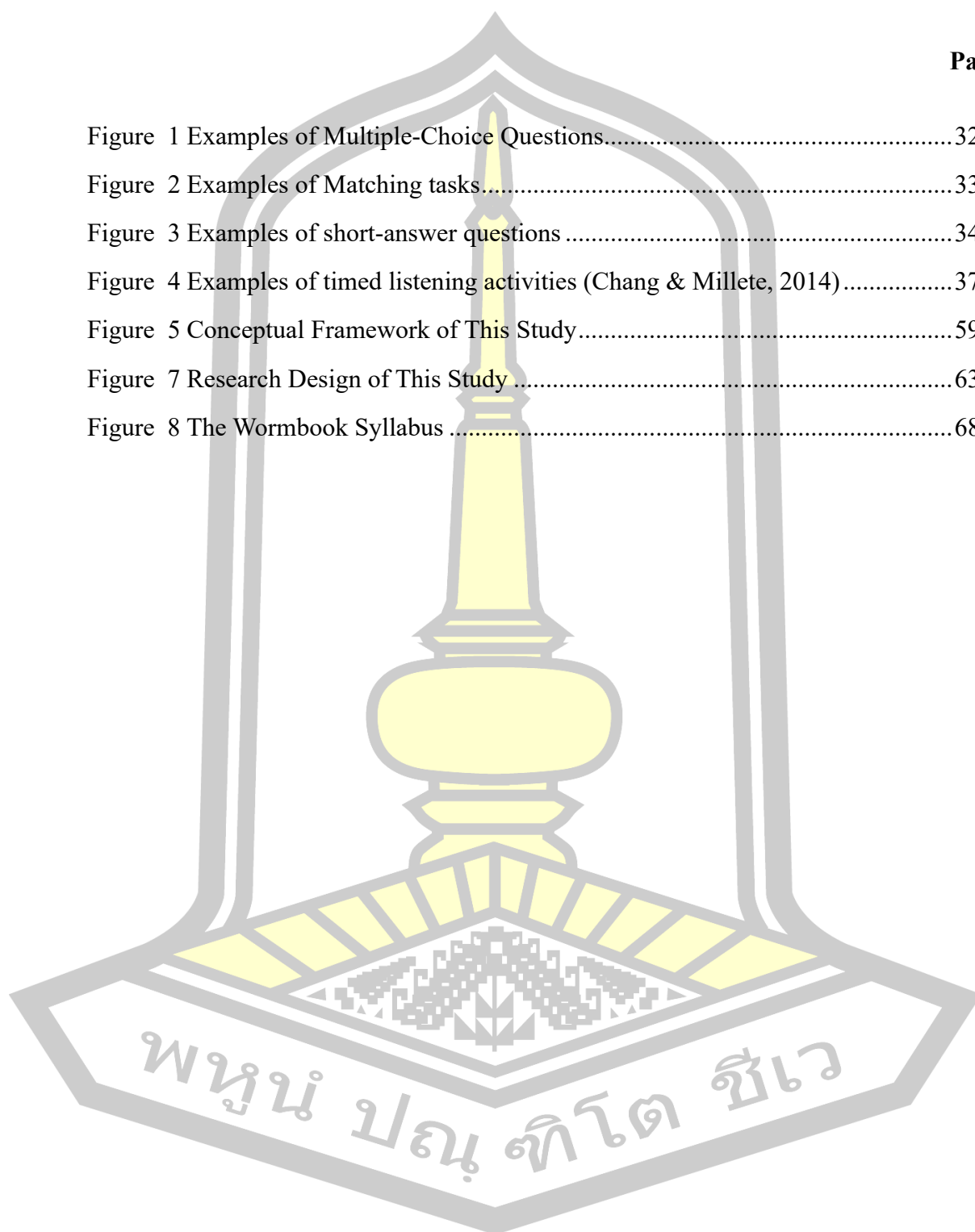
	Page
Table 1 The Summary of Listening Stages and Key Activities	22
Table 2 The Summary of Approaches to Teaching Listening	29
Table 3 A Summary of Participants' Demographic Information.....	65
Table 4 The English Proficiency Levels of the Participants Using Oxford Bookworms Level Test.....	69
Table 5 The Profile of The Selected Audiobooks for In-Class Guided Discussion Sessions.....	69
Table 6 The Profile of The Digital Graded Audiobooks Used in the Listening Comprehension Test.....	70
Table 7 Specific Objectives of the Listening Comprehension Test and Corresponding Formats	72
Table 8 The listening instruction and activities of the control group and the experimental group	79
Table 9 Weekly Instructional Framework for Control and Experimental Groups	79
Table 10 Teacher Guidance Used During In-Class Audiobook Listening	81
Table 11 Initial Codes and Reflective Descriptions on Perceived Audiobook Features	86
Table 12 Initial Codes and Reflective Descriptions on Perceived Benefits.....	87
Table 13 Initial Themes and Related Initial Codes on Perceived Features of Digital Graded Audiobooks	89
Table 14 Initial Themes and Related Initial Codes on Perceived Benefits.....	89
Table 15 Five Audiobook Feature Themes	91
Table 16 Five Benefit-Related Themes.....	92
Table 17 Summary of Final Themes, Audiobook Features, and Perceived Benefits..	94
Table 18 Item difficulty and discrimination for the listening comprehension test and listening fluency test	97
Table 19 Tests of Normality of the Pretest and Posttest Scores on the Listening Comprehension	106

Table 20 Descriptive Statistics of Skewness and Kurtosis for Listening Comprehension Scores.....	107
Table 21 A Summary of Descriptive Statistics of Listening Comprehension Test Scores.....	107
Table 22 Paired Samples T-Test Analysis (Within-Group Differences) of the Pretest and Posttest Scores on the Listening Comprehension	108
Table 23 Independent Samples T-Test (Between-Group Differences) of the Pretest and Posttest Scores on the Listening Comprehension	109



LIST OF FIGURES

	Page
Figure 1 Examples of Multiple-Choice Questions.....	32
Figure 2 Examples of Matching tasks.....	33
Figure 3 Examples of short-answer questions	34
Figure 4 Examples of timed listening activities (Chang & Millete, 2014).....	37
Figure 5 Conceptual Framework of This Study.....	59
Figure 7 Research Design of This Study	63
Figure 8 The Wormbook Syllabus	68



CHAPTER ONE

INTRODUCTION

This chapter provides an overview of the study. It begins with the background and rationale, establishing the context and need for the research. This is followed by a clear statement of the research objectives and questions that guide the inquiry. The chapter then discusses the significance of the study, highlighting its potential contributions to EFL pedagogy and curriculum design. The scope of the research is outlined to clarify its boundaries and focus. Key terms relevant to the study are defined to ensure conceptual clarity. The chapter concludes with an outline of the structure of the dissertation.

1.1 Rationale and Background

The development of listening skills in English as a Foreign Language (EFL) has received growing attention, as it is critical for success in personal, educational, and professional contexts. For personal communication, effective listening fosters rapport, trust, and empathy, thereby strengthening communication across families, friendships, workplaces, and beyond (Brownell, 2012). Moreover, active listening enhances interaction by supporting accurate message interpretation, appropriate responses, and the reduction of misunderstandings (Bodie et al., 2015). Within educational settings, listening plays a key role in acquiring and retaining knowledge, allowing learners to apply new concepts effectively (Wolvin & Coakley, 2019). It also supports conflict resolution and problem-solving by enabling individuals to understand diverse perspectives (Barker, 2018). In professional environments, effective listening improves leadership, collaboration, and decision-making by facilitating a clearer understanding of team dynamics and individual needs (Hargie, 2011). Listening contributes to emotional intelligence by helping individuals interpret others' emotions and intentions, which is an essential skill in social and workplace interactions (Goleman, 1998). Furthermore, it enhances cognitive control and concentration by requiring listeners to filter distractions and attend selectively to relevant input (Sussman & Kane, 2015). Overall, listening constitutes an active cognitive process rather than mere passive hearing, serving as a foundational skill that supports

learning, fosters interpersonal connections, and enhances communicative effectiveness.

For EFL university students, listening plays a vital role in language development, academic success, and communicative confidence (Goh, 2010; Vandergrift & Goh, 2012; Renandya & Farrell, 2011). When learners are exposed to fluent speakers, they receive comprehensible input, which is essential for language acquisition according to Krashen's Input Hypothesis (1985). Through listening, students can expand their vocabulary, improve their pronunciation, and become more sensitive to grammar patterns (Vandergrift & Goh, 2012). In academic settings, listening skills help learners follow lectures, understand instructions, and complete assignments effectively (Rost, 2016). Good listening ability also supports communication in classroom interactions, such as participating in group discussions, understanding pragmatic cues, and expressing ideas clearly to peers and teachers (Gilakjani & Ahmadi, 2011). Listening further encourages critical thinking by helping learners assess arguments and consider different points of view (Field, 2008). In professional contexts, listening supports career readiness through better performance in interviews, stronger teamwork, and clearer customer communication (Cheng, 2015). Importantly, exposure to a range of English accents helps students build intercultural awareness and adapt to global communication environments, which are key qualities in today's international settings (Jenkins, 2000). Therefore, developing strong listening skills is essential for academic, social, and professional growth in EFL contexts.

In second language acquisition, listening comprehension and listening fluency are two essential subskills (Vandergrift & Goh, 2012; Field, 2008), and while they are closely connected, each represents a distinct aspect of listening proficiency (Rost, 2016; Gilakjani & Ahmadi, 2011). Listening comprehension involves understanding spoken language, identifying key ideas, and retaining important information (Vandergrift & Goh, 2012; Rost, 2016). It enables real-time interpretation and inference-making. In contrast, listening fluency refers to the ease, speed, and automaticity with which spoken input is processed (Field, 2008). Fluent listeners can follow rapid speech and respond naturally with minimal cognitive strain (Gilakjani & Ahmadi, 2011). From the lens of Cognitive Load Theory (Sweller, 1988), fluency reduces processing

demands, allowing more mental resources for comprehension and interaction. Learners lacking fluency may struggle to keep pace despite recognizing individual words. Conversely, those with low comprehension may process fluently but miss deeper meaning (Cheng, 2015). Therefore, both skills must develop together to facilitate effective real-life communication (Jenkins, 2000).

However, many EFL learners face persistent challenges in both areas due to a mix of cognitive, linguistic, and contextual barriers. Limited vocabulary, unfamiliar accents, fast-paced speech, and complex grammar structures often impede comprehension, particularly in academic environments (Vandergrift & Goh, 2012; Rost, 2016). Learners may experience cognitive overload when decoding multiple linguistic features such as intonation, grammar, pragmatics simultaneously (Field, 2008). Fluency development is also hindered by slow processing, weak memory retention, and hesitation in real-time interaction (Cheng, 2015). These difficulties are frequently exacerbated by limited opportunities for extended listening practice and lack of interaction with natural spoken English (Rost, 2016). Without adequate support, such challenges can lead to frustration, reduced confidence, and disengagement.

In Thailand, many university students encounter additional difficulties rooted in both their linguistic background and educational context (Khamkhien, 2010; Noom-ura, 2013). A lack of regular exposure to English outside the classroom significantly limits their engagement with authentic listening materials (Wiriyachitra, 2002). Gaps in vocabulary, especially regarding idiomatic expressions and reduced forms, frequently hinder comprehension (Goh, 2000). Cognitively, many students struggle with rapid processing, which diminishes comprehension (Field, 2008). Fluency is often undermined by anxiety, low self-confidence, and minimal automaticity. Learners frequently resort to word-by-word decoding, which impedes holistic understanding and conversational ease (Cheng, 2015). These issues are compounded by instructional models that prioritize reading and grammar over listening, leaving minimal class time for sustained listening practice (Noom-ura, 2013; Wiriyachitra, 2002).

This issue was particularly evident at government universities, where the institutional mission prioritized the development of technically skilled graduates. At the university where the researcher taught, English courses were mandatory; however, they were

frequently perceived by students as peripheral to their primary fields of study. As a result, learner motivation was often limited to passing the course, which primarily assessed reading and writing, with minimal emphasis on listening and speaking proficiency. This led to a reduced awareness of the importance of oral communication skills for both academic progression and future professional success.

Despite being enrolled in general English courses designed to foster communicative competence, students consistently underperformed in listening, as reflected in assessment outcomes across multiple semesters. Informal interviews with learners revealed that motivation to improve listening and speaking skills had been notably low, as many students perceived these skills as less relevant to academic success compared to reading and writing. Learners expressed limited interest in oral communication, often regarding it as peripheral to exam preparation or future career requirements. Consequently, when exposed to spontaneous, fast-paced spoken English, they reported feeling overwhelmed and discouraged, particularly when the input included reduced speech forms, unfamiliar vocabulary, or unfamiliar accents.

This situation placed an added burden on instructors, who were often responsible for independently sourcing or developing supplementary materials that better aligned with learner needs. However, these resources frequently did not correspond to students' actual proficiency levels and lacked the pedagogical scaffolding necessary for incremental development. As a result, learners remained underexposed to sustained and meaningful auditory input, while instructors continued to struggle with the gap between curricular expectations and classroom realities. This disconnect highlighted an urgent need for contextually appropriate and theoretically informed interventions to enhance listening instruction in under-resourced learning environments.

In response to these challenges, scholars over the past decade have advocated alternative instructional approaches that prioritize exposure to authentic or semi-authentic listening input within a supportive learning environment. Extensive listening programs, digital audio resources, and learner-centered strategies have all been recommended to help bridge the gap between classroom instruction and real-world language use (Renandya & Farrell, 2010; Vandergrift & Goh, 2012; Nation &

Newton, 2009). These approaches emphasize the importance of repeated listening, vocabulary recycling, and strategic scaffolding, especially for learners with limited access to English outside the classroom. In particular, materials that are linguistically graded and delivered through flexible digital formats have been identified as promising tools to address the motivational and proficiency barriers faced by low-level EFL learners (Renandya & Farrell, 2010; Nation & Newton, 2009; Vandergrift & Goh, 2012).

One such resource, graded audiobooks have emerged as a practical and pedagogically sound tool for supporting language development, particularly in listening comprehension and fluency. Audiobooks, which are audio recordings of books read aloud, have been distributed in various formats such as CDs, DVDs, and digital files, either with or without accompanying print texts (Rizal et al., 2020). The concept originated in 1932 with the American Foundation's "Books for the Adult Blind" project, which was initially aimed at providing visually impaired adults with access to literature. Over time, audiobooks gained popularity in educational contexts, especially among children and struggling readers, as they served as models of fluent reading (Kartal & Simsek, 2017). In the late 20th century, audiobooks began to evolve in parallel with graded readers, which are simplified texts specifically developed for language learners. This evolution led to the creation of graded audiobooks that were first distributed as cassette or CD companions to print materials. With advances in digital technology and the rise of mobile platforms, these materials have since become standalone digital resources, now available through applications and online streaming services. Graded audiobooks are carefully adapted to match learners' proficiency levels, typically aligned with the CEFR from A1 to C2. At lower levels, they feature slower narration, simplified vocabulary, and clear articulation. At higher levels, they incorporate more complex grammar and faster pacing. Many also include transcripts, glossaries, playback control, and comprehension tasks, which offer learners both structure and flexibility. These multimodal features help reinforce memory, improve pronunciation and prosodic awareness, and support the development of fluency through repeated and comprehensible exposure (Nation & Newton, 2009; Kartal & Simsek, 2017; Vandergrift & Goh, 2012).

In first language acquisition, audiobooks have been widely used to support the development of reading comprehension, oral reading fluency, and vocabulary, particularly among young or struggling readers aged 6 to 12. These interventions often feature modeled fluent reading, audio-text synchronization, and repeated exposure, showing consistent gains in literacy outcomes (Gonzalez-Torres & Solano, 2024; Hudson et al., 2008; Magbanua et al., 2023; Rasinski, 2012; Serafini et al., 2008; Whittingham et al., 2013). Learners in these studies benefited from rich, English-dominant environments, regular teacher support, and well-structured classroom materials. Audiobooks in these contexts were used not only for home reading but also through mobile apps and CD players, often with direct teacher guidance and follow-up activities (Wood et al., 2009). However, a key gap emerges when attempting to transfer findings from these L1 contexts to second language (L2) learners. L1 learners are already immersed in English-rich environments and possess decoding abilities and background knowledge that L2 learners often lack. These findings cannot be directly applied to L2 learners without accounting for differences in linguistic competence, exposure, and cognitive processing. In particular, L2 learners in low-input environments require adapted interventions that recognize their limited access to comprehensible spoken input, weak decoding skills, and reduced support systems (Renandya & Farrell, 2011; Nation & Newton, 2009; Goh, 2000).

While the research base on L1 audiobook use is well-established, studies on audiobook use in L2 learning have primarily involved intermediate to advanced learners in academic settings, particularly at the university level. These learners often possess the metacognitive strategies and language awareness necessary to engage in extended listening tasks with minimal support. Research has shown that when such learners engage with leveled or graded audiobooks, they tend to demonstrate significant gains in listening comprehension, particularly in their ability to follow the flow of discourse, understand key vocabulary, and make inferences (Chang & Millett, 2015; Yeh, 2014; Gonulal, 2020). These benefits are often attributed to repeated exposure to spoken language that is authentic while being simplified and delivered in clear, structured formats.

For example, Chang (2011) and Waring and Takaki (2003) found that repeated listening to graded narratives helped learners retain important information, track plot progression, and identify character actions and motivations. Moreover, the structured nature of graded audiobooks, which includes simplified vocabulary, controlled syntax, and predictable pacing, supports learners in managing complex input without becoming overwhelmed. In some studies, multimodal support such as printed transcripts, vocabulary previews, and visual aids was used to enhance understanding and engagement (Rozak et al., 2021; Gonulal, 2020). Instructional techniques such as pre-listening prediction tasks, focused listening guidance, and post-listening reflection have also been shown to improve comprehension outcomes when used alongside audiobook content (Mohamed, 2018; Li & Renandya, 2023).

While the evidence from these studies is promising, the current body of literature remains limited in several important ways. To begin with, the majority of these studies have been conducted with intermediate or advanced-level learners (Chang & Millett, 2015; Gonulal, 2020). These learners already have the ability to process extended input and often do not require extensive scaffolding (Nation & Newton, 2009). In contrast, low-level learners may find it challenging to follow continuous spoken input, even when it is simplified (Goh, 2000; Renandya & Farrell, 2011). These lower-level learners often need explicit support in decoding skills, guidance in recognizing word boundaries and sounds, and opportunities to pause or replay difficult segments (Field, 2008; Vandergrift & Goh, 2012). However, there is still limited research that investigates how audiobook-based instruction can be modified to meet the needs of these beginner-level learners (Li & Renandya, 2023; Yeh, 2014).

In addition, many existing studies rely heavily on test results or self-assessment data to measure gains in listening comprehension (Chang & Millett, 2015; Yeh, 2014). While these tools are valuable for understanding outcomes, they do not offer insight into how learners actually interpret and process audiobook input (Vandergrift & Goh, 2012). For example, few studies explore the internal strategies that low-proficiency learners use when they encounter unknown vocabulary, how they maintain attention during longer listening tasks, or how they attempt to make sense of meaning when no transcripts are provided (Field, 2008; Goh, 2000). Understanding these internal

comprehension processes is critical for designing effective audiobook instruction that addresses the real-time challenges learners face (Li & Renandya, 2023; Renandya & Farrell, 2011).

Furthermore, research to date has mostly been carried out in urban or university-based settings, where learners typically have access to digital devices, fast internet, and direct teacher supervision (Yeh, 2014; Gonulal, 2020). These controlled conditions are not always available in under-resourced or rural environments (Noom-ura, 2013; Wiriyachitra, 2002). In many EFL contexts such as Thai provincial universities, learners often experience limited exposure to spoken English outside the classroom. They may also lack the technological skills or confidence to engage with digital learning tools independently (Khamkhien, 2010; Renandya & Farrell, 2011). This discrepancy in learning environments presents a serious gap in the research, as the strategies and benefits documented in previous studies may not be replicable in less privileged contexts.

Studies on audiobook use in L2 learning have also examined its impact on listening fluency, which refers to the ability to process spoken language rapidly, accurately, and with automaticity (Field, 2008; Chang & Millett, 2015; Gonulal, 2020). Listening fluency involves automatic decoding of lexical items, recognition of syntactic structures, and real-time interpretation of discourse features such as cohesion and intonation (Field, 2008; Vandergrift & Goh, 2012). In this area, several studies have demonstrated that repeated and meaningful exposure to spoken texts can help learners develop faster and more efficient auditory processing skills (Chang & Millett, 2015; Nation & Newton, 2009). Through regular engagement with leveled audiobooks, learners gradually internalize language patterns, improve their recognition of word groupings, and adapt to the rhythm and prosody of natural speech. For instance, Chang (2011) found that repeated listening to graded stories helped learners build fluency by enabling them to follow speech more smoothly and with greater confidence. Nation and Newton (2009) emphasized that fluency development is most effective when input is both level-appropriate and extensive, allowing learners to recognize frequently occurring lexical chunks and reduce their reliance on slow, word-by-word processing. Audiobooks offer these features through controlled pacing,

repetition of common phrases, and a focus on everyday language, all of which create a supportive environment for developing fluency. Additionally, some studies highlight the role of adjustable playback speed and audio replay functions in helping learners gradually adapt to faster or more natural speech rates (Renandya & Farrell, 2011; Mohamed, 2018).

Despite promising findings, listening fluency remains underexplored in current research on audiobook-supported language development. Many studies isolate fluency as an outcome, often measuring post-listening comprehension or processing speed without linking it to a broader instructional framework (Chang and Millett, 2015; Gonulal, 2020). This limited perspective reduces our understanding of how fluency can be developed systematically alongside other listening subskills such as comprehension and vocabulary acquisition. In addition, few studies have examined how audiobook listening is implemented in low-input or under-resourced classroom settings, where learners often struggle to sustain engagement or apply real-time processing strategies without adequate instructional support. These gaps highlight the need for more comprehensive and context-sensitive research that explores how specific audiobook features and pedagogical design can effectively support the development of listening fluency among low-proficiency EFL learners.

Although recent qualitative studies have acknowledged the motivational benefits of audiobook use (Rozak et al., 2021; Gonulal, 2020), they have largely overlooked how low-proficiency learners experience listening development as a gradual process involving auditory adjustment and strategic self-regulation. Few studies have explored how learners interact with audiobook features such as segmentation, replay functions, or subtitles to enhance comprehension and fluency. Furthermore, research rarely considers the contextual limitations of low-input environments where students have minimal exposure to spoken English and limited experience with digital learning tools. The present study addressed these gaps by providing detailed insights into beginner learners' strategies, perceptions, and emotional responses to audiobook-supported instruction within a Thai provincial university context.

To address these limitations, the study drew on two key theoretical frameworks: Krashen's Input Hypothesis (Krashen, 1985) and Vygotsky's Zone of Proximal

Development (ZPD) (Vygotsky, 1978). Krashen's Input Hypothesis emphasized the importance of providing learners with input slightly beyond their current proficiency level ($i+1$), enabling them to acquire language naturally through meaningful and comprehensible exposure. This concept served as the foundation for the autonomous, out-of-class component of the instructional model, in which students selected leveled audiobooks and engaged in repeated listening at their own pace. Meanwhile, Vygotsky's ZPD highlighted the role of social interaction and instructional scaffolding, proposing that learners could reach higher levels of understanding with appropriate support. This principle informed the in-class component of the model, where vocabulary previews, listening strategy instruction, and reflective discussions helped bridge the gap between what learners could do independently and what they could achieve with guidance.

With advances in mobile technology and online learning platforms, graded audiobooks have further evolved into digital formats that are more accessible, interactive, and adaptable to diverse learner needs (Al-Jarf, 2021; Cohn et al., 2024; Nation & Newton, 2009). Digital graded audiobooks combine the linguistic scaffolding of graded readers with multimedia features such as adjustable playback speed, synchronised text, embedded glossaries, and comprehension tasks (Anderson et al., 2024; Chang & Millett, 2014; Rodgers & Webb, 2011). Delivered through dedicated applications and web-based platforms, they enable learners to engage with spoken English flexibly in both classroom and independent study settings (Bewersdorff et al., 2023; Grgurović et al., 2013; Stockwell, 2007). These multimodal features support comprehension, promote repeated listening, and encourage learner autonomy, making them particularly suitable for low-input EFL contexts such as Thai provincial universities (Brown et al., 2008; Chen et al., 2024; Nasir et al., 2021; Ushioda, 2011).

Building on this theoretical foundation, the study aimed to enhance listening comprehension and fluency through the use of digital graded audiobooks in integrated digital graded audiobook listening activities. It combined in-class guided listening activities and out-of-class autonomous practice to enhance listening comprehension and fluency. Equally important to the implementation of digital graded audiobooks

was understanding how learners perceived and experienced them. In low-input environments, where motivation and sustained exposure were often limited, student perceptions played a vital role in determining the success of any instructional intervention. Learner engagement and motivation were key drivers of language development (Renandya and Farrell, 2010; Waring, 2008). Capturing these perceptions provided practical insights into how the use of digital graded audiobooks supported or challenged students' learning processes, helping to refine future implementations and ensuring the model remained student-centered and responsive to learner needs.

Theoretically, the study contributed to the growing body of research that integrated second language acquisition frameworks with audiobook-based learning. Pedagogically, it offered a structured, replicable model that addressed the needs of lower-proficiency EFL learners in under-resourced classrooms, a group often overlooked in previous studies. Practically, it equipped educators with a flexible instructional approach that could be adapted to suit various learning contexts. Lastly, by foregrounding learner perceptions, the study ensured that instructional design was grounded in the lived experiences and needs of actual learners, enhancing its relevance and impact within Thai EFL education and beyond.

1.2 Objectives of the study

With regard to the rationale above, this research study was conducted to investigate the use of digital graded audiobooks, with the following objectives:

1. To examine the effects of digital graded audiobooks on listening comprehension of Thai EFL undergraduate students,
2. To examine the effects of digital graded audiobooks on listening fluency of Thai EFL undergraduate students,
3. To investigate the perceptions of Thai EFL undergraduate students toward the use of digital graded audiobooks in enhancing their listening comprehension.

According to the objectives mentioned above, the following research questions are formulated to guide this study:

1. What is the effect of digital graded audiobooks on listening comprehension of Thai EFL undergraduate students?
2. What is the effect of digital graded audiobooks on listening comprehension of Thai EFL undergraduate students?
3. What are the perceptions of Thai EFL undergraduate students toward the use of digital graded audiobooks in enhancing their listening comprehension?

1.3 Significance of the Study

This study contributed to the field of English language education by empirically investigating the effects of digital graded audiobooks through integrated digital graded audiobook listening activities on listening comprehension, listening fluency, and learner perceptions among Thai EFL undergraduates. By triangulating quantitative outcomes with learner feedback, the study offered theoretical, pedagogical, and practical contributions for four key stakeholder groups: students, teachers, curriculum developers, and material designers.

This research addressed critical gaps in second language acquisition (SLA) literature by integrating Krashen's Input Hypothesis (Krashen, 1985), Vygotsky's Zone of Proximal Development (ZPD) (Vygotsky, 1978), and Nation and Newton's fluency development model (Nation & Newton, 2009) into the design of a structured audiobook-based listening program. While extensive listening was often recommended, few empirical studies had operationalized these theories into scaffolded, replicable instructional practices for low- to mid-proficiency learners. This study validated the use of digital graded audiobooks as a practical medium for delivering comprehensible input ($i+1$), promoting automaticity, and facilitating incremental listening development in low-input environments.

For EFL teachers, the study provided integrated digital graded audiobook listening activities that combined in-class guided listening support with out-of-class autonomous listening. This structure ensured flexibility, learner control, and structured scaffolding. Teachers were able to adopt the integrated framework, which included activities such as vocabulary previews, visual cues, listening journals, and

post-listening discussions, to support students in developing listening stamina, decoding skills, and sustained engagement.

For students, the use of digital graded audiobooks offered accessible input aligned with their CEFR levels, which helped reduce listening anxiety and foster learner autonomy. The study's qualitative findings revealed increased motivation, confidence, and awareness of listening strategies, particularly among lower-proficiency learners. These results demonstrated both the emotional and cognitive benefits of the program.

This research supported the inclusion of digital graded audiobooks in general English curricula, particularly in Thai public universities where students often underperformed in listening due to low motivation and minimal exposure to natural spoken English. The integrated digital graded audiobook listening activities provided a cost-effective and scalable solution that aligned with national language policy goals emphasizing digital integration and communicative competence. The study results informed course design, teacher training, and assessment planning in listening-intensive programs. Moreover, it encouraged the institutional adoption of blended learning environments and supported the development of policies that promoted learner autonomy and repeated exposure to input.

The study also offered practical insights for ELT material developers. The findings revealed learner preferences for interactive audiobook features such as replay functions, adjustable playback speed, subtitles, and visual scaffolding. Developers could use these insights to enhance digital graded audiobook platforms, ensuring they met learner needs across different proficiency levels while supporting both cognitive and emotional engagement. Materials that incorporated guided listening, story segmentation, and opportunities for metacognitive reflection could further extend the instructional value of digital audiobook resources in EFL settings.

1.4 Scope of the Study

This study employed a quasi-experimental design to investigate the effects of using digital graded audiobooks on the listening comprehension, listening fluency, and learner perceptions of Thai EFL undergraduate students. The research was conducted over a 12-week period during the second semester of the 2024 academic year.

Participants included 74 second-year non-English major students enrolled in a general English course titled *English for Communication* at a public university in northeastern Thailand. Two intact classes were purposively selected for the study. Class A (n = 36) served as the control group, while Class B (n = 38) was designated as the experimental group. All participants had CEFR proficiency levels ranging from A1 to A2 and had no prior experience with extensive listening or audiobook-based instruction.

The intervention involved the use of twelve digital graded audiobooks from the *Oxford Bookworms Library Series*, delivered through the *Oxford Reading Club* application. These digital graded audiobooks, simplified in vocabulary and structure, were chosen to match learners' proficiency levels. In the experimental group, digital graded audiobooks were incorporated into both classroom and independent learning settings. In-class use included vocabulary pre-teaching, guided listening, and post-listening discussions. Outside the classroom, students engaged in autonomous listening and completed reflective listening journals.

Quantitative data were collected through pretests and posttests on listening comprehension and listening fluency. Qualitative data were gathered through semi-structured interviews with 12 students purposively selected from the experimental group to explore their perceptions towards the use of digital graded audiobooks. The study was theoretically grounded in Krashen's Input Hypothesis (Krashen, 1985), Vygotsky's Zone of Proximal Development (ZPD) (Vygotsky, 1978), and Nation and Newton's fluency development model (Nation & Newton, 2009), which guided the design and implementation of audiobook-based listening practices.

1.5 Definition of Keys Terms

To ensure clarity and consistency throughout this study, this section defines key terms as they are used in the context of the research. Each term is defined with reference to its theoretical basis and specific application within the scope of the study.

1.5.1 Digital Graded Audiobooks

In this study, *digital graded audiobooks* refers to digital storybooks selected from the *Oxford Bookworms Library Series*, specifically designed for English language learners and categorized by CEFR proficiency levels ranging from A1 to B1. A total of twelve audiobooks were used, including six at the Starter level (A1) and six at Level 1 (A1–A2), for in-class scaffolded listening activities. For out-of-class autonomous listening, students were not assigned specific levels but were encouraged to choose audiobooks freely based on their interests and listening comfort. These audiobooks featured simplified vocabulary, grammar structures, and slower speech rates to accommodate the abilities of low- to mid-proficiency learners. They were accessed via the *Oxford Reading Club Application*, a digital platform offering synchronized audio-text playback, adjustable speed, and replay functions. This format supported both guided classroom practice and independent listening outside the classroom, providing comprehensible input (Krashen, 1985) that promotes vocabulary development, decoding efficiency, prosodic awareness, and listening fluency (Nation & Newton, 2009). Such flexibility enables learners to self-select materials that challenge them slightly beyond their current proficiency level while remaining accessible, aligning with the principles of input-based language learning.

1.5.2 Listening Comprehension

In this study, *listening comprehension* refers to the level of achievement demonstrated by participants on the listening comprehension test administered before and after the intervention. It reflects the learners' ability to understand spoken English input, including both the main ideas and specific details presented in audio texts. The test consisted of 36 items, covering four audio passages selected from digital graded audiobooks at CEFR A1–A2 levels. The test included three types of questions: multiple-choice, true/false, and matching. Each section was designed to assess specific listening subskills such as identifying supporting details, understanding sequences of events, and recognizing speaker intentions.

1.5.3 Listening Fluency

In this study, *listening fluency* refers to the learners' ability to process spoken English efficiently and automatically, as measured by the listening fluency test administered

before and after the intervention. It reflected the speed, accuracy, and ease with which learners decoded and comprehended continuous speech. Improvement in fluency scores was interpreted as evidence of enhanced automaticity and reduced cognitive load during listening, resulting from repeated exposure to digital graded audiobooks. The listening fluency test consisted of 60 multiple-choice items based on four graded audiobook stories at the A1 to A2 levels. Each part assessed learners' ability to follow the storyline in real time, with an emphasis on processing speed and comprehension of ongoing discourse. To simulate fluent listening conditions, each audio segment was played only once and at an adjusted speed that reflected natural spoken English, without being overly fast or artificially slow. The test format and item design followed the framework proposed by Chang (2011).

1.5.4 Students' Perception

In this study, *students' perception* refers to general feeling on participants' experience in enhancing listening comprehension explored through semi-structured interviews conducted after the intervention to gain insights into how integrated digital graded audiobook listening activities affected their listening comprehension development.

1.5.5 Thai EFL undergraduate students

In this study, Thai EFL undergraduate students refers to the 74 participants selected from two intact classes enrolled in a general English course titled *English for Communication* during the second semester of the 2024 academic year. Class A, consisting of 36 students, was designated as the control group, while Class B, comprising 38 students, was assigned as the experimental group. These students were second-year non-English majors at a government university in Thailand where the researcher taught. Their English proficiency levels ranged from A1 to A2 according to the Common European Framework of Reference for Languages (CEFR), as determined by the Oxford Quick Placement Test.

1.5.6 Integrated Digital Graded Audiobook Listening Activities

In this study, *integrated digital graded audiobook listening activities* refers to a structured learning environment using digital graded audiobooks combined with integrated activities designed to enhance listening to comprehension and listening fluency through both in-class guided listening activities and out-of-class independent

listening practice. These activities are grounded in Krashen's Input Hypothesis (Krashen, 1985) and Vygotsky's Zone of Proximal Development (ZPD) (Vygotsky, 1978), supporting incremental listening skill development through comprehensible input and appropriate scaffolding.

1.5.7 In-class Guided Listening Activities

In this study, *in-class guided listening activities* refers to classroom-based tasks that provide learners with structured support while engaging with digital graded audiobooks. These activities do not involve direct instruction but offer guidance through teacher-selected materials and facilitative prompts. Organized into pre-listening, while-listening, and post-listening phases, the activities include vocabulary previews, prediction tasks, focused listening with segmented audio, and post-listening reflection or discussion. The aim is to create a supportive environment that helps learners navigate audiobook content slightly beyond their current level of proficiency, in line with Vygotsky's Zone of Proximal Development (ZPD) (Vygotsky, 1978), without relying on detailed explanations or explicit teaching.

1.5.8 Out-of-class Independent Listening Practice

In this study, *out-of-class independent listening practice* refers to learner-initiated listening activities completed outside the classroom using digital graded audiobooks. These practices are self-directed and emphasize learner autonomy, allowing students to engage with digital graded audiobook content at their own pace using features such as playback control, transcript access, and adjustable speed. Learners choose materials based on their interests and comfort levels, supporting repeated exposure to comprehensible input. Reflection is encouraged through listening journals, where students summarize key ideas, note unfamiliar vocabulary, and track personal progress. This independent practice is designed to promote sustained listening development and fluency beyond the classroom setting, in alignment with Krashen's Input Hypothesis (Krashen, 1985).

1.5.9 Listening Guidance for Digital Graded Audiobooks

In this study, *listening guidance for digital graded audiobooks* refers to teacher-facilitated classroom support provided before students engage in out-of-class independent listening. The purpose of this guidance is to introduce learners to the

audiobook content, familiarize them with the context, and build confidence before they listen on their own. Activities may include a brief overview of the story, key vocabulary preview, listening goals, and demonstration of how to use audiobook features such as playback speed and transcripts, and visual cues like cover images or chapter illustrations. This guidance aims to reduce listening anxiety, provide a clear structure, and ensure learners are better prepared to engage meaningfully with the graded audiobooks outside the classroom.

1.6 Structure of the Thesis

Chapter 1 presents the study's background, explains the study's purposes and research questions, and states the significance of the study. The scope of the study and the definitions of key terms used in this study are also described.

Chapter 2 provides a literature review of the related works, including listening skills and the use of graded audiobooks. The last part of the chapter includes related previous studies on graded audiobooks.

Chapter 3 presents the method used to carry out this investigation. It discusses the general principles of research design followed by methods for data collection. The last part of this chapter involves how the collected data will be analyzed, interpreted, and reported.

Chapter 4 presents the results of the study, including both quantitative and qualitative findings. It reports statistical analyses of listening comprehension and fluency scores, followed by thematic insights from student interviews.

Chapter 5 presents the discussion of the findings by integrating both quantitative and qualitative results. It also outlines the pedagogical implications of the study, addresses its limitations, and provides recommendations for future research.

CHAPTER TWO

LITERATURE REVIEWS

This chapter reviews the theoretical foundations and previous research relevant to the use of graded audiobooks in second language listening instruction, with a particular focus on the development of listening comprehension and fluency. It begins by exploring key second language acquisition theories that support the pedagogical value of graded audiobook input and integrated listening activities. The chapter then synthesizes findings from both international and Thai-based studies, identifying the benefits, limitations, and practical implications of audiobook-based learning. The discussion draws attention to research gaps concerning learner proficiency, instructional scaffolding, and the specific challenges of the Thai EFL context. Finally, the chapter presents the conceptual framework guiding this study, highlighting the relationship between audiobook-based instruction, listening outcomes, and learners' perceptions among A1–A2 university learners.

2.1 The Concept of Listening

Listening is widely recognized as a highly complex and multifaceted process, one that scholars have described through a range of perspectives to capture its depth and dynamism. While all definitions acknowledge listening as an active process, they differ in emphasis. Some researchers focus on the perceptual and intentional aspects of listening. For example, Underwood (1989) describes listening as the intentional act of attentively perceiving and extracting meaning from auditory input. Building on this view, Oxford (1993) extends the definition by highlighting that listening goes beyond hearing sounds. She frames it as a means of accessing information, values, and an understanding of the world, positioning listening as a gateway to both linguistic and cognitive growth.

Other scholars emphasize the interpretive and meaning-making nature of the process. Nunan (2003) defines listening as an active skill involving the interpretation of meaning, while Helgesen (2003) presents it as an active and purposeful attempt to make sense of what is heard. These perspectives highlight the learner's role in constructing understanding rather than simply receiving input. Nevertheless, others present listening as a deeply integrated cognitive process. Rost (2015), for instance,

stresses that listening involves a dynamic interplay of neurological, linguistic, semantic, and pragmatic operations, emphasizing its mental complexity. Similarly, Purdy (1997) offers a holistic view, portraying listening as an active and evolving process that connects various internal and external components.

Collectively, these definitions reflect both shared understanding and diverse emphases regarding the nature of listening. While all scholars agree that listening is an active rather than passive process, their interpretations differ in focus. Some emphasize its perceptual dimension, others its interpretive functions, and still others its cognitive-integrative mechanisms. This diversity illustrates that listening is not a single, uniform act but rather a layered and dynamic process, involving perception, interpretation, and mental integration.

Building on this foundation, numerous researchers have developed theories and models to explain how listening unfolds in real time. These perspectives offer valuable insights into the multidimensional nature of the listening process and help to unpack its inherent complexity. To understand how learners engage with and develop listening skills, it is essential to examine the stages, mental operations, and underlying mechanisms that characterize effective listening in both academic and real-world contexts.

One influential model is Nunan's (2001) six-stage framework of the listening process, which consists of hearing, attending, understanding, remembering, evaluating, and responding. Hearing refers to the physical act of perceiving sound through the ears. Attending involves directing attention to relevant auditory input and focusing on the intended message. Understanding requires interpreting the meaning of the message by processing and evaluating the information. Remembering involves retaining information for future use, while evaluating entails critically assessing the accuracy and value of the message. Finally, responding is the act of providing feedback to the speaker, confirming comprehension, and possibly expressing one's own reactions or ideas.

Researchers have developed various models to highlight the complexity of listening and provide a framework for understanding the cognitive processes involved.

According to Rost (2011), the listening process comprises three primary elements: bottom-up processing, top-down processing, and interaction. Bottom-up processing entails processing sounds and phonemes to comprehend words and phrases. During this stage, the listener decodes the acoustic characteristics of the language, such as pitch, stress, and intonation. The listener can identify the message's words and sentences by analyzing the sounds. Top-down processing, on the other hand, entails employing prior information and contextual signals to comprehend the message's meaning. During this phase, the listener interprets the message based on prior knowledge, experiences, and expectations. The recipient visually represents the communication using their language, culture, and topic knowledge. Interaction entails active participation and engagement with the speaker to clarify and confirm comprehension. In this phase, the listener may ask questions, seek clarification, or offer feedback to the speaker. This phase is vital for maintaining efficient communication and preventing misinterpretation or misunderstanding. These models of listening provide frameworks for comprehending the intricate cognitive processes involved in successful listening. These models emphasize the relationship between bottom-up and top-down processing, the activation of mental frameworks, and the significance of interaction in the listening process.

Effective listening involves stages that help individuals comprehend and understand spoken information. These stages include pre-listening, while-listening, and post-listening strategies. Each step is crucial in enhancing listening comprehension and promoting active engagement with the spoken language. Pre-listening strategies are the activities and techniques used before the listening task to prepare learners for the upcoming content. The pre-listening strategies may include activating prior knowledge (Bransford, Brown, & Cocking, 2000), predicting information (Carrell & Eisterhold, 1983), pre-teaching vocabulary (Nation, 2001), and setting listening goals (Graham & Macaro, 2008). Listening strategies are employed during the listening task to facilitate comprehension and promote active listening. The while-listening strategies may include note-taking (Vandergrift, 2004), listening for specific information (Goh, 2008), and monitoring comprehension (Graham, 2006). Post-listening strategies are employed after the listening activity to consolidate

understanding, review content, and reflect on the listening experience. The post-listening strategies may include comprehension checks (Rost, 2016), reflective writing (Farrell, 2013), and follow-up activities (Anderson, 2005). The summary of each approach is presented in Figure 2.1.

Table 1 The Summary of Listening Stages and Key Activities

Listening Stage	Key Activities
Pre-listening Stage	▪ Activating prior knowledge ▪ Predicting information ▪ Pre-teaching vocabulary ▪ Setting listening goals
While-listening Stage	▪ Note-taking ▪ Listening for specific information ▪ Monitoring comprehension
Post-listening Stage	▪ Comprehension checks ▪ Reflective writing ▪ Follow-up activities

In this study, the participants engaged in all listening stages. In the pre-listening stage, the participants were provided with before-listening activities to activate their prior knowledge, including a topic-related discussion and making predictions about the content. During the while-listening stage, the participants were asked to jot down keywords, main ideas, and supporting details in the listening log. In the post-listening stage, the participants engaged in follow-up activity through short video clips to reflect their understanding of the content they listened to, encouraging them to use the information meaningfully and practice their speaking skills. The following section explores different instructional strategies and techniques that can be employed to teach listening skills to language learners effectively.

2.2 Types of Listening

Listening is a complex, multidimensional process that extends beyond the simple act of hearing. In educational and applied linguistic settings, researchers have identified several types of listening based on the listener's purpose and the nature of the communication. This section outlines three primary types of listening, including informational, critical, and therapeutic/empathetic, each serving distinct communicative functions and requiring different cognitive and affective strategies.

2.2.1 Informational Listening

Informational listening involves processing and understanding spoken information, often to gain knowledge or comprehend instructions (Brownell, 2017). In language learning, this type of listening is crucial for students to acquire new vocabulary, understand grammatical structures, and grasp subject matter in academic contexts (Chang, 2011; Vandergrift & Goh, 2012). Research by Rost (2011) emphasizes the importance of developing effective informational listening skills, as they form the basis for successful communication and language proficiency. Educators employ various strategies, such as authentic listening materials and repeated exposure to spoken language, to enhance students' ability to comprehend and extract information from diverse sources (Goh & Burns, 2012).

2.2.2 Critical Listening

Critical listening involves evaluating and analyzing spoken information, requiring the listener to assess the validity, relevance, and credibility of the message (Gilakjani & Ahmadi, 2011). This skill is particularly valuable in academic and professional settings, where individuals need to discern the main ideas, identify biases, and critically engage with the content (Vandergrift & Tafaghodtari, 2010). According to Field (2008), critical listening is an essential component of higher-order thinking skills, contributing to the development of analytical and evaluative abilities. Language teachers integrate critical listening into their instructional practices by incorporating diverse perspectives in listening materials and encouraging students to question and critique the information presented (Nation & Newton, 2009).

2.2.3 Therapeutic and Empathetic Listening

Therapeutic and empathetic listening involves providing emotional support and understanding to the speaker (Brownell, 2017). This type of listening is fundamental in counseling, therapy, and interpersonal relationships, where the listener aims to comprehend and empathize with the speaker's emotions and experiences (Gudykunst & Kim, 2003). Vandergrift and Goh (2012) highlight the relevance of developing empathetic listening skills in language learning, as it fosters interpersonal communication and cultural sensitivity. Language instructors incorporate activities that promote empathy, such as discussing personal experiences and engaging in role-

playing scenarios, to enhance students' ability to listen empathetically (Renandya & Farrell, 2010). The cultivation of therapeutic and empathetic listening skills contributes to effective communication and positive interpersonal relationships.

In this study, there is an emphasis on listening for information within the context of extensive listening activities, listening comprehension tests, and listening fluency tests. The incorporation of extensive listening activities, where learners are exposed to graded audiobooks for pleasure and comprehension, aligns with the principles of fostering a natural and enjoyable language learning experience. Simultaneously, the integration of listening comprehension tests allows for the assessment of learners' ability to comprehend and extract information from spoken discourse. Moreover, the inclusion of listening fluency tests acknowledges the significance of automatic processing and seamless comprehension in enabling learners to actively participate in spoken interactions.

2.3 Components of Listening Skill

Listening is a multifaceted skill that involves both understanding and processing spoken language in real time. This section discusses two essential components of effective listening: listening comprehension and listening fluency.

2.3.1 Listening Comprehension

Various definitions of listening comprehension have been proposed by scholars in the field. According to Mendelsohn (1994), it refers to the ability to understand spoken language used by native speakers. Buck (2001) describes listening comprehension as an active process that involves constructing meaning by applying linguistic and non-linguistic knowledge to the incoming sound. Hamouda (2013) emphasizes listening comprehension as a communicative process where audiences build meaning by utilizing sound segregation, existing knowledge, sentence structures, stress intonation, and other linguistic or non-linguistic cues. Nadig (2013) explains that listening comprehension involves comprehending and understanding spoken language. These definitions highlight listening comprehension's active and interactive nature, emphasizing the role of prior knowledge and various language cues in constructing meaning.

Listening comprehension plays a crucial role in language acquisition as it contributes significantly to developing language skills. Listening comprehension provides learners with the primary input necessary for language acquisition. According to Krashen's Input Hypothesis (1982), comprehensible input is essential for language development. By listening to native speakers or proficient speakers of the target language, learners are exposed to authentic and meaningful language samples, which aids in vocabulary expansion, grammatical structure acquisition, and overall language proficiency (Krashen, 1982). Nation (2001) suggests that extensive listening can lead to acquiring new words and phrases as learners encounter them in context and become familiar with their meanings and usage. Listening comprehension allows learners to identify and internalize the patterns and structures of the target language. By listening to authentic language use, learners can recognize sentence structures, verb tenses, idiomatic expressions, and other grammatical features in context (Goh & Taib, 2006). Listening to native or proficient target language speakers enhances learners' pronunciation and intonation skills. By imitating the sounds, stress patterns, and intonation patterns they hear, learners can refine their pronunciation and produce more natural-sounding speech (Derwing & Munro, 2013). Listening comprehension is a foundation for developing other language skills, such as speaking, reading, and writing. Effective listening skills provide learners with the necessary input to speak fluently, read with understanding, and write coherently (Nunan, 1998). Listening comprehension is a bridge that connects the various components of language acquisition and supports overall language development.

EFL (English as a Foreign Language) learners often face difficulties in listening comprehension due to several factors. One of the major difficulties for EFL learners in listening comprehension is their limited vocabulary knowledge. Research by Vandergrift (2004) suggests that learners with a smaller vocabulary repertoire find it challenging to understand spoken language when encountering unfamiliar words or expressions. Limited vocabulary hinders learners' ability to grasp the meaning of spoken utterances and comprehend the overall message (Vandergrift, 2004). The linguistic complexity of spoken language poses a challenge for EFL learners. Features such as rapid speech, connected speech, colloquial expressions, idiomatic phrases, and

unfamiliar accents can make it difficult for learners to follow and comprehend spoken discourse (Field, 2008). Using complex sentence structures, including subordinate and embedded clauses, can impede understanding (Field, 2008). EFL learners often struggle with employing effective listening strategies. According to Goh (2008), learners who are unaware of or do not utilize specific listening strategies may have difficulties extracting meaning from spoken texts. Strategies such as predicting, making inferences, and note-taking can enhance comprehension but require explicit instruction and practice (Goh, 2008). Limited exposure to authentic listening materials can hinder EFL learners' listening comprehension. Authentic materials, such as native speaker conversations, movies, and news broadcasts, provide learners with real-world language use and expose them to various accents, speaking styles, and cultural references (Nuttall, 2005). Lack of exposure to authentic materials can result in difficulties in understanding natural spoken language. Insufficient opportunities for listening practice contribute to difficulties in listening comprehension. Research suggests regular and extensive listening practice is essential for improving listening skills (Graham, Santos, Vanderplank, & Maia, 2014). Without consistent practice, EFL learners may struggle to develop their ability to process spoken language efficiently and accurately (Graham et al., 2014).

2.3.2 Listening Fluency

Listening fluency is an essential aspect of language acquisition that involves the ability to comprehend spoken language smoothly and effortlessly. In this section, we will explore definitions of listening fluency, its roles in language acquisition, and the difficulties that EFL learners often encounter in developing it.

Various researchers have defined and described listening fluency in the second language. Segalowitz (2003) characterizes it as the ability to produce or comprehend utterances smoothly, rapidly, and accurately. Similarly, Chang (2011) defines listening fluency as reasonably understanding aural input at an average pace. Cheng and Millet (2013) describe listening fluency as the individual's capacity to automatically process auditory input and achieve satisfactory comprehension. Additionally, in the study conducted by Chang et al. (2019), listening fluency is defined as the ability to effortlessly and automatically process auditory input, restructure existing knowledge,

and attain satisfactory performance. These definitions highlight the common aspects of listening fluency, emphasizing the seamless and efficient processing of auditory information, comprehension at a reasonable pace, and the automatic restructuring of existing knowledge.

Listening fluency plays a vital role in language acquisition, contributing significantly to the development of overall language proficiency. Listening fluency enables learners to process spoken language in real time. According to Vandergrift and Goh (2012), fluent listeners have the ability to process incoming speech rapidly and efficiently, allowing them to keep pace with native or proficient speakers. This real-time processing facilitates comprehension and enables learners to extract meaning from spoken discourse without undue cognitive effort (Vandergrift & Goh, 2012). Fluency in listening helps learners achieve automaticity in language processing. When learners become fluent listeners, their cognitive resources are freed up, allowing them to focus on higher-order comprehension tasks rather than decoding individual words or phrases (Segalowitz, 2010). This automaticity enables learners to process and understand spoken language more effortlessly and efficiently. Listening fluency contributes to accurate perception of sounds, phonemes, and intonation patterns in the target language. Fluent listeners develop sensitivity to subtle phonetic distinctions and can better discriminate between similar sounds (Derwing & Munro, 2005). This enhanced perception of sounds and intonation facilitates accurate pronunciation and comprehension of spoken language. Fluency in listening fosters learners' confidence and engagement in communication. As learners become more fluent listeners, they feel more comfortable and competent in understanding and participating in conversations (Vandergrift & Goh, 2012). This confidence encourages active engagement in listening activities and real-life interactions, leading to increased exposure to the target language and accelerated language acquisition. Listening fluency serves as a foundation for the integration of other language skills. Fluent listening supports the development of speaking, reading, and writing skills by providing learners with accurate pronunciation models, vocabulary usage, grammatical structures, and discourse patterns (Nation & Newton, 2009). Through

extensive exposure to fluent listening, learners internalize these language features, positively impacting their overall language proficiency.

EFL students often struggle with listening. EFL learners struggle to build listening fluency due to limited exposure to actual spoken language. According to research, fluency development requires exposure to natural, authentic spoken language (Graham, Santos, Vanderplank, & Maia, 2014). Learners may struggle to acquire listening skills and fluency without regular exposure to native or proficient speakers and authentic listening resources. Poor listening practice in realistic circumstances impairs fluency. Classroom listening activities and real-life listening circumstances sometimes differ for EFL learners (Vandergrift & Goh, 2012). Limited exposure to authentic listening environments, including conversations, interviews, and audio resources, might hinder natural spoken language processing and comprehension.

Rapid and linked speech challenges EFL learners' listening fluency. Native speakers speak quicker, employ connected speech patterns, and decrease noises, making it hard for learners to understand and comprehend spoken language in real-time (Field, 2008). Fast-paced talks might be difficult for EFL learners to follow and decipher. EFL learners sometimes struggle with idioms, slang, and colloquialisms, which might hamper listening fluency. Native or proficient speakers use these language elements in genuine discussions, requiring cultural and contextual expertise (Ur, 1984). EFL learners may struggle to understand and respond to such language use without exposure and specific training. The cognitive load of hearing comprehension limits EFL learners' listening fluency. Listening entails simultaneously processing sounds, vocabulary, grammar, and meaning (Goh, 2008). EFL learners may experience cognitive overload while processing multiple components simultaneously, reducing spoken language fluency.

2.4 Approaches to Teaching Listening

Approaches to teaching listening provide teachers with various instructional frameworks to design effective listening lessons and activities. The section covers six notable approaches: the direct method, the audio-lingual method, the communicative language teaching approach, the Task-based Language Teaching approach, the Natural

Approach, and the Silent Way. The summary of each approach is presented in Table 2.2.

Table 2 The Summary of Approaches to Teaching Listening

Approaches	Implementation
The Direct Method	In the context of listening, the Direct Method focuses on providing learners with a natural and immersive environment to replicate the way learners acquire their first language (Brown, 2014) by providing learners with opportunities to listen to and understand meaningful and contextually rich audio materials, such as dialogues or recorded conversations (Larsen-Freeman & Anderson, 2013).
The Audio-lingual Method	In the context of listening, the Audio-Lingual Method focuses on developing learners' listening and speaking skills through pattern drills and repetitive practice using audio recordings to expose learners to target language sounds, intonation, and pronunciation (Richards & Rodgers, 2014).
The Communicative Language Teaching Approach	In the context of listening, the Communicative Language Teaching Approach focuses on developing learners' communicative competence (Richards & Rodgers, 2014) by engaging learners in real-life listening tasks, such as listening to authentic audio materials, watching videos, or participating in interactive listening activities (Nunan, 2003).
The Task-based Language Teaching Approach	In the context of listening, the Task-based Language Teaching Approach focuses on meaningful and authentic language use (Willis & Willis, 2007) using listening activities that simulate authentic communication situations, such as listening to a radio interview or following instructions to complete a task (Ellis, 2003).
The Natural Approach	In the context of listening, the Natural Approach focuses on providing learners with comprehensible input that is slightly beyond their current level of understanding, allowing them to make connections and infer meaning from the context (Krashen, 1982) using authentic audio materials, such as recorded conversations or stories (Richards & Rodgers, 2014).
The Silent Way	In the context of listening, the Silent Way focuses on learner autonomy and discovery learning by utilizing visual aids, such as colored rods or charts, to represent language structures and assist

Approaches	Implementation
	learners in making connections between the written and spoken form of words (Gattegno, 2010)

Peterson (2012) suggests six effective listening comprehension instruction principles in such contexts. These principles include increasing the amount of listening time in class, prioritizing listening activities before other language skills, incorporating both global and selective listening to enhance comprehension and accuracy, activating students' background knowledge, developing automaticity in bottom-up processing, and teaching conscious listening strategies. Wang's (2018) principles for teaching listening skills complement Peterson's recommendations by emphasizing the selection of appropriate materials, incorporating authentic materials for real-life speech exposure, planning engaging tasks, providing pre-task and while-task support, and promoting a relaxed listening environment by encouraging students to focus on meaning rather than obsessing over every missed word. These principles can guide teachers in designing effective listening lessons that integrate listening with other language skills based on appropriate teaching materials.

According to Suwannasit (2018), teaching listening skills involves principles derived from teaching and learning theory and real-life experience. These principles address various aspects of the listening process. The first principle emphasizes bottom-up and top-down processing, where EFL learners focus on language aspects while relating the input to their background knowledge. The second principle highlights the dual goals of comprehension practice and language acquisition, achieved through activities that promote understanding and attention to language forms. Diverse and interesting authentic materials should be used, accompanied by pre-listening, while-listening, and post-listening activities targeting specific teaching purposes. The fourth principle stresses the training of students in listening strategies, including clarification questions, monitoring, inference-making, and note-taking. These principles guide effective teaching of listening skills.

Wang (2018) outlines principles for teaching listening skills that emphasize selecting appropriate materials and incorporating authentic materials to provide students with

real-life speech experiences. Despite the perceived difficulty, teachers are encouraged to invest time in finding accurate materials suitable for different proficiency levels. Another essential principle is planning tasks and exercises that engage students and promote active listening, such as expressing opinions, note-taking, and answering questions. Starting with easier tasks helps build learners' motivation and confidence. Providing pre-task and while-task support, such as background information and instructions, aids in focusing on relevant parts of the message. The final principle encourages teachers to foster good listening habits by not obsessing over every missed word but rather encouraging students to gather information, use inference, and tolerate vagueness, leading to improved overall comprehension.

In summary, this section has outlined six influential approaches to teaching listening: the Direct Method, the Audio-Lingual Method, the Communicative Language Teaching Approach, Task-Based Language Teaching, the Natural Approach, and the Silent Way. Each approach reflects different theoretical perspectives on how learners acquire listening skills, ranging from behaviorist repetition to meaning-focused, communicative interaction. While all contribute useful strategies, they vary in terms of learner autonomy, input control, and focus on form versus meaning.

However, this study adopts the Natural Approach as the instructional foundation for its extensive listening activities. This approach emphasizes the importance of exposing learners to authentic and comprehensible language input in a low-stress, meaning-focused environment—conditions that align well with the use of graded audiobooks. The Natural Approach supports the idea that language acquisition occurs most effectively when learners are provided with rich input that is slightly beyond their current proficiency, allowing them to infer meaning naturally. As such, it serves as a suitable framework for designing audiobook-based extensive listening lessons for A1–A2 Thai EFL learners, who require repeated, meaningful exposure to support comprehension and fluency development.

2.5 Assessing Listening Skill

Assessing listening skill is a critical aspect of language evaluation, especially in EFL contexts where learners often face challenges in processing spoken input. This section

introduces key approaches to evaluating listening ability, with a particular focus on two core dimensions: listening comprehension and listening fluency.

2.5.1 Assessing Listening Comprehension

Assessing listening comprehension is a key aspect of evaluating learners' receptive language abilities, particularly in EFL contexts where students may have limited exposure to authentic spoken input. A variety of assessment methods have been developed to measure how well learners understand oral texts, ranging from controlled formats such as multiple-choice questions to more open-ended tasks like summarizing or retelling.

Among the most widely used methods are multiple-choice questions (MCQs), which require learners to select the most appropriate response based on the audio they hear. This format is especially suitable for assessing global and detailed comprehension in a reliable and time-efficient manner (Buck, 2001). MCQs are effective for evaluating understanding of main ideas, specific details, and even inferential meaning when distractors are carefully constructed. Examples of multiple-choice questions are shown in Figure 2.1

Questions 26 – 30

In what time period can the float projects help with the issues 26-30 below?

A At present
B In the near future
C In the long-term future

Write the correct letter, **A**, **B** or **C**, next to questions 26-30.

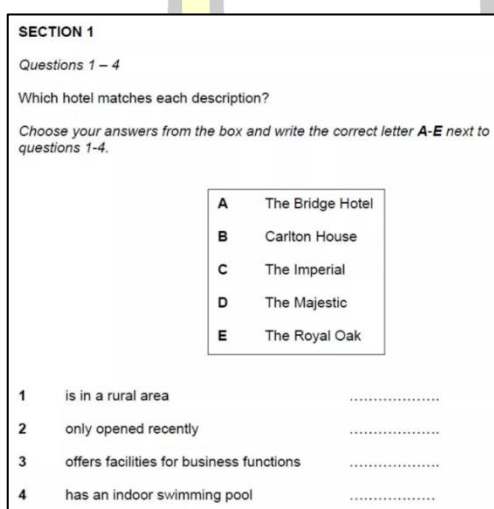
26	El Niño	
27	Global warming	
28	Naval rescues	
29	Sustainable fishing practices	
30	Crop selection	

* Source: Official website

www.ieltsessentials.com

Figure 1 Examples of Multiple-Choice Questions

Another common approach is the true/false format, where learners judge the accuracy of statements based on the audio input. This method provides a quick way to assess comprehension of factual information and supports immediate feedback (Rost, 2002). Matching tasks are also frequently used to assess sentence-level comprehension, such as matching sentence beginnings to appropriate endings, or linking events to speakers or actions. These formats test the learner's ability to connect meaning and recognize sequence within a spoken narrative. Examples of true/false format are shown in Figure Figure 2.2.



SECTION 1
Questions 1 – 4

Which hotel matches each description?

Choose your answers from the box and write the correct letter **A-E** next to questions 1-4.

A	The Bridge Hotel
B	Carlton House
C	The Imperial
D	The Majestic
E	The Royal Oak

1	is in a rural area	
2	only opened recently	
3	offers facilities for business functions	
4	has an indoor swimming pool	

* Source: Official website www.ieltsessentials.com

Figure 2 Examples of Matching tasks

In addition, more open-ended tasks like gap-fills, short-answer questions, note-taking, and summary writing have been used to assess deeper comprehension. These tasks offer greater insight into learners' processing abilities but may also be influenced by their writing and grammatical skills. To evaluate higher-order listening skills, some assessments use retelling, interviews, or oral responses, which can reveal how well learners internalize and reproduce what they have heard (Lynch, 2017). Examples of short-answer questions are shown in Figure Figure 2.3.

SECTION 2

Questions 11 – 16

Answer the questions below.

Write **NO MORE THAN THREE WORDS AND/OR A NUMBER** for each answer.

What **TWO** factors can make social contact in a foreign country difficult?

- 11
- 12

Which types of community group does the speaker give examples of?

- theatre
- 13
- 14

In which **TWO** places can information about community activities be found?

- 15
- 16

* Source: Official website www.ieltsessentials.com

Figure 3 Examples of short-answer questions

In this study, the listening comprehension pretest and posttest were developed using multiple-choice questions, true/false items, and matching tasks to align with the CEFR A1–A2 levels and the needs of Thai EFL learners. These formats were selected for their practicality, objectivity, and appropriateness for low-intermediate proficiency learners. Each part of the test was played twice, and learners had time to preview the questions and respond after listening. The test was designed to evaluate a range of skills, including identifying main ideas, recognizing supporting details, interpreting speaker intent, and understanding sequence of events.

While other assessment methods such as gap-fills, oral summaries, and authentic media tasks offer valuable insights, they were not employed in this study due to constraints related to scoring consistency and learner proficiency levels. Instead, structured and standardized formats were prioritized to ensure validity and reliability in measuring participants' listening comprehension gains.

This multi-format approach is supported by language assessment research, which emphasizes the need for varied item types and clear scoring criteria to produce fair and accurate evaluations of listening proficiency (Bachman & Palmer, 2010).

2.5.2 Assessing Listening Fluency

Assessing listening fluency involves evaluating learners' ability to process and understand spoken language smoothly, efficiently, and in real time. Unlike general comprehension assessments, which focus on meaning alone, fluency assessments target automaticity, processing speed, and the ability to sustain attention across extended spoken input. Fluent listeners can follow speech without relying on repetition or extended pauses and are capable of decoding meaning while maintaining the natural rhythm of listening (Field, 2008; Lynch, 2017). To assess these abilities, this study employed two primary assessment types, supported by test items designed to simulate real-world listening conditions and limit external aids. Additionally, several well-established fluency-oriented assessment types are discussed below as possible complements to or extensions of the assessment framework used in this research.

2.5.2.1 Timed Multiple-Choice Listening

This type involves listening to short audio passages played once only, followed by immediate selection of the correct answer from multiple-choice options. This task format assesses learners' ability to extract key information quickly and accurately, requiring both focused attention and rapid comprehension. Because learners cannot review the input or take excessive time, it effectively reflects their real-time listening fluency (Lynch, 2017).

2.5.2.2 Speeded Gap-Fill and Paraphrasing

In this format, learners complete missing words or phrases during listening (gap-fill), followed by brief paraphrasing or summarization of what they heard. This type of task measures both bottom-up lexical recognition and top-down meaning integration. The speeded nature of the task forces learners to process and respond quickly, simulating spontaneous understanding.

2.5.2.3 Shadowing

Shadowing is a real-time fluency assessment technique in which learners are required to repeat spoken language immediately after hearing it. This method is used to measure learners' ability to process auditory input rapidly and accurately, reflecting their fluency in decoding, pronouncing, and mimicking natural speech rhythms.

Shadowing tasks assess not only listening speed, but also pronunciation, intonation, and connected speech recognition (Chang & Millett, 2014). Although not used in this study, shadowing is particularly useful for examining real-time processing in more advanced learners or for oral fluency training contexts.

2.5.2.4 Timed Summary

A timed summary task involves listening to a passage once and then summarizing the main points orally or in writing within a limited timeframe. This assessment measures learners' ability to retain and synthesize information quickly, combining both comprehension and production under time pressure. It reflects global fluency, focusing on overall understanding, paraphrasing skill, and the ability to convey meaning efficiently. This type is useful for assessing how well learners can extract essential information from longer texts and express it fluently without detailed reliance on scripted prompts (Nation & Newton, 2009).

2.5.2.5 Real-Time Sentence Completion

Real-time sentence completion tasks require learners to complete spoken sentences while or immediately after listening. These tasks assess learners' predictive listening skills, lexical access, and grammatical sensitivity. For example, learners may hear a sentence like "*The train will arrive at...*" and must supply the final word or phrase based on context and prior cues. This task type targets processing speed and accuracy, requiring learners to stay attuned to the rhythm and structure of the sentence in real time. It is particularly valuable for evaluating fast-response comprehension in interactive or semi-controlled listening contexts (Field, 2008).

While all five types offer valuable insights into listening fluency, this study specifically employed timed multiple-choice listening and speeded gap-fill and paraphrasing. These two formats were chosen for their practicality, objectivity, and suitability for A1–A2 Thai EFL learners. They effectively simulate authentic listening conditions by requiring learners to process input in real time and respond without extended rehearsal. Shadowing, timed summary, and sentence completion were reviewed as complementary methods but were not included due to their complexity, scoring demands, and greater suitability for more advanced learners. The selected assessment types align well with the study's instructional goals and learner

proficiency level, providing reliable measures of fluency gains resulting from the audiobook-based extensive listening program.

Remember Miranda, chapter two: 'The first secret'

- 1 What season was it?
- 2 Most days they walked along the beach. ☐ True ☐ False
- 3 What colour were the leaves on the trees?
- 4 The children _____ and _____ because they liked playing on the beach.
- 5 Who spoke to Cathy?
- 6 What colour were his eyes?
- 7 He asked her to have lunch with him. ☐ True ☐ False
- 8 When did they meet again?
- 9 She liked Nick. He was _____ and _____.
- 10 Who did Nick ask about?
- 11 Where was Duncan that month?
- 12 Nick told Cathy to be _____ at Beach House.
- 13 Did Cathy tell Mrs Harvey about her dinner with Nick?
- 14 Who did Cathy talk to about Nick?
- 15 'That evening I put the children to _____ and read them a _____.'

Figure 4 Examples of timed listening activities (Chang & Millete, 2014)

Another method includes oral output tasks, such as picture description or story retelling, which assess how fluently learners can reproduce or summarize what they have heard (Vandergrift & Goh, 2012). These tasks focus not only on comprehension but also on productive fluency. Additionally, rating scales and checklists can be used to holistically assess dimensions of fluency such as speed, rhythm, and absence of hesitations (Bachman & Palmer, 2010). With technological advances, speech recognition tools have also been used to evaluate aspects of fluency like pacing and intonation automatically (Chapelle & Jamieson, 2008). These tools offer immediate, data-driven insights into learners' processing fluency.

In this study, however, listening fluency was assessed through a structured, test-based approach that emphasized real-time comprehension of continuous spoken input. The Listening Fluency Test was designed using multiple-choice, true/false, gap-fill, and yes/no item types, all drawn from graded audiobook content. The test items were arranged to follow the chronological sequence of each chapter, enabling assessment of sustained attention and storyline tracking. Unlike the comprehension test, the audio texts in the fluency test were played only once, and students were required to answer

simultaneously while listening—reflecting natural listening conditions that required immediate cognitive processing.

This combination of single-playback exposure and story-sequenced tasks targeted learners' fluency by limiting their reliance on repeated input or extra processing time. While the study did not include oral retelling, rating scales, or speech technology, the test design effectively captured essential features of listening fluency, including speeded comprehension, real-time decision-making, and automatic processing of spoken English.

2.6. Graded Audiobooks

Graded audiobooks have played a significant role in language acquisition, offering learners customized listening materials tailored to their proficiency levels. This section explores the history of graded audiobooks, theoretical explanations behind their effectiveness, their roles in language acquisition, and their advantages and disadvantages.

2.6.1 History of Graded Audiobooks

The history of audiobooks stretches back to the early 20th century when spoken recordings were first developed as assistive tools. In 1932, the American Foundation for the Blind established a recording studio as part of the "Books for the Adult Blind" project, producing the earliest versions of audiobooks on vinyl records for visually impaired adults (Kartal and Simsek, 2017). These early materials were limited by technology, offering short readings with basic sound quality. In the decades that followed, advances in audio formats such as cassette tapes and compact discs helped to extend the use of audiobooks into schools, libraries, and homes, where they began to support literacy development for children and struggling readers (Rizal et al., 2020).

As audiobooks gained recognition in mainstream education, scholars began to see their potential not only for reading support but also for language learning. However, most audiobooks in this early phase were based on unmodified literary texts. For language learners, these texts were often too complex. They featured fast speech, idiomatic expressions, and dense vocabulary that made listening difficult for

beginners (Lam, 2002). To solve this problem, publishers began adapting well-known stories into simplified forms, leading to the creation of graded readers and eventually graded audiobooks. Graded audiobooks are simplified recordings of stories or nonfiction books designed for learners at different proficiency levels. They are aligned with frameworks like the Common European Framework of Reference for Languages (CEFR), offering controlled vocabulary and grammar suited for beginner to advanced learners (Waring and Takaki, 2003).

The use of grading systems in audiobooks allowed learners to access stories at their level and gradually move to more complex material. These adaptations were especially helpful for English as a Foreign Language (EFL) students who had limited exposure to authentic spoken English. According to Tangkarn (2018), the language in graded audiobooks is carefully selected to match the learner's proficiency, including frequent vocabulary recycling, simplified sentence structures, and clear pronunciation. This controlled input supports the development of listening comprehension, grammar awareness, and vocabulary retention. Moreover, many graded audiobooks include exposure to native-speaker accents, often American or British, which helps learners become familiar with global English variations (Rizal et al., 2020).

In the early 2000s, the rise of digital audio technology transformed how learners accessed and used audiobooks. With MP3 players, mobile phones, and later smartphones, listening became portable, flexible, and learner-centered. Digital audiobooks allowed learners to listen on demand, pause or replay audio, and track their progress over time. This shift also introduced standalone digital graded audiobooks, which no longer required printed texts and could be accessed through online platforms or mobile apps. Educational publishers such as Oxford University Press began offering graded audiobook libraries, like the Oxford Bookworms series, through apps such as the Oxford Reading Club. These digital platforms gave learners access to hundreds of graded titles with features like playback speed control, subtitles, vocabulary glossaries, and quizzes (Kartal and Simsek, 2017; Rizal et al., 2020).

The digital format also increased learner engagement by offering multimodal support. Learners could listen while reading along, replay difficult parts, or slow down

narration. These features reduced listening anxiety and gave learners greater control over their learning process. According to Chang and Millett (2015), such extensive listening with adjustable tools helps improve listening fluency, especially in low-input settings where learners have few opportunities to hear English outside the classroom.

Digital graded audiobooks have also been used in blended and autonomous learning environments. Learners are often encouraged to choose stories based on their interests and level, which increases motivation. At the same time, teachers can incorporate graded audiobooks into lessons using pre-listening and post-listening tasks. This combination supports learner autonomy and provides scaffolding, making the listening experience more structured and meaningful (Nation and Newton, 2009).

2.6.2. Theoretical Explanations for Graded Audiobooks

The use of graded audiobooks in extensive listening program draws on well-established theories in second language acquisition and cognitive learning. These theories offer valuable explanations for how structured, level-appropriate audio input can support learners' listening comprehension, fluency, and overall language progress especially in low-proficiency, low-exposure EFL contexts like rural Thai classrooms. This study builds on five key theoretical perspectives: the Input Hypothesis, Cognitive Load Theory, Automaticity Theory, Noticing Theory, and Dual Coding Theory. Each contributes to a better understanding of how audiobooks can reduce listening difficulties, promote meaningful engagement, and facilitate lasting language development through guided and repetitive exposure.

2.6.2.1 Input Hypothesis (Krashen, 1982)

Krashen's Input Hypothesis remains a central theory in second language acquisition (SLA), proposing that learners acquire language most effectively when exposed to input that is both comprehensible and just slightly beyond their current level of competence—known as “i+1.” This type of input allows learners to progress naturally, without needing explicit grammar instruction, provided the learning environment is low in stress and high in engagement. In the context of this study, graded audiobooks serve as an ideal vehicle for delivering i+1 input to Thai A1–A2 learners, who often face limited access to authentic English outside the classroom.

Graded audiobooks are designed with controlled vocabulary and syntax that match various proficiency levels. By presenting leveled stories through clear, natural speech, these resources offer rich linguistic input embedded in meaningful contexts. Unlike scripted classroom dialogues or isolated listening drills, audiobooks provide sustained exposure to connected discourse, which supports both comprehension and subconscious acquisition. Learners can control their listening pace, repeat sections, and gradually become familiar with recurring grammatical structures and vocabulary features that closely reflect Krashen's view of natural language learning. Moreover, the story-based format of audiobooks helps reduce the affective filter a key component of Krashen's hypothesis. When learners are emotionally engaged in content, their anxiety decreases and their receptiveness to input increases. The narratives used in graded audiobooks are generally enjoyable and motivating, making it easier for learners to focus on meaning rather than form. This is particularly important in Thai EFL settings, where learners often experience low confidence and limited motivation due to minimal real-world English exposure.

Krashen also maintains that acquisition occurs more effectively when learners are not interrupted by constant correction or forced to focus on discrete grammar rules. Graded audiobooks align with this principle by allowing learners to process language holistically. The focus is on global understanding and inference, rather than on isolated language forms. This supports the development of listening fluency and confidence—two major goals of the present study. Finally, Krashen emphasizes the importance of extensive input—listening or reading large amounts of language over time as a critical driver of acquisition. This study responds to that call by integrating graded audiobooks into a structured extensive listening program. While learners listen independently outside of class, they also receive classroom-based scaffolding such as vocabulary previews, discussion tasks, and reflection activities. This blended approach aligns with Krashen's belief in meaningful, low-pressure input while also addressing the practical needs of low-proficiency learners in EFL contexts like Thailand.

2.6.2.2 Cognitive Load Theory (Sweller, 1988)

Cognitive Load Theory (CLT), proposed by Sweller (1988), explains how learning is affected by the limitations of working memory during complex tasks. It identifies three types of cognitive load: intrinsic load (the inherent difficulty of the material), extraneous load (ineffective instructional design), and germane load (the effort used to build and automate schemas). In second language listening, especially for low-proficiency learners, exposure to rapid, unstructured, or lexically dense spoken input can easily overload working memory, reducing comprehension and increasing learner frustration.

Graded audiobooks address these cognitive demands by minimizing both intrinsic and extraneous loads. Their language is intentionally leveled, with controlled vocabulary and grammar, making it easier for A1–A2 learners to follow narratives without being overwhelmed by unfamiliar forms. Additionally, clear pacing, repetition, and absence of distracting audio elements help reduce extraneous load, allowing learners to concentrate fully on meaning-making rather than navigating chaotic or confusing input. This study further supports CLT by embedding graded audiobooks within a structured instructional design. Activities such as pre-listening vocabulary previews, prediction tasks, note-taking, and post-listening discussions are designed to foster germane cognitive load. These supports help learners focus attention, link new information to prior knowledge, and build meaningful mental representations of language in use. This process mirrors CLT principles such as segmenting (breaking information into manageable units) and modality (leveraging auditory input to reduce visual overload), both of which are especially relevant for listening-focused instruction.

In Thai EFL contexts where learners often face limited exposure to authentic English and lack self-directed listening habits—structured audiobook use becomes even more critical. Without pedagogical scaffolding, input that is technically “comprehensible” may still overwhelm learners due to fast delivery, unfamiliar accents, or cultural references. CLT explains why such learners benefit from repeated, leveled, and carefully supported listening experiences that reduce cognitive strain while promoting meaningful language processing. Therefore, this study adopts CLT as a guiding

framework for designing audiobook-based listening instruction. By aligning input difficulty, task design, and instructional support with learners' cognitive capacities, the program aims to enhance both listening comprehension and fluency while minimizing cognitive overload.

2.6.2.3 Automaticity Theory (LaBerge & Samuels, 1974)

Automaticity Theory, introduced by LaBerge and Samuels (1974), posits that fluent language processing depends on learners' ability to decode and interpret linguistic input rapidly and effortlessly. In listening, this means recognizing words, phrases, and grammatical structures without consciously allocating mental effort. When lower-level processing becomes automatic, learners can redirect cognitive resources toward higher-order comprehension tasks such as making inferences, identifying main ideas, and integrating meaning across longer stretches of discourse skills essential for fluent real-time communication.

Graded audiobooks are particularly well-suited to support this development. Their leveled content introduces high-frequency vocabulary, recurrent grammatical structures, and predictable discourse patterns in a consistent and controlled manner. Through repeated exposure, learners begin to recognize familiar language chunks more quickly and with less mental strain. This shift from effortful decoding to rapid recognition reflects the core of automaticity. Over time, such practice builds the lexical retrieval speed and syntactic processing efficiency that define listening fluency. Furthermore, audiobook-based instruction can be structured to explicitly support fluency development. Activities such as repeated listening, shadowing, timed transcription, and progressive playback speed adjustments help reinforce automatic form-meaning mapping. These methods encourage learners to attend to rhythm, intonation, and word groupings prosodic features that are often overlooked in traditional listening tasks but are vital for fluent and natural listening.

In low-exposure EFL environments such as Thailand, the development of listening automaticity is often hindered by a lack of consistent and meaningful input. Many Thai learners possess some vocabulary knowledge but struggle to recognize words quickly enough in continuous speech, particularly when spoken at natural speed. Graded audiobooks help bridge this gap by offering digestible and engaging input that

is both comprehensible and repetitive. As students progress through audiobook levels, they build processing fluency incrementally, enabling them to follow longer texts with greater ease and confidence. Thus, Automaticity Theory offers a compelling theoretical rationale for the use of graded audiobooks in this study. By providing structured, repeated exposure to manageable input, audiobooks help foundational-level learners develop the rapid, unconscious processing required for effective listening. In doing so, they prepare learners not only to understand what is said, but to do so effortlessly which is an essential step in achieving true listening proficiency.

2.6.2.4 Noticing Theory (Schmidt, 1990)

Noticing Theory, proposed by Schmidt (1990), posits that conscious awareness of linguistic forms is a prerequisite for language acquisition. According to this theory, learners must “notice” features such as grammar structures, pronunciation patterns, and vocabulary items in the input for them to become intake—meaningfully processed and retained language. This is particularly critical for adult EFL learners, who typically require structured opportunities to attend to language forms embedded in authentic communicative contexts.

Graded audiobooks naturally support this noticing process by offering slow, clearly articulated, and leveled input. Unlike unmodified authentic listening materials, which can overwhelm lower-level learners with fast-paced or idiomatic language, graded audiobooks present recurring linguistic forms in manageable chunks. Their simplified narration, predictable story structures, and high-frequency vocabulary help learners focus on salient features such as verb tenses, collocations, discourse markers, and suprasegmental features (e.g., intonation, stress, rhythm). Because the language is embedded in meaningful narratives, learners are more likely to notice how form and meaning are connected in context. Moreover, when integrated with targeted instructional activities, the noticing potential of graded audiobooks increases substantially. Pedagogical supports such as pre-listening vocabulary previews, listening with transcripts, and post-listening analysis tasks help guide attention to specific language points. Instructional strategies like shadowing, dictogloss, and selective noticing tasks (e.g., identifying modals or linking words) align well with Schmidt’s view that focused attention within meaning-oriented tasks supports

acquisition. These techniques also help learners become more aware of the gap between their current knowledge and the target language, motivating deeper processing.

In audiobook-based programs, the ability to pause and replay audio segments further enables learners to revisit unclear portions, compare spoken and written forms, and monitor their own comprehension and pronunciation. This cyclical exposure enhances phonological awareness and allows learners to internalize language patterns through both form-focused and meaning-focused listening. For Thai EFL learners especially those in low-exposure, A1–A2 environments where listening instruction often emphasizes comprehension over form graded audiobooks provide a unique opportunity to integrate noticing into everyday practice. This is particularly relevant given the common challenges Thai learners face in recognizing English prosody and structure. By embedding salient language features within accessible, engaging, and repeatable input, graded audiobooks operationalize the key principles of Noticing Theory. In this study, such integration is used not only to support comprehension but also to help learners develop greater linguistic awareness, accuracy, and confidence in processing spoken English.

2.6.2.5 Dual Coding Theory (Paivio, 1971)

Dual Coding Theory, proposed by Paivio (1971), posits that information is more effectively processed, retained, and recalled when it is encoded through both verbal (linguistic) and non-verbal (visual or imagery-based) cognitive systems. In language learning, this means that when learners simultaneously engage with spoken or written language and generate mental images related to that input, their comprehension and memory are significantly enhanced. The dual processing channels reinforce each other, resulting in stronger and more durable learning outcomes.

Graded audiobooks are well aligned with this theory as they inherently stimulate both auditory-verbal and visual-imaginal pathways. As learners listen to leveled, story-based audio input, they naturally visualize scenes, characters, actions, and settings—especially when the language is descriptive and contextually embedded. These mental images provide visual anchors that deepen semantic processing and enhance memory retention. The sequential, narrative nature of audiobooks further supports this process

by guiding learners to construct vivid mental storylines, which in turn strengthens comprehension and recall. This visualization process becomes even more meaningful when supported by pedagogical scaffolds. In the current study, learners are encouraged to generate imagery through pre-listening picture prompts, mind maps, and listening journals where they draw or summarize story scenes. These tools make internal visualizations explicit and help link audio input with meaningful personal representations. Such multimodal engagement is especially useful for Thai EFL learners at the A1–A2 level, who often lack access to rich, real-world English input. Dual coding techniques compensate for this gap by creating immersive, emotionally engaging learning experiences that enhance both comprehension and fluency.

In addition, visualization supports critical comprehension strategies such as predicting, inferring, and monitoring understanding. For instance, learners may visualize a character's actions and anticipate plot developments, enabling deeper interaction with the audio content. This intuitive, imagery-based processing reduces cognitive load during listening and facilitates smoother, more fluent real-time understanding of discourse structure and logical connections.

By integrating narrative content with visual imagination and explicit visual support tools, graded audiobooks embody the principles of Dual Coding Theory. Their use in this study helps A1–A2 learners not only process language more effectively but also build confidence and memory through multimodal reinforcement. This theoretical lens further validates the structured use of audiobook-based instruction within extensive listening programs designed for low-exposure EFL settings like rural Thailand.

2.6.3 Roles of Graded Audiobooks in Language Acquisition

Graded audiobooks play a pivotal role in supporting language acquisition, particularly for EFL learners in low-exposure environments. These resources provide level-appropriate, engaging, and accessible input that can be effectively integrated into both classroom-based instruction and independent learning. Their pedagogical value lies in the alignment of linguistic content with learners' proficiency levels, as well as their ability to model natural speech, foster learner autonomy, and develop listening

fluency. This section outlines the key roles of graded audiobooks in facilitating language development and highlights their potential limitations.

One of the primary functions of graded audiobooks is to provide comprehensible input, which Krashen (1985) identifies as a crucial condition for second language acquisition. Graded audiobooks are carefully designed using simplified vocabulary and controlled grammatical structures, with difficulty increasing incrementally across levels. As noted by Tangkarn (2018), this structure enables learners to gradually internalize sentence patterns, grammatical rules, and vocabulary. The use of narrative-driven content further aids comprehension by allowing learners to infer meaning from context, promoting naturalistic learning.

Another important role of graded audiobooks is in developing phonological awareness. Learners are exposed to natural pronunciation, rhythm, stress, and intonation patterns—features that are essential for accurate and fluent speech production. By listening to native speaker models, learners can improve their auditory discrimination and imitation skills (Gilakjani & Ahmadi, 2011). This exposure aligns with the principles of the Natural Approach, which emphasizes low-anxiety environments and the importance of naturalistic input for language acquisition.

Graded audiobooks also contribute significantly to vocabulary acquisition. Repeated exposure to high-frequency words in meaningful and memorable contexts enhances word recognition, retention, and usage (Nation, 2013). Listening to stories allows learners to build associations between words and situations, deepening their semantic processing and supporting long-term memory formation.

Furthermore, graded audiobooks help develop listening fluency, which involves the ability to process spoken input efficiently and with minimal cognitive strain. Regular exposure trains learners to decode speech in real time and follow extended discourse without repeated listening. This strengthens automaticity, an essential feature of fluent listening (Field, 2009). The graded structure and predictable language patterns help learners build confidence and fluency gradually.

A key benefit of audiobook-based learning is its support for learner autonomy. Graded audiobooks allow students to select materials that match their interests, goals, and

language levels. This flexibility fosters motivation, engagement, and a sense of ownership over the learning process (Tomlinson, 2013). Learners can listen at their own pace, replay difficult sections, and focus on language forms they wish to revisit—making learning both personalized and self-directed.

In addition, graded audiobooks serve as a valuable resource for implementing extensive listening programs. By encouraging learners to engage in frequent, pleasure-driven listening outside the classroom, these programs promote listening stamina, reinforce comprehension strategies, and gradually enhance overall linguistic competence (Richards & Schmidt, 2010). For A1–A2 learners in particular, this kind of accessible and repeated exposure is crucial for confidence-building and long-term language development.

Finally, graded audiobooks can foster intercultural awareness. Through exposure to diverse characters, settings, and social contexts, learners engage with cultural norms and values embedded in the stories. This promotes not only linguistic understanding but also communicative competence in a broader, cross-cultural sense (Byram, 2020).

2.6.4 The Advantages and Disadvantages of Graded Audiobooks

Graded audiobooks have gained popularity in second language classrooms for their ability to support learners with varying levels of proficiency. These materials are especially effective in improving listening comprehension, vocabulary knowledge, and learner engagement. However, as with any tool, graded audiobooks have both strengths and limitations. Understanding their advantages and disadvantages helps to explain how learners perceive and interact with them, especially in low-input English as a Foreign Language (EFL) contexts.

One major advantage of graded audiobooks is their accessibility and flexibility. Learners can listen anytime and anywhere using mobile devices, which promotes consistent listening practice outside the classroom (Chang and Millett, 2015). The digital format allows users to control playback speed, pause, rewind, or repeat sections. This feature is especially helpful for low-proficiency learners who need more time to process spoken input. By listening repeatedly, learners improve their

understanding of vocabulary, grammar, and pronunciation (Nation and Newton, 2009).

Another benefit is the simplified language used in graded audiobooks. These materials are adapted to match learners' proficiency levels, often following CEFR or other standardized frameworks. According to Tangkakarn (2018), the careful control of vocabulary and sentence structure in graded texts helps reduce cognitive load. This makes it easier for learners to focus on meaning, rather than struggling with unfamiliar words or complex grammar. As a result, learners often feel less anxious and more confident when listening to content that is neither too easy nor too difficult.

Graded audiobooks also promote extensive listening and learner autonomy. Learners can choose stories based on personal interests, which increases motivation. The use of stories with strong narratives helps learners engage emotionally and cognitively with the content. Waring and Takaki (2003) suggest that storytelling encourages deeper listening, as learners follow characters, plotlines, and events. When students enjoy the stories, they are more likely to listen for longer periods and return to the material multiple times.

In addition, graded audiobooks offer exposure to authentic accents and pronunciation. Learners can hear natural speech patterns, such as intonation, rhythm, and connected speech. This type of exposure improves learners' ability to understand real-life spoken English. According to Rizal et al. (2020), many audiobook platforms now include both British and American accents, giving learners a wider range of listening experiences.

Finally, in classroom settings, graded audiobooks can be integrated with various activities such as prediction tasks, guided listening, group discussions, and reflective journaling. These activities promote collaborative learning and teacher support, which help students process content more effectively (Renandya and Farrell, 2011). With proper guidance, learners not only improve their listening skills but also become more aware of their progress and strategies.

Despite their many strengths, graded audiobooks also have limitations. One of the common challenges is the lack of interaction or immediate feedback. Unlike face-to-

face conversations or teacher-led listening, audiobooks do not respond to learners' questions or clarify misunderstandings in real time. Learners may find it difficult to resolve confusion on their own, especially when they encounter unfamiliar words or cultural references (Peters and Webb, 2018). Without teacher support or contextual explanations, some learners may rely too much on replaying audio without truly understanding the meaning.

Another disadvantage is the limited variety of accents and speaking styles in some audiobook libraries. While many platforms now offer recordings in native-speaker accents, they still may not represent the full range of global Englishes that learners need to understand in international communication. This can create difficulties when students are later exposed to unfamiliar accents in real-life situations (Goh, 2008).

In some cases, the simplicity of graded texts may reduce the richness of language. Simplified grammar and vocabulary, while helpful for beginners, may limit learners' exposure to more complex or natural language features. As learners progress, they may need more authentic and spontaneous speech to continue developing their listening fluency (Field, 2008). If the material remains too controlled or repetitive, it may slow down their progress.

Additionally, some learners may find the narration style of graded audiobooks unnatural or overly dramatic. Certain audiobooks use professional actors or theatrical voices, which can sound exaggerated or artificial. This may affect the learner's ability to transfer listening skills to real-life conversations, where speech is more spontaneous and less scripted (Lam, 2002).

Finally, motivation can vary among learners. While some students enjoy the flexibility and independence that audiobooks offer, others may struggle to maintain consistent listening habits. Without regular classroom integration or peer support, self-study through audiobooks may not be enough to ensure listening development, especially for low-motivation learners (Chang, 2011).

2.7 Previous Studies

The main point of this section is to review the past research works on graded audiobooks carried out by different researchers both in other countries and Thailand

during the past to know how past researcher devised their steps of data collection as well as the results on how graded audiobooks affecting English language learning, primarily, listening skill development.

2.7.1 Previous Research in the Global Context

This section delves into the global research trends and findings related to graded audiobooks, explicitly focusing on their influence on listening comprehension and listening fluency.

2.7.1.1 Previous Studies on the Use of Graded Audiobooks and Listening Comprehension

A number of studies have investigated the use of graded audiobooks to enhance listening comprehension among EFL learners. Although findings consistently point to positive effects, closer examination reveals limitations in study contexts, learner profiles, and instructional designs. These gaps inform the rationale for the present study.

To begin with, Chang (2011) explored the impact of a reading-while-listening approach using audiobooks on Taiwanese secondary school students. The study found that students who listened to audiobooks while simultaneously reading texts experienced significant improvements in both listening comprehension and vocabulary acquisition. While the dual-input method proved effective, the research focused primarily on short-term gains and did not assess long-term fluency or learners' ability to engage with listening tasks independently. Building on these findings, Chang (2012) examined the effects of extensive listening using graded readers with low-proficiency EFL learners. The intervention involved repeated listening to leveled input over several weeks. Results showed statistically significant improvements in post-test comprehension, confirming that graded audiobooks can enhance listening development. However, the study relied on individual, unsupervised listening and did not examine how structured classroom support or teacher intervention might further improve outcomes—particularly for learners in low-autonomy learning environments.

Similarly, Fajry and Erbakan (2016) implemented audiobook-based narrative stories to investigate their effects on EFL learners' listening comprehension. Their results supported the benefits of audiobooks for skill development. Nevertheless, the study provided minimal information about the presence of pre-listening, while-listening, or post-listening activities, making it difficult to evaluate the influence of instructional scaffolding on learner engagement or comprehension. Following this, Erbakan (2017) and Kartal and Simsek (2017) extended this line of inquiry in the Turkish EFL context. Their research not only confirmed improvements in comprehension but also reported enhanced learner motivation and awareness of pronunciation. Despite these positive outcomes, both studies relied heavily on self-report data and did not include objective measures of listening fluency or long-term listening growth. Furthermore, the educational settings offered higher English exposure than typically found in rural EFL contexts, thereby limiting the generalizability of the findings.

In a different context, Rahman and Hajar (2021) examined the effectiveness of mobile audiobooks (MABs) in improving the listening comprehension of college-level EFL students. The study showed that learners who engaged in out-of-class MAB activities achieved better comprehension outcomes than those who did not. While this reinforces the potential of mobile listening tools, the study did not investigate how these tools function within a classroom setting or how less autonomous learners might benefit from additional instructional guidance. Additionally, Yen, PhKien, and Ngoc (2021) conducted quasi-experimental research with English majors in Vietnam. Their findings showed significant improvements in listening comprehension following the integration of audiobooks into instruction. Although this provides further support for audiobook use, the sample consisted of motivated English majors with relatively high language awareness. As such, the study may not fully represent the challenges faced by students in technical or non-language-focused programs.

More recently, Magbanua et al. (2023) investigated the use of audiobooks to improve listening comprehension among third-grade students. The study found that students who used audiobooks showed significant improvements in listening comprehension compared to those who used traditional books. Despite these positive outcomes, the study was limited to a specific age group and educational level, indicating the

necessity for research across different age brackets and proficiency levels. Likewise, Gonzalez-Torres and Solano (2024) explored the effectiveness of video listening journals in enhancing EFL listening skills among university students. The study revealed that students who maintained video listening journals demonstrated greater improvement in listening skills than those who did not. Students also reported increased self-awareness of their listening abilities. However, the study acknowledged challenges such as students' difficulties in understanding certain information and learning new vocabulary, highlighting areas for instructional support.

In summary, the reviewed studies collectively demonstrate that graded audiobooks can effectively enhance listening comprehension across diverse EFL learner populations and instructional contexts. Improvements in vocabulary acquisition, learner motivation, and comprehension accuracy have been consistently observed. However, several limitations remain evident. Most research has concentrated on short-term comprehension gains, with limited exploration of long-term fluency development or real-time processing. In addition, many studies rely on unsupervised or out-of-class listening, offering minimal insight into how teacher-guided scaffolding and structured classroom integration may impact learner outcomes—particularly in low-input contexts. Moreover, few studies target technical or lower-proficiency learners, and most are situated in environments with higher English exposure than typically found in rural Thai universities. Furthermore, little attention has been given to learners' affective responses, task engagement, or differentiated instructional strategies. These gaps underscore the need for research that investigates how graded audiobooks, when embedded in a scaffolded classroom setting, can support both listening comprehension and fluency among A1–A2 EFL learners in low-exposure contexts—an area this study seeks to address.

2.7.1.2 Previous Studies on the Use of Graded Audiobooks and Listening Fluency

In recent years, interest in extensive listening (EL) has extended beyond comprehension to include listening fluency, which refers to learners' ability to process spoken language efficiently and automatically. Graded audiobooks have been explored as a tool for developing fluency through leveled and repeated audio input. However, a close review of the literature reveals differences in how fluency is

defined, measured, and supported. These differences reflect the ongoing need for structured, scaffolded research, particularly in low-input environments with lower-proficiency learners.

A key trend in the literature involves comparing different types of input. Brown, Waring, and Donkaewbua (2008) investigated three listening conditions: reading only, reading while listening, and listening only, in relation to vocabulary acquisition. Although the main focus was vocabulary, their findings offered insights into fluency. Learners in the listening-only group gained some vocabulary, but retention was weak three months later. The study suggested that unstructured listening may not support long-term language processing or fluency development. Repetition and structured input appeared to be missing components. Chang and Millett (2014) also studied the impact of repeated listening across three groups: reading only, reading/listening before listening, and listening only. Both groups that received audio input outperformed the reading-only group in listening tasks. Their findings supported the value of repeated and meaningful exposure to spoken English. However, like the Brown et al. study, their research focused on comprehension scores and lacked fluency-specific indicators such as speed of understanding, reaction time, or reduced reliance on subtitles. Chang et al. (2019) later introduced more structured extensive listening practices, including graded audiobooks and guided activities. This study emphasized automaticity through repeated practice, noting that fluency improved when learners had access to graded materials and instructional support. However, the study did not clearly distinguish which component, such as listening journals, pre-teaching, or repetition, contributed most to the observed gains.

Other studies investigated fluency-related outcomes using tasks that required speaking or pronunciation. Zúñiga and Gutiérrez (2018) used oral communication tasks alongside listening activities in a Colombian EFL classroom. They found that these tasks improved learners' real-time listening processing, suggesting fluency growth. However, because the study blended speaking and listening practice, the role of audiobooks as a standalone input was unclear. Cakir (2012) focused on Turkish university students learning pronunciation through audiobook use. After a nine-week intervention, students improved their pronunciation of targeted words. While not a

direct measure of fluency, the study suggested that repeated auditory input helps learners process sounds more efficiently and speak more naturally. The improvement in speech clarity points to the auditory benefits of structured audiobook exposure.

Across many of these studies, fluency is often measured indirectly. Most use comprehension tasks or pronunciation checks rather than fluency-focused indicators such as real-time listening speed, uninterrupted listening performance, or processing time. Chang and Millett (2014) and Chang et al. (2019), for example, reported comprehension and accuracy improvements, but did not examine how quickly or effortlessly learners processed audio. As a result, it is difficult to determine the depth of fluency improvement, particularly in terms of automaticity and reduced cognitive strain. In addition, most studies were conducted in environments with moderate to high English exposure, such as universities in Taiwan, Japan, or Turkey. Learners in these contexts typically have greater access to English materials and may already be more comfortable with autonomous learning. For example, Chang et al. (2019) used self-paced extensive listening tasks, and Cakir (2012) provided limited information about in-class guidance. These conditions differ from rural Thai EFL settings, where learners often have limited input, low confidence, and less experience in independent listening. Thus, the findings may not fully reflect the challenges faced by learners in low-input environments.

Structured support appears to enhance fluency, yet its role remains underexplored. While Chang et al. (2019) emphasized the benefits of supported listening, the design did not isolate specific strategies such as pre-listening scaffolding, classroom feedback, or peer discussion. Similarly, Zúñiga and Gutiérrez (2018) reported that task-based learning improved listening fluency, but did not clarify whether repeated audiobook exposure or the communicative tasks played the larger role. Without separating these variables, it is difficult to determine what kind of scaffolding best supports fluency development.

2.7.2 Previous Studies in the Thai Context

In Thailand, research on the use of graded audiobooks for language development remains limited. However, several studies have explored extensive listening (EL) using various forms of audio input, including podcasts, YouTube videos, and graded

readers. While these studies provide useful insights, few have examined the role of graded audiobooks within structured classroom instruction, particularly at the tertiary level. This section reviews the existing literature on EL in Thai EFL contexts and highlights the need for further investigation into audiobook-based instruction.

One of the few studies focusing on graded audiobooks was conducted by Tangkakarn (2018), who investigated the effects of reading-while-listening (RWL) and listening-before-reading-while-listening (LBRWL) on listening comprehension and vocabulary knowledge among 138 eighth-grade Thai learners. Participants were divided into two experimental groups (RWL and LBRWL) and a control group (listening only). The 16-week intervention involved twelve graded reader books, with assessments administered before, immediately after, and ten weeks following the intervention. Results showed that both experimental groups improved in listening and vocabulary, with the LBRWL group outperforming the RWL group. Furthermore, the delayed post-tests indicated retention of the learning gains. Student feedback from questionnaires and semi-structured interviews was generally positive, suggesting high engagement with the audiobook-based activities.

Following this, Bangkhadara (2019) examined the influence of mobile podcasts on the listening comprehension of Thai university students. Using a mixed-methods design, the study included 45 participants and employed pre-tests, post-tests, questionnaires, and interviews. The results revealed a statistically significant improvement in listening scores, indicating the positive impact of mobile-based extensive listening. Students also reported benefits such as greater flexibility, enhanced exposure, and improved motivation for listening practice.

Kampiranon (2021) further investigated the effects of extensive listening on upper secondary students' listening skills and strategies. Conducted over a 10-week period with 18 participants, the study integrated classroom-based listening tasks, out-of-class resources, and independent listening practice. Findings showed significant post-test gains in listening comprehension. Learners reported using strategies such as repeated listening, the use of subtitles, and goal-driven motivation, suggesting that extensive listening fosters strategic engagement with audio materials.

More recently, Prasongngern and Soontornwipast (2023) explored the effects of intensive listening instruction on metacognitive awareness and listening performance among ten first-year hospitality students. The study employed an embedded mixed-methods design and incorporated CALLA-based instruction, digital listening materials, reflective journals, and structured listening logs. After nine weeks, results from the Wilcoxon Signed Rank Test showed significant improvement in post-test listening scores. Interviews and journals indicated that students developed greater metacognitive control, although individual progress varied. This study demonstrated that strategy-based listening instruction can enhance both skill and awareness in beginner learners.

Although these studies demonstrate the growing recognition of extensive and intensive listening in the Thai EFL context, a critical gap remains regarding the use of graded audiobooks, particularly in relation to speaking fluency, which is closely linked to listening skills. Existing studies have largely focused on comprehension and vocabulary outcomes, with minimal emphasis on fluency, pronunciation, or interactive speaking skills. Furthermore, most research has targeted secondary students or English majors, leaving a gap in the literature concerning non-English major university learners in under-resourced or technology-driven institutions.

Although graded audiobooks have been widely recognized for their pedagogical value in supporting listening comprehension, fluency, and learner autonomy, existing research reveals several important limitations. Most studies have emphasized cognitive outcomes such as comprehension test scores, often overlooking the affective and experiential aspects of audiobook use, including learner motivation, listening anxiety, and engagement. Additionally, research rarely addresses how audiobook instruction can be effectively scaffolded within classroom environments. This issue is especially important for low-proficiency learners who require structured support. Listening fluency, a core component of real-time language use, also remains underrepresented in existing literature.

Furthermore, most prior work originates from East Asian ESL contexts with relatively high levels of English exposure. This limits its applicability to low-input environments like rural Thailand. Learners in these settings face distinct challenges,

including minimal access to authentic English, limited confidence, and a lack of autonomous listening habits. Despite the increased availability of digital audiobook resources, their classroom integration has not been thoroughly explored in EFL contexts, especially when considering guided instruction, reflective tasks, and teacher-led support.

To address these gaps, the present study investigated the use of graded audiobooks within a structured extensive listening program designed for non-English major undergraduates at a private university in Northeast Thailand. Unlike earlier research, this study focused on learners who had limited exposure to natural spoken English and low confidence in both listening and speaking. A quasi-experimental mixed-methods design was employed, incorporating pretests and posttests on listening comprehension, listening fluency, and speaking performance. In addition, semi-structured interviews were conducted to explore learner perceptions. The experimental group received audiobook-based instruction that was supported by teacher scaffolding, while the control group continued with traditional instruction. Through this design, the study aimed to provide a more comprehensive understanding of how graded audiobooks could support the development of both receptive and productive skills among Thai EFL learners in low-input educational settings.

2.8 Conceptual Framework

Figure 2.5 illustrates the conceptual framework, outlining the key variables examined in this study and the anticipated relationships among them. The framework includes one independent variable, which is the use of graded audiobooks in integrated graded audiobook listening activities, and three dependent variables: listening comprehension, listening fluency, and learners' perception of the use of graded audiobooks in these integrated listening activities.

The model proposes that structured and scaffolded exposure to graded audiobooks supports learners in three ways. First, it helps develop their ability to understand spoken English. Second, it enhances their capacity to process audio input more fluently and with greater automaticity. Third, it influences their affective responses to learning, including their confidence, engagement, and motivation. Listening comprehension refers to the learners' ability to grasp main ideas, supporting details,

and implied meanings in spoken texts. Listening fluency involves the ability to decode and process spoken input smoothly and efficiently in real time. Learners' perception captures their personal responses to the audiobook-based learning experience, such as perceived usefulness, enjoyment, and the impact on their confidence and interest in listening.

This framework reflects the study's focus on understanding both the cognitive outcomes and the learner experience associated with integrated graded audiobook listening activities. It is particularly relevant in low-input EFL environments, such as those found in many parts of Thailand, where learners often have limited access to authentic spoken English and benefit from structured instruction as well as affective support.

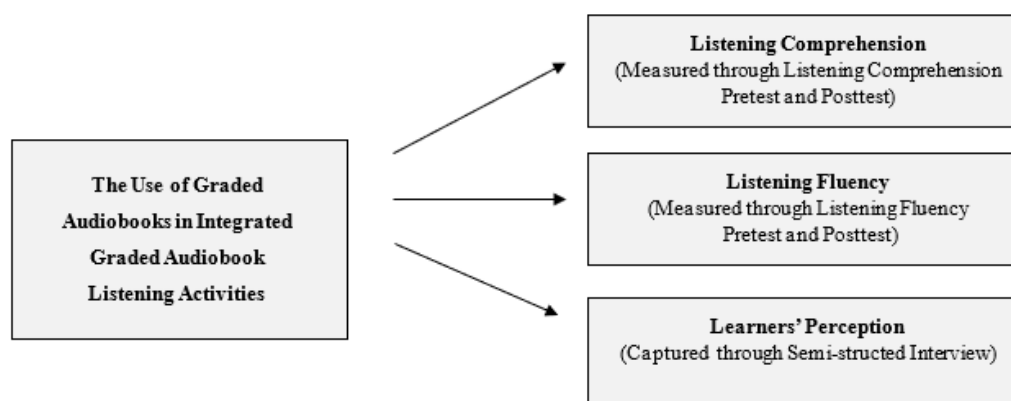
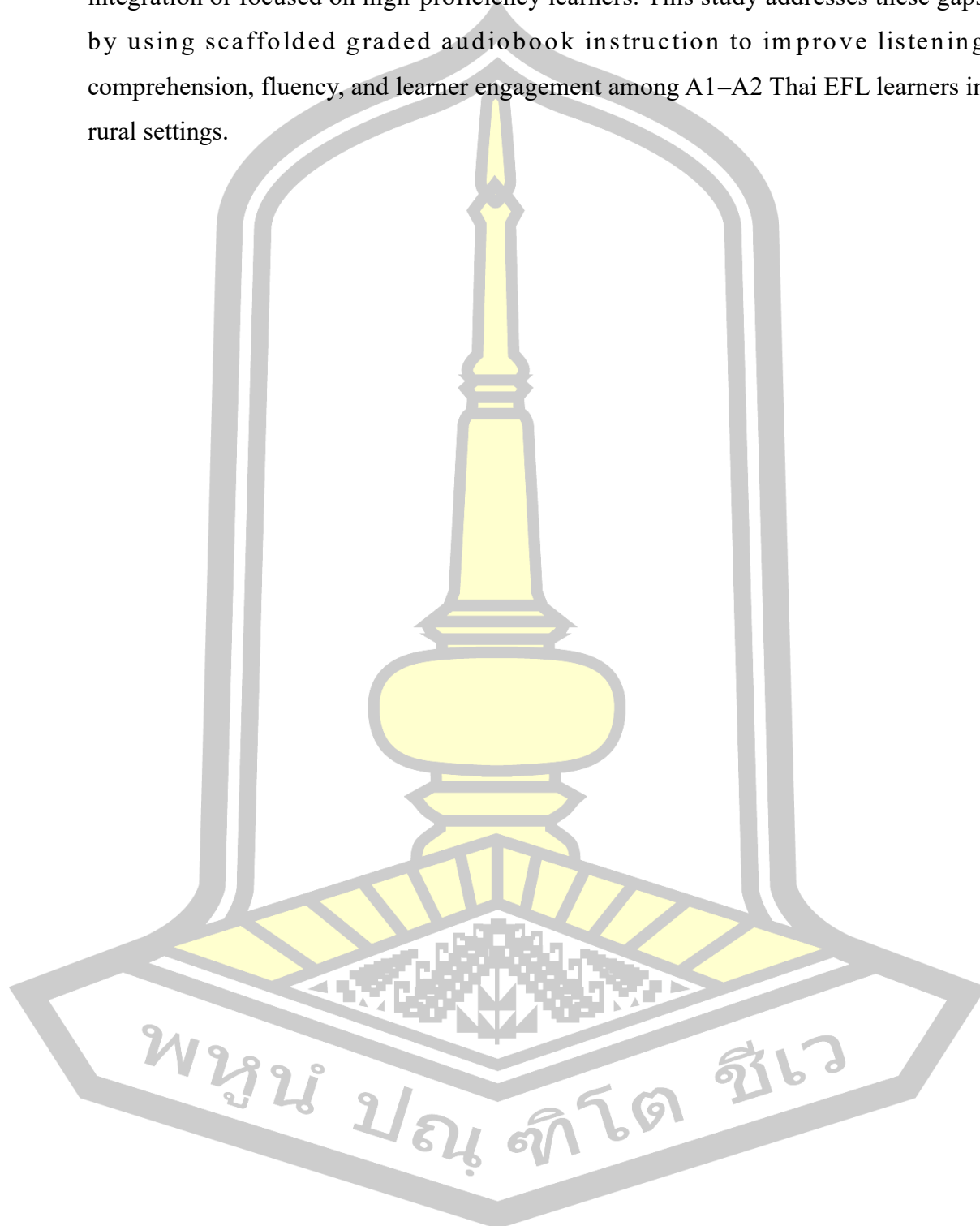


Figure 5 Conceptual Framework of This Study

2.9 Summary of the Chapter

This chapter reviewed key concepts related to listening in EFL contexts, focusing on comprehension, fluency, and the use of graded audiobooks. It outlined theoretical models and teaching approaches, with the Natural Approach identified as most suitable for this study. Listening comprehension and fluency were defined and linked to relevant assessment methods. Graded audiobooks were explored in detail, including their development, theoretical foundations, benefits, and limitations. Prior research showed positive effects on comprehension and vocabulary, but less attention has been

given to fluency, especially in low-input contexts. Most studies lacked classroom integration or focused on high-proficiency learners. This study addresses these gaps by using scaffolded graded audiobook instruction to improve listening comprehension, fluency, and learner engagement among A1–A2 Thai EFL learners in rural settings.



CHAPTER THREE

RESEARCH METHODOLOGY

This chapter explains the research methodology employed in the study. It begins by discussing the chosen research design and highlighting its relevance to the research objectives. The chapter then proceeds to describe the research setting and participants in detail. The research instruments utilized in the study are discussed. The chapter further outlines the step-by-step procedures followed throughout the research process, encompassing the execution of research instruments and data collection methods employed. Additionally, the data analysis techniques applied in the study are explained. The process of instrument development and validation is presented. Ethical considerations are also addressed.

3.1 Research Design

This study adopted a quasi-experimental mixed-method research design to investigate the effects of extensive listening through digital graded audiobooks on Thai EFL undergraduate students' listening comprehension, as well as to explore their perceptions of audiobook-based instruction. This approach was selected to ensure that both measurable learning outcomes and contextual understanding were captured, offering a comprehensive view of the intervention's impact.

Quasi-experimental research is commonly used in educational settings where random assignments are not feasible (Creswell & Creswell, 2018; Fraenkel et al., 2021). It is especially appropriate when the study involves pre-existing groups, such as intact classes, which is often the case in real-world schools and universities (Creswell, 2012; Cohen et al., 2018). One of the main advantages of quasi-experimental design is that it allows researchers to investigate causal relationships in authentic instructional contexts. It also supports the collection of data on learning gains over time through the use of pretests and posttests (Fraenkel et al., 2021). However, the absence of randomization may introduce potential threats to internal validity, such as selection bias or uncontrolled external variables (Cook & Campbell, 1979; Shadish et al., 2002). To mitigate these risks, researchers are encouraged to implement rigorous design features such as equivalent test instruments, consistent instructional time, and matching pre-intervention conditions across groups (Gall et al., 2007).

In the present study, a non-equivalent group pretest-posttest design was implemented. Two intact second-year undergraduate classes were assigned as experimental and control groups. Random assignment was not possible due to institutional scheduling and administrative constraints, which is typical in classroom-based research (Wiersma & Jurs, 2005). To maintain internal validity, both groups completed the same pretests and posttests in listening comprehension, using carefully constructed instruments aligned with CEFR A1 to A2 proficiency levels. The experimental group received audiobook-based instruction over a 12-week period using stories from the Oxford Bookworms series. These activities included both in-class listening sessions and out-of-class individual practice. The control group was taught through textbook-based listening tasks drawn from *Interchange 1* (Richards et al., 2012), a widely used general English textbook. By comparing the pretest and posttest results between the two groups, the study was able to examine the effectiveness of audiobook-based listening instruction relative to traditional textbook-based teaching.

Moreover, this study employed the use of mixed-method research which is increasingly common in language education, particularly when researchers aim to capture both the extent of learning gains and the lived experiences of participants (Dörnyei, 2007; Johnson & Onwuegbuzie, 2004). Mixed-method designs allow for triangulation, which enhances the validity of findings by cross-verifying data from different sources (Creswell & Plano Clark, 2018). They also support complementarity, where qualitative findings help explain or expand quantitative trends (Greene et al., 1989). However, mixed-method research can be demanding in terms of time, planning, and expertise. Researchers must be careful to ensure alignment between the research questions, data sources, and analytical methods (Teddlie & Tashakkori, 2009).

In this study, the quantitative phase involved administering standardized listening comprehension tests to both groups before and after the intervention. These tests were designed to assess learners' listening skills in understanding spoken English. The qualitative phase involved conducting semi-structured interviews with 12 participants who were purposively selected from the experimental group. This approach allowed the researcher to capture a range of perspectives and experiences (Patton, 2015). Interview questions explored learners' engagement with audiobook listening, the

features enhanced their listening comprehension, the challenges they encountered, and the benefits they perceived. All interviews were conducted in Thai to ensure comfort and clarity, then transcribed and translated for analysis. Thematic analysis followed the six-phase framework proposed by Braun and Clarke (2006), which includes familiarization with the data, initial coding, theme identification, theme review, definition, and final reporting.

The flow of the research procedures, including data collection timelines and participant involvement across both phases, is illustrated in Figure 7.

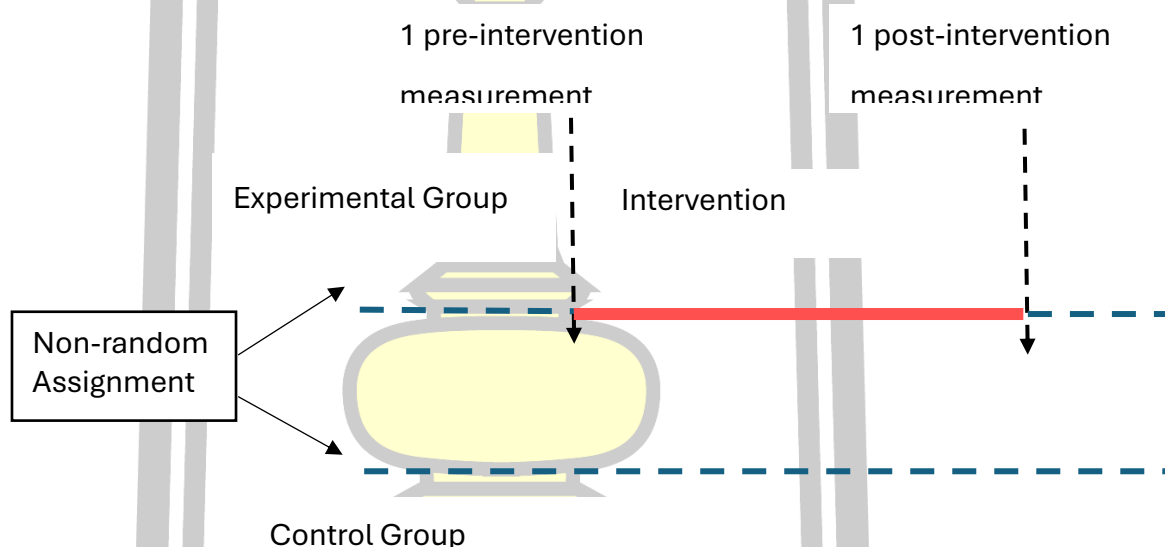


Figure 6 Research Design of This Study

3.2 Participants and Setting

This study included 74 Thai undergraduate students who were non-English majors, enrolled in two intact classes of the English for Communication course during the second semester of the 2024 academic year at a government university located in the Northeastern region of Thailand. The course was part of the university's general education curriculum and aimed to develop students' practical English skills, specifically listening, speaking, reading, and writing for daily and academic communication. Both the control and experimental classes were taught by the same instructor. The teacher held a Master of Education in English and had ten years of

professional experience in English language teaching at the tertiary level. Class A, which included 36 students, was assigned as the control group. Class B, which comprised 38 students, served as the experimental group. The participants were second-year engineering students aged between 19 and 20. All students had completed the required English prerequisite course. On average, they had received 12 years of formal English education through the Thai national curriculum.

To determine the English language skill levels of the participants, the Oxford Quick Placement Test (QPT) Version 2 (see Appendix A) was administered. This test was selected because it aligned with the Common European Framework of Reference (CEFR) and provides a valid and practical tool for placing students into appropriate levels. The QPT consisted of 60 multiple-choice items divided into grammar, vocabulary, and reading sections. It primarily measures receptive language skills and takes about 30–45 minutes to complete. The students' performance was used to determine their initial English level and ensure comparability between the two groups.

Table 3 presents a summary of the participants' demographic information in both the control group (CG) and the experimental group (EG). A total of 74 students participated in the study, with 36 in the control group and 38 in the experimental group. The majority of students in both groups were female, accounting for 88.9% in the CG and 81.6% in the EG. Most participants were 20 years old, followed by a small number aged 19 and 21. In terms of English proficiency, as determined by the Oxford Placement Test, the majority of students in both groups were at the A1 level (80.6% in CG and 73.7% in EG), while the remaining students were placed at the A2 level. This distribution reflects a relatively balanced baseline in terms of gender, age, and CEFR proficiency level between the two groups.

Table 3 A Summary of Participants' Demographic Information

Demographic		CG (N = 36)		EG (N = 38)	
Characteristics		Number	Percentage	Number	Percentage
Gender	Male	4	11.1	7	18.4
	Female	32	88.9	31	81.6
Age	19	2	5.6	3	7.9
	20	33	91.7	31	81.6
	21	1	2.8	4	10.5
CEFR Level	A1	29	80.6	28	73.7
	A2	7	19.4	10	26.3

Note: Control Group: CG, Experimental Group: EG

None of the participants had ever lived in an English-speaking environment or participated in any structured extensive listening program. In addition, none had used audiobooks either in the classroom or outside of it. Therefore, this intervention was their first experience with audiobook-based learning.

Regarding socio-economic background, most participants were from rural or semi-rural areas in Northeastern Thailand, where access to economic and educational resources was modest. Many students came from working-class families, including farmers, small-scale vendors, and manual laborers. Several were first-generation university students. Most students had chosen engineering as a practical career path rather than out of personal academic interest in language studies. As a result, English was generally viewed as a required subject rather than a meaningful communicative tool. Their motivation toward English learning tended to be instrumental and examination focused. Many of them perceived listening as the most difficult skill due to its fast pace, lack of visual support, and unfamiliar accents.

Because enrollment in each section was determined by schedule availability and completion of prerequisite courses rather than language proficiency, the two classes included students with varying levels of English ability. Despite these variations, both groups were comparable in terms of age, academic background, language learning

experience, and teacher exposure, making them suitable for comparison in this quasi-experimental study.

All participants studied these four skills through a commercial English textbook, which is commonly adopted in Thai university language programs. This textbook followed a structural syllabus with a strong emphasis on grammar, controlled vocabulary, and short scripted dialogues. The listening input was limited to brief pre-recorded conversations ranging from 30 seconds to two minutes in length. These recordings were accompanied by comprehension questions such as multiple-choice, gap-fill, and true/false tasks. The materials prioritized grammatical accuracy and form-based practice rather than extended or naturalistic language exposure, offering limited support for the development of listening fluency or real-time comprehension skills.

This research was undertaken at a private university in the Northeastern region of Thailand. This institution stressed the development of specific technical and technological abilities in its students in accordance with the rapid evolution of global technological landscapes. Given the university's primary emphasis on technology-oriented fields, English, despite being an essential subject, generally played a secondary role in the academic structure. In addition, the university's location in Northeast Thailand which is a region that may not be as exposed to international exchanges as metropolitan areas such as Bangkok likely restricted students' opportunities to use English outside the classroom. Students had limited opportunities to hear and engage with native or proficient English speakers, which was notably evident in their listening abilities.

3.2 Digital Graded Audiobooks

In this study, twelve selected audiobooks from the Oxford Bookworms Library Series were used as the basis for in-class guided discussion sessions. However, students were not limited to these titles for their independent listening. For out-of-class activities, learners were encouraged to explore and select any audiobook from the Oxford Bookworms Library Series that matched their language proficiency and personal interests. This dual approach was intended to promote learner autonomy and

engagement by combining structured in-class support with individualized out-of-class listening experiences.

The digital graded audiobooks were accessed through the Oxford Reading Club application. The Oxford Bookworms Library Series was designed to support English language learners in developing their proficiency through carefully graded materials. The series offered six stages, ranging from Beginner to Stage 6, each aligned with levels on the Common European Framework of Reference for Languages (CEFR). These stages ensured a progressive increase in linguistic complexity, allowing learners to build skills incrementally. The books were adaptations of well-known works of fiction, nonfiction, and drama, rewritten to retain the core themes and narratives of the originals while making them accessible to second language learners. Each level featured texts with controlled vocabulary and simplified grammatical structures appropriate to that stage, providing learners with comprehensible input that supported their language development.

Each audiobook was accompanied by professionally recorded audio files, enabling learners to listen while reading, thereby supporting their listening and pronunciation skills. Supplementary materials such as comprehension questions, vocabulary activities, and language-focused tasks were included to reinforce learners' understanding. Many titles also contained glossaries and explanatory notes that further supported comprehension. The series included a wide variety of genres, including mystery, adventure, romance, science fiction, and biography, which ensured that learners could engage with stories that matched their interests. Although the texts were simplified, they preserved authentic themes, writing styles, and cultural content found in the original works. Figure 7 presented the Workbook Syllabus, which outlined the structural framework and vocabulary load for each level.

Grammatical Structures Focused on Each Stage	Starter Stage: 400 headwords	Stage 1: 400 headwords	Stage 2: 700 headwords	Stage 3: 1,000 headwords	Stage 4: 1,400 headwords	Stage 5: 1,800 headwords	Stage 6: 2,500 headwords
present simple							
present continuous							
imperative							
can/cannot, must							
going to (future)							
simple gerunds							
past simple							
Coordination with and, but, or							
time clauses with before, after, then							
adverbs of manner							
infinitive of purpose							
gerunds and infinitives							
present perfect							
will (future)							
(don't) have to, must not, could							
comparison of adjectives							
simple time clauses							
past continuous							
tag questions							
ask/tell + infinitive							
should, may							
present perfect continuous							
used to							
past perfect							
causative							
relative clauses							
indirect statements							
past perfect continuous							
passive (simple forms)							
would conditional clauses							
indirect questions							
relatives with where/when							
clauses of purpose, reason, contrast							
gerunds after preposition/phrases							
future continuous							
future perfect							
passive (modals, continuous forms)							
would have conditional clauses							
modals + perfect infinitive							
so/such...that result clauses							
passive (infinitives, gerunds)							
advanced modal meanings							
clauses of concession, condition							

Figure 7 The Wormbook Syllabus

To determine the appropriate proficiency level of the participants, the Oxford Bookworms Level Test (see Appendix B) was administered. This web-based, interactive multiple-choice test was used to help learners identify their optimal reading level across the Oxford Bookworms graded series. The test defined a "passing" score as 80 percent. Scores below this threshold suggested a need to begin at a lower level, while scores above 95 percent indicated readiness for a higher level. Based on the test results presented in Table 4., 36 students in the experimental group were classified at the Starter level (A1), while only one student qualified for Level 1 (A1/A2).

Table 4 The English Proficiency Levels of the Participants Using Oxford Bookworms Level Test

English Proficiency Levels	Experimental Group	
	Numbers of Students	%
Starter Level	37	97.37%
Level 1	1	2.63%
Total	38	100%

Based on these results, the integrated digital graded audiobook activities were structured to match learner proficiency. In-class support was provided using twelve selected audiobooks, six from the Starter level (A1) and six from Level 1 (A1/A2), to gradually increase listening complexity and provide comprehensible input (Krashen, 1982) as presented in Table 5 These audiobooks were used during weekly sessions to introduce listening strategies, discuss content, and build familiarity with varied language and genre.

Table 5 The Profile of The Selected Audiobooks for In-Class Guided Discussion Sessions

Level	Level of the CEFR	Book title	Approx. Words Count
Starter	A1	The Fifteenth Character	1,400
Starter	A1	Sally's Phone	1,400
Starter	A1	New York Cafe	1,600
Starter	A1	The Big Game	1,316
Starter	A1	The Girl with Green Eyes	1,702
Starter	A1	The Girl with Red Hair	1,702
Level 1	A1/A2	A Little Princess	5,840
Level 1	A1/A2	Shirley Homes and the Cyber Thief	6,063
Level 1	A1/A2	The Lottery Winner	5,655
Level 1	A1/A2	The Butler Did it	5,925
Level 1	A1/A2	The Lottery Winner	5,655
Level 1	A1/A2	Nobody Listens	5,830

However, students were not restricted to these titles for independent listening. For out-of-class activities, students were encouraged to explore and select any audiobook from the Oxford Bookworms Library Series, based on their interests and language level.

3.4 Research Instruments

In this study, two research instruments were utilized to collect data. This section delves into the specific research instruments employed in the study. They were designed to capture specific data to address the research objectives.

3.4.1 Listening Comprehension Pretest and Posttest

The listening comprehension pretest and posttest (see Appendix C) were developed to measure the participants' listening comprehension. The listening comprehension pretest and posttest consisted of four parts with excerpts from four stories, as shown in Table 6.

Table 6 The Profile of The Digital Graded Audiobooks Used in the Listening Comprehension Test

Level	Level of the CEFR	Book title
Starter	A1	Sally's Phone
Starter	A1	Girl on a Motorcycle
Level 1	A1/A2	The Adventures of Tom Sawyer
Level 1	A1/A2	The Coldest Place on Earth

The Listening Comprehension Test employed in this study was divided into three structured sections, each designed to evaluate distinct aspects of listening comprehension.

Part 1 focused on multiple-choice questions, which assessed learners' ability to identify the main idea, supporting details, and speaker purpose across a range of short audio excerpts adapted from digital graded audiobooks. Each question presented four options, and participants were required to choose the most appropriate response after listening. This format emphasized global comprehension, inference, and detail recognition (Buck, 2001; Rost, 2011), supporting the needs of beginner to low-

intermediate learners by offering scaffolded, fixed-response tasks that reduced cognitive load while encouraging careful listening (Vandergrift & Goh, 2012).

Part 2 consisted of true/false statements targeting literal comprehension. In this section, participants had to determine the truth value of statements based on specific information presented in the audio. This part assessed the learners' capacity to extract explicit details such as names, actions, numbers, locations, and sequence markers from the passage. The binary choice format minimized ambiguity and made the task suitable for low-proficiency learners while reinforcing their ability to match oral input with written prompts (Goh, 2008; Rost, 2011).

Part 3 featured matching tasks that assessed more integrative comprehension skills, including understanding cause-effect relationships, narrative flow, and character-event associations. Participants were asked to match columns such as events and results, characters and actions, or questions and appropriate responses based on information heard in the audio. These tasks required a higher level of working memory and attention to sequencing, as learners needed to hold and organize multiple pieces of information across a single listening (Field, 2008; Lynch, 2017).

All three parts of the test used adapted audio segments drawn from four digital graded audiobooks spanning Starter and Level 1 of the Oxford Bookworms Library, ensuring appropriateness in both linguistic and cognitive demand. Each excerpt was played twice, and students had one minute to review the questions before listening, followed by a one-minute pause to record their answers. Together, these parts offered a comprehensive assessment of listening comprehension by evaluating a range of subskills including gist comprehension, detail retrieval, and narrative connection through formats that are practical, reliable, and pedagogically appropriate for Thai undergraduate EFL learners (Bachman & Palmer, 2010; Brown, 2004).

Table 7 Specific Objectives of the Listening Comprehension Test and Corresponding Formats

Objective	Test Format and Example
To evaluate recognition of specific supporting details	Multiple-choice questions Part A: Choose the best answer. 1. What is Kenny's plan when he gets to the town? a. See the town b. Sleep at a motel c. Have dinner d. Take another bus
To evaluate recognition of specific supporting details	True/False items Part B: Write 'T' if the statement is true or write 'F' if the statement is false. 3. _____ It is an evening in summer. 4. _____ Kenny want to take a bus to California.
To assess the ability to understand specific actions and sequence of events	Matching items Part C: Match the letter from A with the number from B with to make complete sentences A. a. Sally is having breakfast with ... b. Sally picks up c. Andrew has ... B. 14. _____ her phone and answers it. 15. _____ her mother. 16. _____ a lot of money and a beautiful, expensive car.

3.4.2 Semi-Structured Interview Questions

A semi-structured interview was conducted to investigate participants' reflections after using graded audiobook intervention. This qualitative approach combined both structured and flexible components, allowing open-ended responses and enabling the interviewer to explore unexpected but relevant ideas that emerged during the conversation. The purpose was to gain deeper insights into how students interacted with digital graded audiobooks, how these features supported their listening comprehension, and what benefits or challenges they perceived during the learning process.

A total of twelve participants were randomly selected from the experimental group. All interviews were conducted in Thai to minimize language barriers and encourage natural expression. Each session lasted 15–20 minutes, and additional follow-up interviews were held with some low-level participants who initially provided short responses to ensure data richness and achieve saturation.

The semi-structured interview comprised four main parts aligned with the study's research questions which were specific features of digital graded audiobooks and perceived benefits. Each part is described in detail below.

The first part of the interview explored how students used the technological features of digital graded audiobooks to support their listening comprehension. Questions encouraged participants to describe how they interacted with specific tools such as playback speed control, text highlighting, built-in dictionaries, and comprehension quizzes. The intention was to understand which features they found most useful and how these features affected their comprehension and engagement. Sample questions included:

- Which features of the digital graded audiobooks (e.g., playback speed control, text highlighting, built-in dictionary, comprehension quizzes) do you find most helpful? Why?
- How does adjusting playback speed affect your understanding of the spoken content?

- Do you use the feature that displays the text while listening? If yes, how does it influence your comprehension or listening ability?

These questions provided insights into how learners interacted with multimodal supports that combined audio and text, which are central to graded audiobook design.

The second part of the interview focused on their perceived benefits and motivational responses after using digital graded audiobooks. It sought to uncover how the integration of listening and reading affected their comprehension. Participants were encouraged to reflect on personal progress and to share examples of improvement. Sample questions included:

- In what ways do you think using digital graded audiobooks has helped improve your listening comprehension?
- Have you noticed any changes in your vocabulary or pronunciation after using the audiobooks?
- Do you feel more confident or motivated to learn English through this method? Why or why not?
- Have digital graded audiobooks helped you become more independent in your listening practice?

These questions aimed to capture students' emotional and cognitive responses, helping identify which aspects of audiobook learning contributed most to their progress.

All interviews were conducted individually in a quiet and comfortable environment, either in a designated study room or an empty classroom, to encourage open communication and minimize external distractions. Before each interview began, participants were reminded of the study's purpose and their rights, including the right to withdraw at any time without consequence. They were assured that their identities would remain confidential and that all collected data would be used solely for research purposes. Verbal and written consent were obtained prior to recording, following the ethical guidelines approved by the university's research ethics committee. At the beginning of each session, the interviewer spent a few minutes engaging in light conversation to help participants relax and build rapport. This warm-up stage was particularly important for low-proficiency learners, as it helped reduce

anxiety and encouraged more natural communication. Once participants felt comfortable, the interviewer followed the semi-structured interview guide, using prompts and follow-up questions when necessary to clarify ideas or encourage deeper reflection. While the guide ensured consistency across participants, the flexible format allowed spontaneous discussion when participants shared new or relevant experiences.

Each interview lasted approximately 15–20 minutes, depending on the depth of responses. Audio recordings were captured using a high-quality digital voice recorder to ensure clarity and accuracy. Immediately after each session, the recordings were securely transferred to a password-protected folder on the researcher's personal computer. Each file was labeled with an anonymous participant code (e.g., S1, S2, S3) to protect personal information. Backup copies were stored on an encrypted drive to prevent data loss. Only the researcher and two authorized research assistants had access to the files during the transcription and analysis stages. Each recording was transcribed verbatim in Thai to preserve the authenticity of participants' original expressions and language use. Non-verbal cues such as pauses, laughter, or hesitation were also noted when they contributed meaningfully to the interpretation of responses. After transcription, the data was carefully reviewed for accuracy by the researcher while listening to the recordings a second time. This ensured that no important details were missed or misrepresented.

The Thai transcripts were then translated into English for the purpose of coding and thematic analysis. To maintain meaning equivalence between the two languages, a forward–backward translation process was applied. The initial English translation was completed by the researcher, who was bilingual in Thai and English. A second bilingual researcher independently reviewed the translated versions and compared them to the original Thai transcripts to verify that key ideas, tone, and nuances were preserved. Any discrepancies in translation were discussed collaboratively until consensus was reached. This cross-verification process enhanced the reliability and linguistic validity of the data. To ensure data trustworthiness, several validation strategies were applied. Member checking was conducted informally after each interview, where the interviewer paraphrased participants' responses to confirm

understanding. Audit trails were maintained by documenting all steps in data collection and transcription, including file names, dates, and notes on contextual factors during the interviews. Peer debriefing with two colleagues in applied linguistics was also carried out to discuss potential researcher bias and ensure interpretive accuracy.

All validated transcripts were organized systematically and coded using a qualitative data management framework. Each transcript was stored in a structured folder system for later retrieval. These finalized transcripts formed the primary qualitative dataset used for thematic analysis in Chapter 4, where patterns, subthemes, and overarching categories were identified and interpreted in relation to the study's research questions.

3.5 Data Collection Procedure

In this study, the research procedure was divided into two stages: the pilot study and the experimental study. The details of each stage are presented as follows:

3.5.1 Pilot Study

A pilot study was a small-scale preliminary study conducted before a larger research project to test or refine various aspects of the study design, procedures, or measurements. A pilot study aimed to identify and correct any potential problems or limitations in the study before it was conducted on a larger scale. A carefully organized and managed pilot study could potentially increase the research quality as results from such studies could inform subsequent parts of the research process (Malmqvist, Hellberg, Möllås, Rose, & Shevlin, 2019). In this study, a pilot study was conducted before the experimental study. During the piloting stage, 20 students (not the participants from the experimental and control groups) from other classrooms participated. In the first period, the listening comprehension test and listening fluency test were carried out to evaluate the test's suitability for actual use.

3.5.2 The Main Study

The main study was divided into three phrases:

3.5.2.1 Pre-intervention phase

During the pre-intervention phase, participants were informed about the research objectives, procedures, and ethical considerations, including their right to withdraw at any time. Informed consent was obtained from all participants prior to data collection. Following this, a listening comprehension pretest was administered. These assessments were used to establish the baseline listening abilities of both the control and experimental groups and to ensure comparability between the groups before the treatment began.

3.5.2.2 While-intervention phase

The control and experimental groups were enrolled in the *English for Communication* course. The instructions for the control group and the experimental group were as follows:

3.5.2.2.1 The control group received instruction through a conventional, teacher-centered approach commonly used in Thai EFL university classrooms. Listening instruction was delivered as part of the standard *English for Communication* course, using *Interchange 1* (Cambridge University Press) as the core textbook. This coursebook integrates all four language skills, with listening materials presented in a structured and repetitive format aimed at reinforcing key vocabulary and grammar.

Each weekly lesson followed the textbook unit structure and focused on short, scripted audio recordings ranging from 30 seconds to 3 minutes in length. These recordings were accompanied by comprehension exercises such as multiple-choice, gap-fill, and true/false items. The teacher introduced the topic, played the audio track twice, and then led students through the corresponding activities.

This method emphasized form-focused instruction and accurate comprehension, with little exposure to natural speech or extended listening. The scripted listening materials were carefully aligned with the grammatical and lexical targets of each unit. Students were not assigned listening homework, nor were they encouraged to engage with longer or unscripted audio materials outside of class.

3.5.2.2.2 The experimental group participated in a structured extensive listening program that integrated both in-class and out-of-class activities. In this study, twelve

selected audiobooks from the Oxford Bookworms Library Series were used as the basis for in-class guided discussion sessions. These audiobooks, drawn from Starter and Level-1 categories, were used to scaffold learners' comprehension and introduce a range of genres and topics. From Weeks 1 to 6, Starter-level audiobooks were introduced to support foundational listening strategies such as understanding the gist and identifying key characters or events while from Weeks 7 to 12, Level-1 audiobooks were incorporated to gradually increase listening complexity.

During in-class sessions, students were guided in how to use digital graded audiobooks effectively. This familiarization process was intended to motivate students, equip them with essential listening strategies, and ensure meaningful engagement with the materials. Each week, the selected audiobook was introduced, followed by strategy instruction and discussion activities.

For out-of-class listening, students were encouraged to explore and select any audiobook from the Oxford Bookworms Library Series that matched their language proficiency and personal interests. After completing each weekly out-of-class listening task, students were required to complete and submit a listening log. The log served as a reflective tool to track their progress and deepen their engagement with audiobook content outside the classroom. To monitor and guide participants' listening practices, a listening log was developed based on the frameworks of Mayura (2017) and Kampiranon (2021) (see Appendix D).

Table 8 provides a comparative overview of the listening instruction and activities implemented in both the control and experimental groups, illustrating the key differences in teaching approach, listening materials, and in- and out-of-class learning components.

Table 8 *The listening instruction and activities of the control group and the experimental group*

Listening Phase	Week No.	Control Group	Experimental Group
	1.	Orientation & Pretest Score Collection	
Phase 1	2-7	Interchange 1: Unit 1-3	- Interchange 1: Unit 1-3 - In-class guided discussion sessions with starter-level digital graded audiobooks - Out-of-class listening tasks
	8.	Mid-term exam week	
Phase 1	9-14	Interchange 1: Unit 4-6	- Interchange 1: Unit 4-6 - In-class guided discussion sessions with A1-level digital graded audiobooks - Out-of-class listening tasks
	15	Posttest Score Collection	
	16.	Final exam week	

To scaffold the use of digital graded audiobooks and maximize their pedagogical impact, the researcher designed weekly in-class activities that integrated listening strategies, comprehension tasks, and guided discussions. The lesson plan below outlines a sample weekly structure for in-class sessions using a graded audiobook. A sample is shown in Table 9.

Table 9 *Weekly Instructional Framework for Control and Experimental Groups*

Stage	Control Group (Traditional Textbook-Based)	Experimental Group (Graded Audiobook-Based)
Warm-up	Teacher introduces unit theme and reviews key vocabulary. (5 min)	Brainstorm vocabulary related to emotions and relationships. (10 min)
Pre-listening	Teacher briefly introduces the topic and provides vocabulary needed to complete comprehension tasks. (5 min)	Predict the story based on the title and cover image. (10 min)
Listening 1	First playback of short textbook audio. Students listen for the main idea. (5 min)	Listen to the first half of the audiobook (played twice). (10 min)

Stage	Control Group (Traditional Textbook-Based)	Experimental Group (Graded Audiobook-Based)
	min)	
Comprehension Check	Complete textbook exercises (multiple-choice, gap-fill, true/false). (10 min)	Answer multiple-choice and true/false questions. (15 min)
Listening 2	Second playback of audio. Students complete remaining textbook tasks. (10 min)	Listen to the second half of the audiobook (played once). (10 min)
Discussion / Feedback	Teacher checks answers, explains difficult items, leads grammar/vocabulary review. (10–15 min)	Pair discussion: students discuss key events and character decisions. (15 min)
Pronunciation / Vocabulary Focus	Optional drills or vocabulary practice from textbook. (10–15 min)	Identify and review five key words from the story. (10 min)
Wrap-up / Reflection	Students summarize or review key points orally or in writing. (10 min)	Write 3–4 sentences in journal about what they learned. (10 min)
Out-of-Class Activities	No homework assigned; no extended listening.	Weekly out-of-class audiobook tasks + listening log (Appendix E)

This format was adapted weekly based on the audiobook title and student feedback. The activities emphasized listening for gist and details, encouraged learner autonomy, and supported vocabulary acquisition through contextual exposure.

In the experimental group, although no formal comprehension checks such as multiple-choice or true/false questions were administered during in-class listening, teacher guidance served as the primary scaffold to support and enhance students' listening comprehension. This instructional support was strategically embedded throughout each session, and its flexibility and responsiveness were key features of the audiobook-based intervention.

Before listening, the teacher provided pre-listening scaffolding by introducing essential vocabulary, offering cultural or contextual background, and prompting students to make predictions using the title, illustrations, or key phrases. These activities activated prior knowledge and reduced cognitive load, allowing students to enter the listening task with a clearer purpose. The teacher also posed guiding

questions like, “What do you think might happen in this chapter?” to help learners establish expectations and prepare for comprehension.

During listening, the teacher employed various forms of real-time guidance. These included pausing the audio at key points to model how to extract main ideas, draw attention to discourse markers (e.g., “however,” “then,” “because”), or emphasize the tone, mood, and emotional shifts in characters' voices. In addition, the teacher provided live commentary and mental visualization cues, such as “Picture what the character is seeing” or “Listen for the change in her tone when she speaks.” Prompts like “Listen for what the character decides next” or “What do you think the problem is now?” encouraged intentional, goal-directed listening.

After listening, guidance continued through teacher-facilitated group and pair discussions. These discussions focused not only on what happened in the story but also how students understood it. Rather than supplying correct answers, the teacher used scaffolding prompts such as “What makes you think that?” and “Can someone explain that in a different way?” to encourage students to explain, infer, and reconstruct meaning collaboratively. The teacher also revisited key vocabulary, paraphrased complex sections, and invited learners to summarize key events, supporting both comprehension and retention.

Table 10 Teacher Guidance Used During In-Class Audiobook Listening

Strategy Type	Instructional Action	Purpose
1. Directing attention through questions	Asking guiding questions before, during, or after listening	Focus learner attention on key ideas, characters, tone, and sequence
2. Modeling listening behavior	Demonstrating how to listen for specific cues (main idea, tone, connectors)	Teach students what expert listeners do while listening
3. Using verbal signals during listening	Pausing the audio to insert commentary or refocus attention	Re-engage students and help them refocus when attention drifts
4. Pre-listening scaffolding	Providing key vocabulary, background info, or visual predictions	Lower cognitive load and activate prior knowledge
5. Post-listening summarizing	Reviewing events with the class before discussion	Reinforce overall understanding and prepare students to talk about what

Strategy Type	Instructional Action	Purpose
		they heard
6. Paraphrasing or rephrasing unclear parts	Explaining difficult words, idioms, or fast speech in simpler language	Make input more comprehensible and accessible
7. Encouraging mental visualization	Prompting students to picture what they hear in their minds	Deepen comprehension through mental imagery
8. Providing structural cues	Highlighting transitions and discourse markers in speech	Help learners follow the flow of the story or argument
9. Recasting student responses	Gently correcting or rephrasing student interpretations for clarity	Reinforce accurate comprehension and respectful communication

To promote learner autonomy and provide extended listening practice beyond classroom hours, students in the experimental group were assigned weekly out-of-class audiobook tasks. These tasks were designed to strengthen listening comprehension and fluency by encouraging students to engage with level-appropriate digital graded audiobooks at their own pace, supported by structured reflection through a listening journal. This routine is outlined

This structured out-of-class listening routine allowed students to personalize their learning experience while remaining accountable through weekly journal submissions. It also provided additional input exposure, an essential factor in second language acquisition (Krashen, 1985).

3.5.2.3 Post-intervention phase

During the post-intervention phase, two post-tests were administered to both the control and experimental groups: the listening comprehension test and the listening fluency test. These assessments aimed to measure the development in students' listening abilities after the 12-week instructional period and to compare the effects of the traditional and extensive listening approaches.

In addition, semi-structured interviews were conducted with selected participants from the experimental group to gain deeper insights into their experiences with the graded audiobook program. The interviews focused on students' perceptions of the strengths, challenges, and overall effectiveness of using digital graded audiobooks for

improving listening skills. This qualitative data was used to support and enrich the quantitative findings from the post-tests.

3.6 Data analysis

As mentioned earlier, the present investigation was both quantitative and qualitative data. Therefore, different methods of data analysis were considered.

3.6.1 Data analysis for Research Questions 1: To what extent do digital graded audiobooks affect Thai EFL undergraduate students' listening comprehension?

To answer Research Questions 1, which investigated the effects of digital graded audiobooks on Thai EFL undergraduate students' listening comprehension, both independent samples t-tests and paired samples t-tests were conducted to analyze the pretest and post-test scores of the two groups.

An independent samples t-test was used to compare the mean scores between the experimental group and the control group at both the pretest and post-test stages. This test was appropriate for examining whether there were statistically significant differences in performance between two unrelated groups receiving different types of instruction, graded audiobook-based learning versus conventional listening instruction.

A paired samples t-test was used within each group to determine whether students showed significant improvement from pretest to post-test. This test was appropriate for analyzing repeated measurements from the same participants over time, allowing the researcher to assess the effectiveness of the instructional approach used within each group.

These statistical procedures allowed for a comprehensive analysis of both between-group differences (effect of instructional method) and within-group changes (individual learning gains), thereby providing robust evidence regarding the impact of digital graded audiobooks on listening skill development.

3.6.2 Data Analysis for Research Questions 2 and 3: What are the perceptions of Thai EFL undergraduate students toward the features and use of digital graded audiobooks on their listening comprehension?

To answer Research Questions 2 and 3, qualitative data were collected through semi-structured interviews with 12 participants purposively selected from the experimental group based on their post-test listening comprehension scores to capture a range of experiences and perspectives. All interviews were conducted in Thai to ensure clarity and comfort and were then transcribed and translated into English for analysis.

The data were analyzed using thematic analysis, guided by Braun and Clarke's (2006) six-phase framework: (1) familiarization with the data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. Each of these steps was systematically applied to ensure a rigorous and transparent analysis process.

Step 1 – Familiarization with the Data. The familiarization process began with the transcription of the semi-structured interview recordings collected from participants after the intervention. Each interview was transcribed verbatim to ensure accuracy and to preserve the participants' authentic expressions and intended meanings. The researchers then read the transcripts multiple times to gain a comprehensive understanding of the content, tone, and context of the responses. During these initial readings, notes were made in the margins to record preliminary impressions, recurring ideas, and phrases that reflected students' perceptions of digital graded audiobooks. Particular attention was given to statements that addressed two distinct but interrelated areas of focus: (1) students' perceptions of specific audiobook features such as narration quality, playback controls, accessibility options, multimodal integration, and text–audio synchronization, and (2) their perceptions of the benefits these features provided, including comprehension support, vocabulary development, pronunciation modeling, engagement, and ease of learning. This dual focus allowed the researchers to understand not only which features students noticed and valued, but also how these features were believed to contribute to their listening comprehension and overall language learning experience. This stage of immersion established the analytical foundation for subsequent coding and theme development. It enabled the

researchers to identify patterns of meaning across both technological and pedagogical dimensions, paving the way for the systematic coding of audiobook features and perceived benefits in later stages of thematic analysis.

Step 2: Generating Initial Codes. Following the familiarization phase, the next step involved generating initial codes to systematically organize the qualitative data. This process was conducted manually using an inductive approach to allow patterns and meanings to emerge directly from participants' accounts rather than from pre-existing assumptions. Each transcript was reviewed line by line, and excerpts that captured meaningful ideas, perceptions, or reflections were highlighted and assigned concise descriptive codes. Both semantic meanings (explicitly stated) and latent meanings (implied ideas) were considered, consistent with Braun and Clarke's (2006) guidelines for thematic analysis.

To address the two research questions, the coding framework intentionally distinguished between references related to audiobook features (Research Question 2) and those reflecting perceived benefits (Research Question 3). Codes within the features category captured descriptions of technological and pedagogical functions, such as playback speed control, pause and replay functions, clear narration, synchronized text, visual aids, and mobile accessibility. Meanwhile, codes within the benefits category represented learners' reported outcomes, such as improved comprehension, increased confidence, vocabulary development, pronunciation awareness, and greater motivation to listen.

During this phase, a broad range of codes was generated across all 12 interview transcripts. For instance, "uses replay function" (feature), "adjusts playback speed to aid comprehension" (feature linked to benefit), "increased confidence" (benefit), and "daily listening builds familiarity with accents" (benefit) were among the most frequently occurring codes. These codes were compiled into a preliminary coding list and systematically compared across transcripts to identify overlapping ideas, unique insights, and recurring patterns of perception.

As coding progressed, related codes were grouped into conceptual clusters representing broader areas of shared meaning. For example, feature-related codes

such as “clear pronunciation,” “story segmentation,” and “text–audio synchronization” were clustered under a broader category related to structured listening support. Similarly, benefit-related codes such as “improved comprehension,” “better vocabulary recall,” and “more relaxed listening experience” were grouped into clusters representing listening improvement and affective engagement. These clusters served as an analytical bridge between raw data and emerging higher-level themes. Once all initial codes had been reviewed and refined, they were organized into broader conceptual categories that formed the foundation for the thematic development process described in Step 3.

Table 11 Initial Codes and Reflective Descriptions on Perceived Audiobook Features

Initial Code	Reflective Description
Focused vocabulary input	Words and expressions were intentionally grouped around key story events or topics, helping learners notice and remember vocabulary in meaningful contexts.
Recycling of lexical items	Repeated exposure to the same words across chapters and stories reinforced recognition and recall, supporting faster and more automatic comprehension.
Leveled content	Vocabulary, grammar, and story complexity were matched to learners’ proficiency levels, ensuring input was comprehensible yet challenging enough to promote progress.
Gradual story progression	The design allowed learners to move from short, simple stories to longer, complex ones, building stamina and confidence in listening comprehension.
Simplified sentence structures	Shorter and clearer syntax reduced processing demands and allowed learners to focus on meaning rather than decoding individual words.
Story segmentation	Division of stories into smaller parts gave learners natural pauses for reflection, review, and prediction, preventing fatigue and improving retention.
Compelling narratives	Interesting storylines, suspense, and emotional content maintained attention and encouraged extended listening, increasing exposure to English input.
Variety of topics	A wide range of story genres and themes supported learner choice and personalization, sustaining motivation and promoting active engagement.
Visual and textual support	Features such as synchronized text, subtitles, and illustrations reinforced understanding by linking visual and auditory input.
Clear pronunciation and pacing	Slow, deliberate narration and accurate articulation made it easier for learners to recognize words and process meaning, especially at lower levels.

Initial Code	Reflective Description
Authentic native accents	Exposure to natural accents helped learners adapt to real-life English speech, improving recognition and confidence in varied listening contexts.
Adjustable playback controls	Speed control, pause, and replay functions enabled learners to manage listening pace and review difficult sections, reinforcing comprehension.
Mobile and anytime access	Learners could listen on personal devices at their convenience, integrating English practice into daily life and promoting consistent exposure.
Multimodal interactivity	The combination of text, sound, and visuals created an immersive environment that reduced anxiety, enhanced engagement, and supported comprehension.
Flexible personalization	Adjustable settings allowed learners to tailor input to their needs and skill levels, increasing autonomy and motivation to continue practice.

Table 12 Initial Codes and Reflective Descriptions on Perceived Benefits

Initial Code	Reflective Description
Improved comprehension	Reflects learners' perception that audiobook content was easier to follow and understand.
Use of repeated listening	Reflects the strategy of replaying audio to enhance clarity and reinforce understanding.
Storyline tracking	Reflects the ability to follow the plot and sequence of events more effectively.
Playback speed control	Reflects learners' use of slower playback to aid comprehension of fast or difficult passages.
Pronunciation awareness	Reflects increased sensitivity to native pronunciation and sound patterns.
Listening frequency	Reflects the benefits of daily or repeated listening practice on comprehension.
Sound discrimination	Reflects the ability to distinguish between similar sounds and recognize words more clearly.
Accent familiarity	Reflects increased comfort with different English accents through regular exposure.
Vocabulary acquisition	Reflects learning of new words through contextual listening.
Vocabulary retention	Reflects learners' perception that vocabulary was easier to remember in audiobook context.
Natural language exposure	Reflects learners' increased awareness of authentic language use.
Real-life language	Reflects appreciation for acquiring English in practical, story-based

Initial Code	Reflective Description
learning	scenarios.

Step 3: Searching for Themes. After generating the initial codes across all interview transcripts, the next step involved organizing these codes into potential themes that captured broader patterns of meaning. Codes were reviewed for conceptual similarities and grouped into clusters that reflected shared ideas or underlying perceptions about how digital graded audiobooks supported listening development. This phase marked the transition from descriptive coding to interpretive analysis, in which individual codes were no longer viewed as isolated data points but as interconnected components of larger, meaningful categories that addressed the two research questions.

For Research Question 2, which explored students' perceptions of audiobook features, codes describing technological and pedagogical functions—such as “adjustable playback,” “story segmentation,” and “synchronized text”—were grouped under categories that reflected how the design of the platform facilitated listening comprehension. Meanwhile, for Research Question 3, which examined perceived benefits, codes such as “easier to understand,” “clear pronunciation,” and “learned new words” were merged into categories representing how learners experienced improvement in comprehension, confidence, and motivation.

Through iterative rounds of comparison, refinement, and conceptual integration, these two sets of categories were consolidated into five overarching themes, each representing a key dimension of learners' perceptions that linked audiobook features with their perceived benefits. The final themes captured linguistic, structural, cognitive, and affective aspects of audiobook use, along with motivational influences arising from flexible, learner-centered technology.

The table below summarizes the emerging themes and their corresponding initial codes, illustrating how perceived features and benefits were connected during the thematic development process.

Table 13 Initial Themes and Related Initial Codes on Perceived Features of Digital Graded Audiobooks

Emerging Theme	Related Initial Codes
Vocabulary Development through Focused Input and Recycling	grouped vocabulary, repeated exposure, thematic word sets, contextual guessing, vocabulary recall
Structured and Level-appropriate Scaffolding	leveled content, gradual progression, story segmentation, simplified language, clear structure, reflection opportunities
Engaging and Multimodal Learning Experience	enjoyable stories, meaningful narratives, story variety, visual and textual support, sustained attention, reduced anxiety
Supportive Listening Features for Comprehension and Confidence	clear pronunciation, controlled pacing, accent familiarity, replay and speed adjustment, comprehension monitoring
Motivation and Learner Engagement Stimulated by Audiobook Accessibility and Flexibility	mobile learning, anytime access, self-paced practice, flexible personalization, autonomy in listening, motivation to continue

Table 14 Initial Themes and Related Initial Codes on Perceived Benefits

Emerging Theme	Related Initial Codes
Enhancing Listening and Deep Story Understanding	clear story structure, storyline division, contextual guessing, listening for main ideas, understanding narrative flow
Improving Sound Discrimination	sound separation ability, word recognition, distinguishing similar sounds
Improving Understanding of Accents	accent familiarity, exposure to native accents, pronunciation imitation
Acquiring New Vocabulary Knowledge	vocabulary exposure, contextual vocabulary learning, vocabulary note-taking
Learning Language in Real-Life Contexts	real-life story engagement, natural sentence structures, everyday expressions

The thematic map developed at this stage illustrated the key areas where students perceived digital graded audiobooks to have contributed to their listening development. It captured not only the *pedagogical and technological features* that facilitated learning such as clear pronunciation, adjustable playback, and multimodal support but also the *perceived benefits* that resulted from these features, including improved comprehension, increased vocabulary retention, and sustained motivation. Each theme represented the dynamic relationship between the audiobook design and learners' developmental outcomes, showing how specific affordances translated into meaningful listening gains. These themes were then reviewed and refined in the next phase to ensure internal coherence within each category and clear distinctiveness across themes before finalizing the structure presented in Chapter Four

Step 4: Reviewing Themes. In this phase, the initial themes identified in the previous step were systematically reviewed and refined to ensure that they accurately represented the coded data and addressed both research questions:

(1) *How do students perceive the features of digital graded audiobooks in facilitating their listening comprehension?* And (2) *What are the perceptions of Thai EFL undergraduate students toward the perceived benefits of using digital graded audiobooks in enhancing their listening comprehension?*

The review process involved two analytical levels: (1) examining the internal coherence of coded extracts within each theme, and (2) assessing the distinctiveness and conceptual clarity of each theme across the dataset. This stage marked the interpretive phase of analysis, during which preliminary descriptive codes were reorganized into two interrelated yet distinct analytical dimensions audiobook features (Research Question 2) and perceived benefits (Research Question 3).

At the first level, all coded extracts were re-examined to ensure conceptual consistency within each dimension. Codes referring to technological and pedagogical features—such as *clear pronunciation*, *adjustable playback*, and *story segmentation*—were grouped under audiobook feature-related themes that explained how design affordances shaped learners' listening experiences. Separately, codes representing emotional, cognitive, and linguistic outcomes such as *better comprehension*,

increased confidence, and *greater motivation* were classified as benefit-related themes, reflecting how learners perceived improvements as a result of using these features.

Through iterative refinement, five major themes emerged, representing these two perspectives. Each theme was first examined in terms of the specific audiobook feature that contributed to listening development (addressing RQ2), followed by the corresponding learner-perceived benefit (addressing RQ3).

Table 15 presents the five audiobook feature themes that describe the technological and pedagogical affordances of digital graded audiobooks perceived by students as supporting listening comprehension development.

Table 15 Five Audiobook Feature Themes

Theme	Description of Key Audiobook Features
1. Vocabulary Development through Focused Input and Recycling	Thematic grouping of words and repeated exposure to key vocabulary across stories enabled learners to notice, recognize, and internalize new words effectively.
2. Structured and Level-appropriate Scaffolding	Leveled story design, gradual progression, and segmentation of content provided organized input that matched learners' proficiency levels.
3. Engaging and Multimodal Learning Experience	Integration of audio, visuals, and synchronized text created a multimodal environment that maintained learners' attention and reduced cognitive overload.
4. Supportive Listening Features for Comprehension and Confidence	Features such as clear pronunciation, natural pacing, and adjustable playback (pause, rewind, speed control) allowed learners to regulate input and decode speech accurately.
5. Motivation and Learner Engagement Stimulated by Audiobook Accessibility and Flexibility	Mobile access, anytime learning, and customizable settings encouraged learners to integrate English listening practice into daily routines.

These feature-based themes highlight how technological and pedagogical design elements within the audiobook platform facilitated listening comprehension by providing structured, flexible, and multimodal learning opportunities.

Table 16 summarizes the five benefit-related themes that reflect learners' perceptions of the developmental outcomes resulting from their use of digital graded audiobooks. These themes capture the linguistic, cognitive, and affective dimensions of the audiobook learning experience.

Table 16 Five Benefit-Related Themes

Theme	Description of Perceived Benefits
1. Enhanced Vocabulary Recognition and Retention	Repeated exposure to vocabulary across stories improved memory, contextual understanding, and word recognition speed.
2. Improved Comprehension and Listening Fluency	Structured and level-appropriate content facilitated efficient speech processing and comprehension accuracy.
3. Sustained Interest and Emotional Engagement	Enjoyable storylines and multimodal elements reduced anxiety, enhanced motivation, and promoted sustained focus.
4. Increased Confidence and Accent Familiarity	Clear narration and exposure to native accents enhanced sound discrimination, pronunciation awareness, and comfort with authentic English input.
5. Greater Motivation and Autonomous Learning	The flexibility of mobile access and adjustable playback settings encouraged self-regulated, consistent, and autonomous engagement.

Collectively, these benefit-related themes reveal that learners perceived audiobook use as both *linguistically effective* and *emotionally engaging*. The features that facilitated comprehension simultaneously enhanced confidence, motivation, and long-term engagement with English listening.

During this review process, overlapping codes were redistributed, redundant categories removed, and each theme refined to ensure clear conceptual boundaries between *features* and *benefits*. The final thematic framework therefore presents a dual structure that captures both the technological affordances of digital graded audiobooks (RQ2) and the perceived developmental outcomes experienced by learners (RQ3).

This structure offers a comprehensive explanation of how audiobook design simultaneously supported the linguistic, cognitive, and motivational dimensions of listening comprehension development among Thai EFL learners.

Step 5: Defining and Naming Themes. In this final stage of thematic analysis, each theme was carefully defined and named to capture its central meaning and analytical scope. The objective was to clarify what each theme revealed about participants' perceptions of using digital graded audiobooks and to explain how these findings collectively addressed both research questions: (1) *How do students perceive the features of digital graded audiobooks in facilitating the development of their listening comprehension?* and (2) *What are the perceptions of Thai EFL undergraduate students toward the perceived benefits of using digital graded audiobooks in enhancing their listening comprehension?*

The definition and naming of themes were guided not merely by the frequency of codes but by the depth, coherence, and conceptual richness of the data linked to each theme. Each theme integrates both a technological and/or pedagogical feature of the audiobook platform and a corresponding learner-perceived benefit, reflecting the dual dimensions of the analysis. This approach provides a holistic understanding of how the features of digital graded audiobooks supported the linguistic, cognitive, and motivational processes that underpin listening comprehension.

Five final themes were established. Each theme combines a description of the relevant audiobook features (RQ2) with the associated perceived benefits (RQ3), illustrating how specific design elements translated into meaningful learning outcomes.

Together, these themes provide a comprehensive view of how audiobook features and learner perceptions intersected to enhance listening development. The following table summarizes the relationship between audiobook features (addressing RQ2) and perceived benefits (addressing RQ3), outlining how each theme connects design affordances with learning outcomes.

Table 17 Summary of Final Themes, Audiobook Features, and Perceived Benefits

Theme	Key Audiobook Features (RQ2)	Perceived Benefits (RQ3)
1	Thematic grouping of words; repetition of key vocabulary across stories; contextual presentation of new expressions	Improved vocabulary recognition, faster word recall, and stronger retention through repeated exposure
2	Leveled story design; gradual progression; segmented chapters and manageable difficulty	Enhanced comprehension accuracy, reduced cognitive load, and increased confidence in following extended listening texts
3	Integration of audio, text, and visuals; diverse and meaningful story topics; synchronized text display	Increased motivation, emotional engagement, and improved understanding through dual auditory-visual input
4	Clear pronunciation; natural pacing; adjustable playback functions (pause, rewind, speed control)	Improved sound discrimination, accent familiarity, and listening fluency; reduced anxiety and increased self-assurance
5	Mobile access; anytime learning; customizable playback and level settings	Sustained motivation, self-regulated learning habits, and consistent exposure to English

Collectively, these themes and their associated features and benefits demonstrate how digital graded audiobooks provided both linguistic scaffolding and motivational support for Thai EFL learners. The findings show that technological design elements, such as repetition, structure, clarity, and accessibility, worked synergistically with learner engagement and self-regulation to enhance comprehension, fluency, and confidence. This dual framework underscores the pedagogical value of digital graded audiobooks as tools that integrate cognitive, linguistic, and affective dimensions of listening comprehension in low-input Thai EFL contexts.

Step 6 Producing the Report. The final phase of the thematic analysis involved producing a coherent and analytically grounded report that systematically presented the findings in response to the two research questions. This stage required translating the refined themes into a comprehensive narrative that connected learners' voices with theoretical interpretation and pedagogical implications.

For Research Question 2—How do students perceive the features of digital graded audiobooks in facilitating the development of their listening comprehension?, the report emphasized the technological and pedagogical design features that supported comprehension. Each feature-oriented theme was presented with an analytical definition followed by detailed interpretation, supported by direct quotations from participant interviews. These excerpts illustrated how learners interacted with key audiobook functions such as clear pronunciation, structured leveling, playback flexibility, multimodal support, and mobile accessibility. The analysis demonstrated that students perceived these features as scaffolds that reduced cognitive load, directed attention to salient linguistic cues, and promoted self-regulated listening. For instance, repetition and thematic vocabulary clustering enhanced lexical noticing and retention, while adjustable playback controls enabled learners to tailor the listening pace to individual needs. Segmentation of stories into smaller parts facilitated manageable comprehension and reflection, and multimodal elements such as synchronized text and visuals reinforced meaning through dual-channel processing. Each of these features aligned with theories of comprehensible input (Krashen, 1982), Cognitive Load Theory (Sweller, 1988), and Dual Coding Theory (Paivio, 1991), illustrating how technology design supported the gradual development of listening proficiency. The resulting report presented these four feature-oriented themes in sequence to show how design affordances collectively enhanced learners' cognitive engagement and comprehension accuracy.

For Research Question 3—What are the perceptions of Thai EFL undergraduate students toward the perceived benefits of using digital graded audiobooks in enhancing their listening comprehension?, the report focused on learners' subjective experiences and outcomes. These benefit-oriented themes highlighted the linguistic, affective, and behavioral gains that resulted from interaction with audiobook features. Each theme was substantiated with participant quotations that illustrated developmental progress, emotional responses, and motivational changes. The analysis revealed that students perceived the audiobooks as improving their vocabulary recognition and retention, listening fluency, and comprehension of diverse accents. They also reported increased confidence, sustained motivation, and greater autonomy

in English listening practice. Repeated exposure and contextualized language use promoted automatic recognition of words and phrases, while engaging narratives and multimodal cues helped maintain interest and reduced anxiety. Learners also emphasized the flexibility of mobile access and self-paced listening, which allowed them to integrate English learning into daily life. These perceptions align with theories such as Noticing Theory (Schmidt, 1990), Automaticity Theory (LaBerge & Samuels, 1974), and Vygotsky's Zone of Proximal Development (1978), demonstrating how cognitive, affective, and motivational factors interacted to support language development.

3.7 Instrument Validation

To validate the listening comprehension pretest and posttest, content validity was performed to determine the appropriateness and accuracy of the developed tests. Several steps were involved in this process. First, evaluations from five experts in the field were collected to assess the relevance and alignment of each test item with the research objectives. Secondly, item difficulty and item discrimination were calculated. Items with low difficulty or discrimination indices were revised and retested until acceptable levels were achieved.

The purpose of the item difficulty analysis was to examine whether students who performed well on the overall test also demonstrated consistent performance across individual items. In contrast, item discrimination measured how effectively each item differentiated between high-performing and low-performing students. Both item difficulty and item discrimination were calculated using the SPSS program. After the initial analysis, the test items were revised and then piloted again with a comparable group of students to confirm improvements in quality. The revised items were reanalyzed to ensure they met the accepted psychometric thresholds. Items were retained in the final version of the tests only if they fell within the acceptable difficulty range of 0.30 to 0.80 and had a discrimination index of 0.20 or higher. In this study, any items with a difficulty index below 0.30 or above 0.80, or a discrimination index below 0.20, were revised before being used, as such items were deemed either too easy, too difficult, or ineffective at distinguishing between levels of student performance.

Table 18 Item difficulty and discrimination for the listening comprehension test and listening fluency test

Test	Items	Difficulty index	Discrimination index	Total of items	Results
Listening Comprehension Pretest	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36	0.20-0.80	0.20-0.80	36	moderate
Listening Comprehension Posttest	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36	0.20-0.80	0.20-0.80	36	moderate

To ensure the validity and appropriateness of the semi-structured interview questions used in this study, a two-step validation process was undertaken. First, the initial set of open-ended questions was developed based on the study's research objectives, the literature on audiobook-based listening instruction, and commonly explored themes in learner perception studies. These draft questions were then submitted to five experts in the fields of applied linguistics, English language teaching, and qualitative research for expert validation. The experts were asked to evaluate the questions based on clarity, relevance, and alignment with the research question regarding learner perceptions of digital graded audiobooks. Their comments were reviewed and used to revise unclear wording, ensure cultural appropriateness, and enhance the depth of inquiry. To further validate the structure and clarity of the instrument, a pilot interview was conducted with two non-participating students who matched the target population

profile. Feedback from the pilot interviews was used to refine question sequencing, adjust probing techniques, and eliminate redundant items. This process helped ensure that the final interview guide was linguistically accessible, conceptually clear, and methodologically aligned with the goals of thematic analysis.

To validate the listening comprehension pretest and posttest, as well as the listening fluency pretest and posttest, content validity was conducted to determine the appropriateness and accuracy of the developed tests. Several steps were involved in this process. First, evaluations from five experts in the field were collected to assess the relevance and alignment of each test item with the research objectives (Bachman and Palmer, 2010; Brown, 2004). Second, item difficulty and item discrimination were calculated. Items with low difficulty or discrimination indices were revised and retested until they reached acceptable levels (Fulcher and Davidson, 2007; Hughes, 2003).

The purpose of the item difficulty analysis was to determine whether students who performed well on the overall test also demonstrated consistent performance on individual items. In contrast, item discrimination measured effectively each item distinguished between high-performing and low-performing students. Both item difficulty and item discrimination were computed using the SPSS program. After revisions, the test items were piloted again with a comparable group of students to verify improvements in item quality. The revised items were reanalyzed for both item difficulty and item discrimination. Only items that met the accepted psychometric thresholds, with difficulty values between 0.30 and 0.80 and a discrimination index of 0.20 or higher, were included in the final version of the tests (Brown, 2005). In this study, items that fell below or above the acceptable difficulty range, or had a discrimination index lower than 0.20, were revised before use, as they were considered too difficult, too easy, or inadequate in distinguishing between different levels of student performance.

To ensure the validity and appropriateness of the semi-structured interview questions used in this study, a two-step validation process was undertaken. First, the initial set of open-ended questions was developed based on the study's research objectives, the literature on audiobook-based listening instruction, and commonly explored themes in

learner perception studies (Dörnyei, 2007; Vandergrift & Goh, 2012). These draft questions were then submitted to five experts in the fields of applied linguistics, English language teaching, and qualitative research for expert validation. The experts were asked to evaluate the questions based on clarity, relevance, and alignment with the research question regarding learner perceptions of digital graded audiobooks (Creswell & Poth, 2018; Merriam & Tisdell, 2016). Their comments were reviewed and used to revise unclear wording, ensure cultural appropriateness, and enhance the depth of inquiry. To further validate the structure and clarity of the instrument, a pilot interview was conducted with two non-participating students who matched the target population profile. Feedback from the pilot interviews was used to refine question sequencing, adjust probing techniques, and eliminate redundant items. This process helped ensure that the final interview guide was linguistically accessible, conceptually clear, and methodologically aligned with the goals of thematic analysis (Braun & Clarke, 2006).

3.8 Trustworthiness of Qualitative Data

To ensure the quality and rigor of the qualitative component of this study, several strategies were employed to establish trustworthiness. Lincoln and Guba (1985) proposed four criteria for evaluating qualitative research: credibility, transferability, dependability, and confirmability. These criteria parallel the quantitative concepts of internal validity, external validity, reliability, and objectivity, respectively, but are adapted to the naturalistic paradigm of qualitative inquiry (Shenton, 2004). Each criterion was addressed through specific methodological strategies as outlined below.

Credibility refers to the confidence in the truth of the findings and ensures that the research accurately represents the participants' perspectives (Lincoln & Guba, 1985).

To enhance credibility in this study, several strategies were implemented. First, prolonged engagement was established as the researcher spent 12 weeks working directly with the experimental group participants throughout the audiobook intervention. This extended period allowed for the development of trust and rapport, enabling participants to provide honest and reflective responses during interviews (Creswell & Poth, 2018). Second, triangulation was employed by using multiple data sources to cross-verify findings. Quantitative data from listening comprehension tests

were compared with qualitative data from semi-structured interviews. This triangulation helped confirm patterns and provided a more comprehensive understanding of students' learning experiences (Patton, 2015). Third, member checking was conducted whereby interview transcripts and preliminary thematic interpretations were shared with selected participants to verify accuracy and ensure that their perspectives were faithfully represented. Participants were given the opportunity to clarify, correct, or elaborate on their responses (Merriam & Tisdell, 2016). Fourth, peer debriefing was implemented as the researcher engaged in ongoing discussions with peers and advisors who were familiar with qualitative research methods and the context of EFL instruction. These discussions helped challenge assumptions, explore alternative interpretations, and refine the emerging themes (Lincoln & Guba, 1985).

In addition, transferability refers to the extent to which the findings of the study can be applied to other contexts or populations (Lincoln & Guba, 1985). While qualitative research does not aim for statistical generalization, it can provide insights that may be relevant in similar settings. To support transferability, this study employed two key strategies. First, thick description was provided through detailed descriptions of the research context, participants, instructional procedures, and audiobook materials. This level of detail enables readers to assess the degree of similarity between this study and their own contexts, thereby facilitating informed judgments about the applicability of the findings (Geertz, 1973; Merriam & Tisdell, 2016). Second, purposive sampling was used whereby participants for the semi-structured interviews were selected using stratified purposeful sampling to represent three achievement levels (high, medium, and low). This approach ensured that a range of perspectives was captured, enhancing the richness and potential applicability of the findings (Patton, 2015).

In addition, dependability refers to the stability and consistency of the data over time and conditions, similar to the concept of reliability in quantitative research (Lincoln & Guba, 1985). To establish dependability, two measures were taken. First, an audit trail was maintained throughout the research process. This included documentation of all research decisions, interview transcripts, coding processes, theme development, revisions, and analytical memos. This transparent record allows external reviewers to

trace the research process and assess the consistency of the findings (Creswell & Poth, 2018). Second, inter-coder reliability was established whereby two independent coders analyzed the interview transcripts using the six-phase thematic analysis framework by Braun and Clarke (2006). Initial codes and emerging themes were compared, and discrepancies were discussed until consensus was reached. This process enhanced the consistency and objectivity of the data analysis (Miles & Huberman, 1994).

Next, confirmability ensures that the findings are shaped by the participants' responses rather than by the researcher's biases, motivations, or interests (Lincoln & Guba, 1985). To enhance confirmability, the study incorporated three strategies. First, reflexivity was practiced as the researcher maintained a reflexive journal throughout the study to document personal assumptions, reactions, and potential biases. This practice encouraged self-awareness and helped ensure that interpretations were grounded in the data rather than preconceived notions (Merriam & Tisdell, 2016). Second, data-driven analysis was conducted through a systematic and transparent thematic analysis process. Initial codes were generated inductively from the data, and themes were developed through iterative review and refinement. All claims were supported by direct quotations from participants, ensuring that findings were firmly rooted in their experiences (Braun & Clarke, 2006). Third, expert review was obtained as the interview guide, coding scheme, and thematic framework were reviewed by five experts in applied linguistics and qualitative research. Their feedback helped refine the analysis and confirmed that the interpretations were credible and grounded in established theoretical frameworks (Creswell & Poth, 2018).

3.9 Ethical Considerations

After the proposal defense committee approved the research proposal, all required documents and the research protocol were submitted to the Office of Human Research Ethics Committee at Mahasarakham University to obtain official approval for conducting the study. Once ethical clearance was granted, a formal permission letter was sent to the university where the research was conducted, requesting authorization to implement the study according to the approved twelve-week schedule covering one academic semester. After receiving official permission, an orientation session was

held during the first week of the semester. During this session, the researcher met with all participants from both the experimental and control groups to explain the purpose, scope, and expected outcomes of the study. Participants were informed that their participation was entirely voluntary and that they could withdraw from the study at any time without any academic or personal consequence. It was emphasized that their decision to participate or withdraw would not affect their course grades, evaluation, or relationship with the researcher or the university in any way.

To ensure fairness, equality, and respect, all participants in both groups were treated equally throughout the study regardless of their English proficiency level, gender, or academic background. Each group received instruction of the same duration, following identical classroom schedules, learning hours, and teacher guidance. The only difference was the instructional method. The experimental group used digital graded audiobooks as part of the listening lessons, while the control group received traditional listening instruction using textbook-based audio materials. Apart from this variation, every other aspect of the learning process such as teacher support, classroom conditions, and feedback procedures was kept consistent to guarantee equal treatment.

During classroom instruction, the researcher acted as both instructor and facilitator for both groups. Each class followed a structured teaching sequence consisting of pre-listening, while-listening, and post-listening activities. In the pre-listening stage, all students were guided to activate their background knowledge, predict the content, and review key vocabulary before listening. In the while-listening stage, both groups practiced comprehension through listening tasks. The experimental group listened to graded audiobooks with playback and text-synchronization features, while the control group listened to audio recordings from standard course materials. Both groups worked on identifying main ideas, key details, and vocabulary in context. In the post-listening stage, all students participated in comprehension checks, discussions, and reflection tasks to reinforce their understanding. Equal attention and feedback were provided to students in both groups. The researcher ensured that all participants received the same amount of instructional time, explanation, and opportunity to ask questions during and after class. Additional guidance was given based on students'

learning needs but without favoritism. The teaching process was conducted professionally, maintaining neutrality and respect toward every participant to ensure consistent and fair learning experiences.

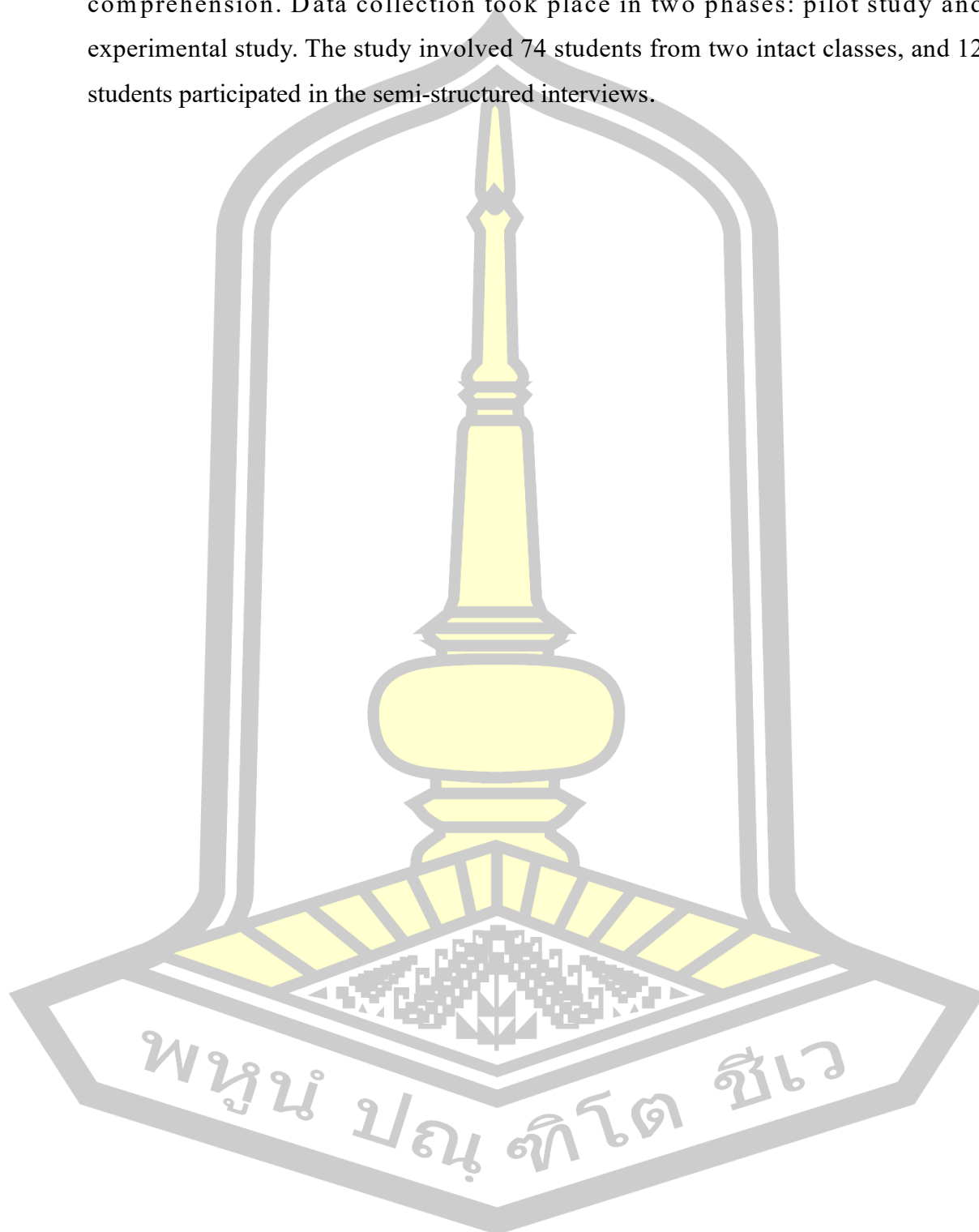
All participants were informed about their rights and the confidentiality of their information. They were assured that their personal data would remain private and that pseudonyms or participant codes would be used in all transcripts, analyses, and reports. To protect data privacy, all recordings, consent forms, and transcripts were stored securely in password-protected digital folders. Only the researcher and the supervisory committee had access to these files.

Before the study began, each participant received an informed consent form written in clear and simple Thai. They were encouraged to read it carefully, ask questions, and sign the form only after fully understanding the study procedures and their rights. Participation was entirely voluntary, and only those who signed the consent form were included in the research. The study strictly followed the ethical principles of respect for persons, beneficence, and justice as stated by the Mahasarakham University Human Research Ethics Committee. These principles guided every stage of the research to ensure that all participants, both in the control and experimental groups, were treated equally, taught fairly, and supported consistently throughout the intervention. All collected data were managed responsibly. The audio recordings, transcripts, and related documents were stored securely and will be kept for one year after the completion of the study. After this period, all digital files will be permanently deleted, and hard copies will be destroyed to protect participants' privacy and comply with the university's data protection policy.

3.10 Summary of the Chapter

This chapter provides an overview of the research methodology, including research design, participants, instruments, research procedures, and data analysis. The study aimed to improve students' listening comprehension and speaking performance in an English course using fourteen intro-level digital graded audiobooks from the Oxford Bookworms series. The treatment was conducted over a twelve-week period, and its effects were measured through listening comprehension tests. Semi-structured interviews were also conducted to gather students' perceptions regarding the features

of digital graded audiobooks that contributed to improving their listening comprehension. Data collection took place in two phases: pilot study and experimental study. The study involved 74 students from two intact classes, and 12 students participated in the semi-structured interviews.



CHAPTER FOUR

RESULTS OF THE STUDY

This chapter presents the results of the study, which aimed to investigate the effects of digital graded audiobooks on Thai EFL students' listening comprehension. The findings are organized according to the research objectives and focus on both within-group and between-group comparisons. Descriptive statistics are provided to summarize participants' performance before and after the intervention. These are followed by inferential statistics such as paired samples t-tests and independent samples t-tests to determine the significance of the observed differences. Effect sizes are also calculated to assess the practical importance of the intervention outcomes. To confirm the suitability of using parametric statistical tests, preliminary tests of normality were conducted. These included the Shapiro–Wilk test and the examination of skewness and kurtosis values. In addition to the quantitative data, this chapter also presents students' perceptions toward the features and perceived benefits of digital graded audiobooks in enhancing their listening comprehension.

4.1 The Effect of Digital Graded Audiobooks on Students' Listening Comprehension

This section presents the quantitative results concerning the listening comprehension of Thai EFL undergraduate students before and after the intervention. The analysis explores the effects of digital graded audiobooks on the participants' listening comprehension through pretest and posttest scores. Both within-group and between-group comparisons were used to assess the effectiveness of the intervention. Statistical analyses included tests of normality, descriptive statistics, t-tests, and calculations of effect size to provide a clearer understanding of the data distribution and the significance of observed changes.

4.1.1 Tests of Normality of the Pretest and Posttest Scores on the Listening Comprehension

To examine the distribution of listening comprehension scores prior to conducting parametric tests, the normality of the pretest and posttest scores was assessed. Since the sample size in each group was fewer than 50 participants ($N < 50$), the Shapiro–Wilk test was employed to evaluate the assumption of normality. The results are

summarized in Table 19. For the control group, the p-values for the pretest and posttest were .058 and .319, respectively. Both values exceed the threshold of .05, indicating that the assumption of normality was met for this group. In the experimental group, the pretest yielded a p-value of .080, confirming normality, while the posttest showed a p-value of .195. Although this value is close to the threshold, the Shapiro–Wilk statistic (.959) remained sufficiently close to 1.0, suggesting that the posttest scores approximated a normal distribution. Overall, the results suggest that the pretest and posttest scores in both groups were normally distributed, thus supporting the use of parametric statistical methods in the subsequent analyses.

Table 19 Tests of Normality of the Pretest and Posttest Scores on the Listening Comprehension

Group	Types of Tests	Shapiro-Wilk		
		Statistic	df	Sig.
Control Group	Pretest	.942	36	.058
	Posttest	.966	36	.319
Experimental Group	Pretest	.946	36	.080
	Posttest	.959	36	.195

In addition to the Shapiro–Wilk test, descriptive measures of skewness and kurtosis were calculated to further assess the shape and symmetry of the data distribution. As shown in Table 20, the skewness values for the control group were 0.409 in the pretest and 0.261 in the posttest, while the corresponding kurtosis values were –0.618 and –0.748. For the experimental group, the skewness values were 0.402 for the pretest and 0.763 for the posttest, and the kurtosis values were –0.624 and 0.428, respectively. All skewness values fell within the acceptable range of -3 to +3, and all kurtosis values were within the range of -10 to +10, as recommended by Kline (2011). These results, as summarized in Table 17 provide additional support for the assumption of normality and justify the use of parametric statistical analyses in the following sections.

Table 20 Descriptive Statistics of Skewness and Kurtosis for Listening Comprehension Scores

Group	Type of Test	Skewness	Kurtosis
Control Group	Pretest	.409	-.618
	Posttest	.261	-.748
Experimental Group	Pretest	.402	-.624
	Posttest	.763	.428

4.1.2 Overview of Descriptive Statistical Data of Listening Comprehension Test Scores

The descriptive statistics of the listening comprehension test scores for both the control group and the experimental group were examined in terms of mean and standard deviation. A summary of the participants' test scores is presented in Table 21.

Table 21 A Summary of Descriptive Statistics of Listening Comprehension Test Scores

Groups	N	Tests	Mean	SD
CG	36	Pre-test	12.694	2.594
		Post-test	14.861	3.390
EG	38	Pre-test	13.026	2.174
		Post-test	17.684	2.761

Notes: Control Group: CG, Experimental Group: EG

For the control group ($n = 36$), the mean listening comprehension score increased from 12.69 in the pre-test ($SD = 2.59$) to 14.86 in the post-test ($SD = 3.39$). Similarly, the experimental group ($n = 38$) showed an increase from a pre-test mean of 13.03 ($SD = 2.17$) to a post-test mean of 17.68 ($SD = 2.76$). These descriptive results suggest that both groups improved in listening comprehension after the intervention, with a more substantial gain observed in the experimental group.

4.1.3 Results of the t-Test Statistic Analysis

To assess the effectiveness of the intervention on students' listening comprehension, both within-group and between-group comparisons were performed using t-test analyses. A paired samples t-test was conducted to determine whether there were significant differences between pre-test and post-test scores within each group. Additionally, an independent samples t-test was employed to compare the post-intervention performance of the control and experimental groups. The following sections present detailed statistical results related to the impact of the intervention on listening comprehension skills.

4.1.3.1 Paired Samples T-Test Analysis (Within-Group Differences) of the Pretest and Posttest Scores on the Listening Comprehension

To evaluate whether participants' listening comprehension improved over time, a paired samples t-test was conducted within each group by comparing pre-test and post-test scores. The control group received traditional listening instruction, while the experimental group participated in a 12-week graded audiobook program. Since the same individuals completed both tests, this analysis was suitable for identifying whether the observed changes were statistically significant and potentially linked to the instructional method. The results of the paired samples t-test are summarized in Table 22.

Table 22 Paired Samples T-Test Analysis (Within-Group Differences) of the Pretest and Posttest Scores on the Listening Comprehension

Groups	N	Tests	Mean	SD	t-value	p-value
CG	36	Pre-test	12.694	2.594	7.050	.000
		Post-test	14.861	3.390		
EG	38	Pre-test	13.026	2.174	15.525	.000
		Post-test	17.684	2.761		

Notes: Control Group: CG, Experimental Group: EG

For the control group ($n = 36$), the mean score on the listening comprehension pre-test was 12.69 ($SD = 2.59$), which increased to 14.86 ($SD = 3.39$) on the post-test. A paired samples t-test revealed that this difference was statistically significant, $t(35) =$

7.05, $p < .001$. Similarly, for the experimental group ($n = 38$), the mean pre-test score was 13.03 ($SD = 2.17$), and the mean post-test score was 17.68 ($SD = 2.76$). The paired samples t-test indicated a statistically significant improvement as well, $t(37) = 15.53$, $p < .001$.

4.1.3.2 Independent Samples T-Test Analysis (Between-Group Differences) of the Pretest and Posttest Scores on the Listening Comprehension

To evaluate the impact of digital graded audiobooks on listening comprehension, an independent samples t-test was conducted. The analysis compared the performance of the experimental and control groups by examining their means, standard deviations, standard errors, t-values, and p-values. In addition, effect sizes were calculated to determine the magnitude of the differences between the groups. Cohen's d was used as the measure of effect size, with values commonly interpreted as small (0.2), medium (0.5), and large (0.8), as outlined by Cohen (1988).

Table 23 Independent Samples T-Test (Between-Group Differences) of the Pretest and Posttest Scores on the Listening Comprehension

Groups	N	Tests	Mean	SD	t-value	p-value	Effect size (d)
Pre-test	36	CG	12.694	2.594	.598	.552	.014
	38	EG	13.026	2.174			
Post-test	36	CG	14.861	3.390	3.937	.000	0.92
	38	EG	17.684	2.761			

*Significant at ($\alpha \leq 0.05$).

As presented in Table 23, the analysis revealed no significant difference between the two groups during the pre-test phase. The statistical results indicated that the control group and the experimental group had comparable baseline scores. This finding confirms that both groups began with a similar level of listening comprehension prior to the intervention, thereby establishing a fair and reliable basis for evaluating the effects of the subsequent treatment. An independent samples t-test showed no statistically significant difference, $t(72) = 0.598$, $p = .552$, with a small effect size ($d = 0.14$). At the post-test stage, the independent samples t-test indicated a statistically

significant difference between the groups, $t(72) = 3.937$, $p < .001$. The corresponding effect size was large ($d = 0.92$), reflecting a notable difference in post-test performance between the two groups.

4.2 Perceptions toward the Features of Digital Graded Audiobooks in Enhancing Students' Listening Comprehension

This section presents a detailed thematic account of students' perceptions of the specific design elements within digital graded audiobooks that supported their English listening comprehension. Drawing on in-depth interview data, the analysis indicates that learners consistently highlighted aspects of the audiobook design that reduced cognitive demands, directed attention to essential language, and encouraged sustained and manageable practice. Four overarching themes capture these perceptions: *vocabulary development through focused input and recycling*, *structured and level-appropriate scaffolding*, *engaging and multimodal learning experiences*, and *supportive listening functions that enhanced comprehension and confidence*. Within these themes, students described how targeted vocabulary clusters and repeated exposure improved noticing, retention, and automatic recognition. They emphasized how leveled content, gradual progression, and clear organization scaffolded comprehension and made challenging input more accessible. Learners also valued the simplicity and variety of stories, which sustained motivation, while visuals, scripts, and illustrations reinforced meaning and supported memory. Finally, they pointed to the benefits of slow and clear narration, exposure to authentic accents, and flexible playback controls such as speed adjustment and replay, which allowed them to manage their listening pace and review difficult segments.

4.3.1 Theme 1: Vocabulary Development through Focused Input and Recycling

The theme *Vocabulary Development through Focused Input and Recycling* reflects how students perceived graded audiobooks as powerful tools for building and retaining vocabulary, which in turn supported their listening comprehension. Vocabulary knowledge is a cornerstone of listening ability, since recognizing words quickly and interpreting them within context allows learners to follow meaning without constant interruption. When unfamiliar words appear too frequently, comprehension often breaks down, leading to frustration and loss of confidence.

Graded audiobooks helped address this challenge by highlighting vocabulary in meaningful clusters and recycling it across multiple contexts, giving students repeated opportunities to notice, understand, and retain new items.

One important dimension was the presentation of vocabulary in thematic groupings. Words and expressions were often tied to key events or central ideas in a story, which made them more salient and memorable. Encountering them in meaningful contexts enabled learners to see how they were used, making comprehension more immediate and natural.

S3 explained that grouped vocabulary supported the noticing and recall of new words because these items were strongly connected to the storyline. This made it easier to follow the plot without frequent interruptions. Encountering related words in meaningful clusters enabled A3 to track both vocabulary and story meaning simultaneously, which directly supported listening comprehension:

“These stories have groups of vocabulary or phrases that are useful for learning. For example, in Aladdin and the Enchanted Lamp, words such as ‘wish,’ ‘genie,’ and ‘magic’ kept appearing together. Because they were linked to the main events in the story, I could remember them more easily, and they stayed in my mind whenever I thought about the characters or the plot.”

S8 noted that contextual clues in the stories made it possible to infer the meaning of new words without relying on translation. This process supported smoother listening comprehension by reducing interruptions and encouraging continuous engagement with the story:

“They introduce me to new vocabulary and help me guess the meaning of words from context. In The Elephant Man, I already knew the word ‘hospital,’ so when I heard ‘nurse’ in the same scene, I could figure out that it meant someone who worked there. The story helped me build confidence that I could understand English naturally.”

S9 emphasized that graded audiobooks not only expanded vocabulary but also introduced new topics and cultural knowledge, which strengthened the ability to comprehend stories more fully. Exposure to thematic vocabulary within meaningful

contexts enriched understanding and supported transfer of knowledge beyond the audiobook:

“They expose me to new vocabulary and topics, which help me expand my knowledge and communicate better. For example, in A Connecticut Yankee in King Arthur’s Court, I learned words like ‘knight’ and ‘castle.’ These were new to me, and later I used them in a class discussion about history. It felt like I was learning not just English words but also about history and culture.”

Another dimension was the recycling of words across chapters and stories, which reinforced memory and promoted faster recognition. Instead of meeting a new word only once, learners encountered it multiple times, sometimes in slightly different contexts, until recognition became more automatic. This reduced the need for repeated translation and freed their attention to concentrate on following the storyline.

S12 observed that repeated exposure improved automatic recognition, which reduced cognitive effort and allowed greater focus on narrative meaning. This automaticity made listening more fluent and less dependent on constant checking:

“The new vocabulary that keeps coming up makes it easier to follow. In The Thirty-Nine Steps, the word ‘secret’ appeared again and again. At first, I needed to stop and check, but later I caught it immediately, and I could enjoy the suspense of the story.”

S2 explained that frequent recycling of vocabulary reduced the need for translation and freed mental resources to focus on character actions and story development. This shift from word-level decoding to meaning-level processing directly supported comprehension:

“The repeated vocabulary in the story helps me remember important words automatically, making it easier to follow the story. For example, in Dracula, the word ‘castle’ appeared so often that I started to recognize it instantly. This helped me pay more attention to the characters’ actions instead of just translating words in my head.”

A further dimension was the value of hearing the same vocabulary across different voices and accents, which trained learners to adapt to variations in pronunciation and intonation. At first, some found it difficult to catch familiar words when they were pronounced differently, but repeated exposure strengthened recognition regardless of the speaker. This adaptability is especially relevant for real-world listening, where multiple accents are common.

S4 highlighted how repeated exposure across accents made recognition quicker and improved confidence in comprehension:

“Repeated exposure to different accents and vocabulary helps me recognize words more easily and understand faster. In Treasure Island, the word ‘pirate’ came up many times, but the way it was spoken sounded different in each voice. After hearing it again and again, I learned to catch it immediately no matter who said it, which made me feel more confident.”

In summary, students identified thematic grouping, recycling, and varied pronunciation as critical aspects of graded audiobooks that supported vocabulary development. These elements enhanced listening comprehension by reducing cognitive load, supporting contextual inference, and building automatic recognition. Learners were able to process language more smoothly, follow storylines with greater ease, and focus on overall meaning rather than struggling with individual items. In this way, graded audiobooks not only enriched vocabulary knowledge but also improved fluency, confidence, and adaptability in listening.

4.3.2 Theme 2: Structured and Level-appropriate Scaffolding

The theme *Structured and Level-appropriate Scaffolding* reflects how students perceived the graded design of audiobooks as essential in supporting their comprehension. Listening in a second language often becomes overwhelming when input is too complex or discouraging when input is too simple. Graded audiobooks addressed this challenge by carefully balancing accessibility and growth, offering content that matched learners’ current abilities while guiding them toward progressively more complex language. This structured scaffolding reduced anxiety,

maintained motivation, and created a pathway for steady improvement in listening comprehension.

One important dimension was the use of leveled content, where vocabulary, grammar, and story complexity were matched to learners' proficiency. This made listening manageable, as students could follow stories without being blocked by too many unknown words, while still encountering enough new expressions to promote growth.

S1 explained that accessible vocabulary gave him the confidence to continue listening, even when new words appeared. By keeping input comprehensible, leveled content enabled him to sustain attention and develop listening fluency:

“The leveled design is helpful. The vocabulary matches my level, so it is easier to understand. For example, when I listened to The Monkey’s Paw, the language was simple enough that I could follow the story, but I also learned new words like ‘wish’ and ‘fate.’ This gave me confidence to keep listening and not give up.”

S2 added that level-appropriate language worked in tandem with playback options to make challenging texts more approachable. He noted that this combination made learning enjoyable and supported understanding of new words. Accessibility of language supported comprehension, while control over speed helped him process new vocabulary more effectively:

“Features like adjustable speed and level-appropriate vocabulary make learning easy and fun. In The Canterville Ghost, I slowed down the narration when I heard new words like ‘haunted’ or ‘phantom.’ Because the vocabulary was matched to my level, I could follow the story and enjoy it, unlike YouTube videos that are usually too difficult and fast.”

Another dimension was the gradual progression from simple to complex stories, which allowed learners to notice their improvement and build stamina for longer texts. Students described how starting with shorter, easier materials prepared them for more advanced narratives.

S7 explained that this progression gave him evidence of improvement and motivated him to continue listening. By progressing through increasingly challenging levels, he developed confidence and the ability to handle complex listening:

“The leveled content lets me start at my current level and gradually improve. I began with The Wizard of Oz, which was easy to follow, and later I moved on to The Hound of the Baskervilles. At first, I had to replay some parts, but after practice I could understand the flow more easily. This step-by-step challenge showed me that I was getting better.”

S10 described a similar experience, where progression allowed him to transition from clear, simple texts to more demanding ones without losing motivation. This gradual increase in difficulty trained him to handle longer narratives and richer vocabulary, directly strengthening his comprehension:

“I started with simpler content and gradually moved to more complex material. At first, I listened to The Happy Prince, which had short and clear sentences. Later, I tried Jane Eyre, which had longer sentences and more difficult vocabulary. Because of the step-by-step progression, I could understand better and felt less stressed.”

A further dimension was the clarity of sentence structures, which reduced processing demands at lower levels. Simplified syntax allowed learners to recognize patterns more quickly and build confidence in understanding speech.

S8 noted that shorter, simpler sentences reduced overload and made following the story easier. This clarity freed his working memory to focus on story meaning rather than decoding each word:

“I like the simpler sentences at my level. It is not overwhelming, so I can understand it better. For example, in The Wizard of Oz, the sentences were straightforward and clear. I could follow the story without stopping every minute, which made the experience more enjoyable.”

Finally, students valued the division of stories into smaller sections, which gave them natural breaks to reflect and review. This made comprehension more achievable and improved retention.

S3 described how this segmentation helped him pause and process before continuing. Breaking stories into parts allowed him to consolidate meaning, which deepened comprehension over time:

“The stories are divided into parts, which makes it easier to pause, think, and reflect on what I have heard before continuing. For example, in Robinson Crusoe, I could listen to one section, stop to check my understanding, and then continue. This step-by-step structure made it easier to remember the story.”

In summary, students valued graded audiobooks for their structured and level-appropriate design, which balanced accessibility with challenge. Leveled content made input comprehensible, progression built stamina and confidence, simplified sentences reduced processing load, and segmentation supported reflection and memory. Together, these dimensions created a supportive scaffold that enabled learners to process input more effectively, maintain motivation, and achieve steady growth in listening comprehension.

4.3.3 Theme 3: Engaging and Multimodal Learning Experience

The theme *Engaging and Multimodal Learning Experience* reflects how students perceived graded audiobooks as both enjoyable and supportive of comprehension. A common challenge in second language listening is maintaining attention long enough to process meaning, especially when materials are uninteresting or cognitively overwhelming. When learners lose focus, they are less likely to follow the storyline or retain new vocabulary. Graded audiobooks addressed this by offering stories that were simple enough to understand yet compelling enough to sustain motivation. In addition, multimodal elements such as scripts, subtitles, and illustrations provided additional channels of input, reinforcing meaning and supporting recall.

One important dimension was the simplicity of the stories, which reduced anxiety and allowed learners to focus on overall meaning rather than decoding every word.

S9 explained that accessible content made it possible for him to enjoy the story without constant interruption. This simplicity gave him confidence and allowed him to follow the storyline more smoothly:

“It feels easier to understand because the content is simple. When I listened to Alice in Wonderland, I could enjoy the story without worrying about every single word. The plot was easy to follow, so even when some phrases were new, I still understood what was happening.”

Another dimension was the compelling nature of the narratives, which encouraged sustained listening and deeper focus.

S1 highlighted how engaging content motivated him to listen for longer than he usually would. By sustaining interest, compelling narratives provided extended exposure that strengthened comprehension:

“Yes, I find it interesting because there are so many kinds of stories. The content is engaging and enjoyable, which makes the process less stressful. For example, when I listened to The Secret Garden, I was curious to know what would happen to the characters, so I listened for much longer than I expected. The story itself motivated me to keep going.”

S2 also described how engaging stories made it possible for him to listen intensively, which deepened his focus on meaning. Prolonged engagement provided him with more practice in processing input, which supported comprehension:

“If the story is very interesting, I might listen for up to one hour. For instance, when I listened to Treasure Island, I wanted to know how the adventure would end, so I kept listening without feeling tired. The storyline kept me motivated and helped me concentrate on the content.”

Students also valued the variety of story topics, which allowed them to choose materials that matched their interests and made listening more personal.

S4 explained that having options gave him a sense of control and enjoyment. Personalizing content through choice enhanced his motivation and sustained his attention, which directly supported comprehension:

“I like the variety of stories. I can choose topics that interest me, like cartoons or detective stories. For example, I enjoyed Sherlock Holmes because I like solving mysteries. The choice made me feel that learning English was fun rather than just practice.”

Another dimension was the ability of audiobooks to sustain concentration more effectively than other media.

S3 contrasted audiobooks with online videos, noting that the structured design helped him stay focused. This focus improved his ability to follow the flow of information, which strengthened comprehension:

“Sometimes, when watching videos or YouTube, I do not concentrate as much. Audiobooks are designed to keep me focused on the story. For example, when I listened to The Phantom of the Opera, I followed the plot closely, and this helped me improve my attention span and listening skills.”

Finally, students highlighted the value of multimodal support such as scripts and illustrations, which reinforced understanding and provided alternative ways to process meaning.

S2 described how scripts gave him reassurance and reinforced vocabulary learning. This allowed him to clarify meaning quickly, reducing breakdowns in comprehension:

“Subtitles or scripts are very helpful. If I do not understand something while listening, I can check the subtitles right away. In The Canterville Ghost, I was not sure about the meaning of ‘phantom,’ but when I saw it in the text, I understood and remembered it.”

S4 emphasized that illustrations supported understanding of vocabulary and events. Visual support provided an additional layer of comprehension that reinforced listening:

“I like the cartoons that come with the audiobooks. They help me follow the story, even if I do not understand every word. In Alice in Wonderland, the pictures of the rabbit and the tea party made the words more meaningful and easier to remember.”

A12 added that visuals encouraged him to make predictions, which sharpened his listening focus. Prediction made his listening more active, which improved comprehension:

“Imagining what will happen next while looking at pictures helps me follow the story. In The Jungle Book, when I saw the picture of the tiger, I guessed that Shere Khan would appear, and it helped me prepare for the words connected to the scene.”

In summary, students perceived engaging and multimodal input as crucial for sustaining attention and improving comprehension. Simplicity reduced anxiety, compelling narratives and variety encouraged longer listening, and multimodal support clarified meaning and reinforced memory. Together, these elements created a learning environment where learners were motivated to practice more, stayed focused on meaning, and strengthened their listening comprehension in enjoyable and effective ways.

4.3.4 Theme 4: Supportive Listening Features for Comprehension and Confidence

The theme *Supportive Listening Features for Comprehension and Confidence* reflects how students valued the clarity, authenticity, and flexibility built into graded audiobooks. One of the greatest challenges for second language learners is dealing with speech that is too fast, unclear, or pronounced in unfamiliar ways. Such difficulties often lead to comprehension breakdowns and feelings of discouragement. Graded audiobooks addressed these challenges by combining clear and deliberate narration with exposure to authentic accents and by offering playback functions that allowed learners to control their listening experience. Together, these elements not only improved comprehension but also built students' confidence in handling English listening tasks.

One key dimension was the clarity of pronunciation and pacing, which made listening input more accessible. Careful articulation helped learners recognize words more easily, while slower pacing provided additional time to process meaning.

S1 contrasted audiobooks with other media, emphasizing that their clarity made stories easier to follow. This clear input reduced frustration and enabled him to focus on meaning, strengthening comprehension:

“Videos might have unclear sound or various accents. Audiobooks are clearer and match my level. When I listened to The Jungle Book, the narrator’s pronunciation was very easy to catch, and I could follow the sentences more confidently than when I tried to watch English movies.”

S11 similarly highlighted how the deliberate pacing gave him more time to connect sounds to words. By reducing processing demands, slower narration supported smoother comprehension:

“The slow and clear pronunciation is the most helpful for me. For example, when I listened to The Secret Garden, the narration was not too fast, so I could catch every word. It made listening less stressful and gave me time to think.”

A second dimension was the exposure to authentic accents, which helped students adapt to natural variations in rhythm, stress, and intonation. While this was challenging at first, repeated practice improved recognition and confidence.

S2 explained how clear but authentic accents aided his recognition of new words. This combination of authenticity and clarity supported his comprehension of new vocabulary within context:

“Listening to graded audiobooks with clear accents designed for learners allows me to catch words and sounds easily. For example, in The Canterville Ghost, the narrator pronounced each word clearly, so even when I met new words like ‘haunted’ or ‘phantom,’ I could still understand.”

S7 reflected on how daily exposure to authentic speech made him more comfortable and encouraged imitation. Regular contact with authentic accents improved his comprehension and also supported oral production:

“Yes, definitely. Listening daily helps me get used to the accent and mimic it. When I listened to Sherlock Holmes: The Hound of the Baskervilles, I became

more familiar with the British accent, and I started to copy the way the narrator spoke. Over time, this helped me sound more natural.”

A third dimension was the ability to adapt to different voices and pronunciations, which strengthened listening flexibility. Students explained that repeated exposure to familiar words across varied speakers made recognition more automatic.

S4 described how encountering the same word across voices helped him recognize it quickly in different forms. This adaptability reflects real-life listening, where speakers often use diverse accents and pronunciations:

“Repeated exposure to different accents and vocabulary helps me recognize words more easily and understand faster. In Treasure Island, the word ‘pirate’ came up many times, but the way it was spoken sounded different in each voice. After hearing it again and again, I learned to catch it immediately no matter who said it, which made me feel more confident.”

A final dimension was the availability of playback controls, which gave learners autonomy to slow down, pause, or replay difficult passages. These controls allowed them to process challenging input at their own pace and reinforced comprehension.

S5 explained how replaying difficult sections helped him confirm meaning and remember new vocabulary. By turning moments of difficulty into opportunities for review, playback controls deepened his comprehension:

“I can replay parts I did not understand, and I can adjust the speed to suit my needs. For example, in The Scarlet Letter, I replayed the courtroom scene many times until I was sure I understood the meaning of ‘magistrate.’ This helped me remember the word clearly.”

In summary, students highlighted how the supportive design of audiobooks enhanced both comprehension and confidence. Clear pronunciation and pacing reduced the burden of decoding, authentic accents built adaptability to real-world listening, repeated exposure across voices strengthened recognition, and playback controls allowed for personalized review. Together, these elements transformed listening into a

more manageable and motivating experience, equipping learners with the skills and confidence to handle increasingly complex English input.

4.3.5 Theme 5: Motivation and Learner Engagement Stimulated by Audiobook Accessibility and Flexibility

The theme *Motivation and Learner Engagement Stimulated by Audiobook Accessibility and Flexibility* captures how specific audiobook features—such as interactive access, mobile convenience, and flexible listening options—encouraged learners to stay motivated and engaged with English listening practice. While earlier themes described how graded audiobooks improved comprehension through linguistic scaffolding, this theme emphasizes how technological and design features sustained learners' emotional and behavioral engagement. Students explained that the flexibility, mobility, and personalization of audiobooks made listening more enjoyable and manageable, encouraging continuous exposure to English input.

One important dimension was the convenience of anytime and mobile learning, which allowed learners to integrate listening practice into daily routines. Students appreciated being able to use audiobooks on personal devices, both inside and outside class, which increased learning frequency and reduced dependence on scheduled lessons.

S5 explained that this flexibility encouraged more frequent and self-initiated listening. This flexibility strengthened motivation by making English exposure part of everyday life rather than a fixed classroom task:

“I would tell others it is a useful learning tool because they can study anytime. I usually listen before bed or when I am traveling. It is easy to use and helps me practice English every day without stress.”

Another dimension was the personalization of learning through adjustable features, such as speed control, level selection, and replay functions. Learners reported that these options allowed them to manage their own pace and review difficult sections, which built confidence and reduced frustration.

S10 explained that this control over listening helped maintain motivation and supported comprehension. By being able to adapt input to individual ability, learners maintained a sense of achievement and motivation to persist:

“I like that it has many adjustable settings, so I can match it to my skill level. For example, if I cannot keep up, I can slow it down and listen again. This makes me want to continue because I can understand more each time.”

Students also emphasized the integration of engaging storylines and interactive design as key motivational drivers. Stories that were meaningful, varied, and well-narrated made learners look forward to listening sessions.

S1 reflected that enjoyable content kept listening from feeling like a test. This sense of enjoyment encouraged voluntary and sustained listening, which increased input exposure and comprehension opportunities:

“Yes, I find it interesting because there are so many kinds of stories. The content is engaging and enjoyable, which makes the process less stressful. I kept listening because I wanted to know what would happen next.”

Finally, learners appreciated the accessibility of multimodal support, including text scripts and visuals, which made the experience more interactive and confidence-boosting. Being able to confirm meaning through text or images helped them feel successful and encouraged further engagement.

S2 highlighted how these supports made learning more approachable. This supportive environment reduced anxiety and reinforced motivation to continue listening independently:

“Subtitles or scripts are very helpful. If I do not understand something while listening, I can check the subtitles right away. It helps me feel more confident and want to listen again.”

In summary, the motivational and engagement outcomes described by learners were closely linked to audiobook features that provided flexibility, personalization, and supportive access. Mobile convenience encouraged consistent practice, adjustable controls enhanced confidence, engaging content sustained interest, and multimodal

aids reinforced understanding. Together, these features created an enjoyable and autonomous listening experience that maintained motivation, deepened engagement, and ultimately strengthened listening comprehension in authentic and sustainable ways.

4.4 Perceptions toward the Use of Digital Graded Audiobooks in Developing Students' Listening Comprehension

This section presents a detailed thematic account of students' perceptions concerning the use of digital graded audiobooks to support their English listening comprehension development. Drawing on in-depth interview data, the findings reveal that participants across proficiency levels overwhelmingly perceived the audiobook-based intervention as both beneficial and engaging. Students described a wide range of cognitive, affective, and behavioral outcomes that contributed to their overall improvement in understanding spoken English. The analysis identified five themes that captured the core dimensions of their experience: *Enhancing Listening and Deep Story Understanding*, *Improving Sound Discrimination*, *Improving Understanding of Accents*, *Acquiring New Vocabulary Knowledge*, and *Learning Language in Real-Life Contexts*. Together, these findings offer a nuanced perspective on how sustained, scaffolded, and narrative-based listening input can enhance comprehension while simultaneously fostering learner agency within Thai EFL contexts.

4.4.1 Theme 1: Enhancing Listening and Deep Story Understanding

The theme *Enhancing Listening and Deep Story Understanding* reflects how learners across all proficiency levels perceived the use of digital graded audiobooks as improving their ability to process spoken English and connect with narrative content. In this study, *Enhancing Listening and Deep Story Understanding* refers to learners' ability to follow the storyline closely, interpret character intentions, and connect events without losing track, while also grasping the underlying themes and emotional nuances of the narrative. This goes beyond recognizing individual words or recalling surface-level facts and involves integrating plot details, character motivations, and contextual cues into a coherent mental representation of the story.

To achieve this deeper comprehension, students used audiobook features that supported accurate decoding and sustained engagement. Clear pronunciation emerged as a central aid, enabling them to hear every word distinctly and connect sounds to meaning without hesitation. This process reflects Schmidt's (1990) Noticing Hypothesis, where clearly articulated input draws attention to prosodic features such as stress, rhythm, and intonation, and aligns with Rost's (2011) view that clarity supports bottom-up processing through precise phonological representations.

S1 explained: *"With audiobooks, the sound is always clear, and the pronunciation is easy to catch. I feel more comfortable because the language matches my level, so I can listen without feeling stressed and can focus on understanding the story instead of worrying about what I missed."*

S7 highlighted sustained attention and faster recognition: *"The pronunciation is clear and steady, which makes it easier for me to follow along, even in longer stories. Over time, I noticed that I could recognize words more quickly and connect them to the meaning without stopping to think."*

S12 noted how clarity and pacing together revealed new details: *"The slow pace of the narration, together with the clear pronunciation, makes it much easier for me to understand every part of the story... each time I do, I notice more details in how the words are pronounced."*

To follow the storyline closely, interpret challenging sections, and maintain engagement without losing track, learners adapted the pace of narration to match the complexity of the plot or difficulty of the language. Slowing the audio gave them time to process unfamiliar words or complex events, while increasing the speed kept momentum during easier sections (Sweller, 1988) and creating space for deeper processing. Over time, some increased the speed to test whether they could still track the storyline at a more natural pace, aligning with fluency-oriented listening principles (Renandya & Farrell, 2011; Waring, 2008). This was made possible through the adjustable playback speed feature, which allowed control over how quickly or slowly the story unfolded.

S3 shared: *“They are designed with many adjustable features, like story selection, speed, and accent options. If I don’t understand something, I can slow it down, repeat it, or change the difficulty level. This makes the story feel more manageable, and I don’t get discouraged when I come across difficult parts.”*

S5 used this feature strategically: *“When there’s a part I don’t catch, I can replay it and slow it down until I hear it clearly. Adjusting the speed to suit my needs means I can spend extra time on tricky parts and move faster through the easier ones.”*

S12 extended its use to pronunciation improvement: *“If I don’t understand something, I listen again, or I slow it down. When I do that, I can hear exactly how the words are pronounced, and it helps me remember the sounds for next time.”*

To retain key events, connect different parts of the plot, and sustain attention over the entire story, learners needed narratives broken into manageable units that allowed time for reflection. Listening to shorter sections enabled them to process what they had heard before moving on, preventing overload and aiding memory recall. This was achieved through segmentation, where stories were divided into smaller parts. Story segmentation acted as another scaffold, allowing learners to process one narrative unit at a time before moving on. This aligns with Schema Theory (Carrell & Eisterhold, 1983), which posits that structured input allows new information to be integrated with existing knowledge.

S3 explained: *“The stories are divided into parts, which makes it easier to pause, think, and reflect on what I’ve heard before continuing. If I try to listen to a long story all at once, I get lost, but when it’s in smaller pieces, I can understand each part better.”*

S5 found segmentation also provided mental rest: *“The division into smaller sections allows you to take breaks and reflect on what you’ve listened to. It*

gives my brain time to catch up and be ready for the next part, so I don't feel overwhelmed."

S9 noted strengthened memory and cohesion: *"The stories are divided into sections, which makes it easier to remember and reflect on what I've heard. I can connect the events from one part to another more clearly, which helps me follow the whole story."*

To anticipate upcoming events, make sense of the plot, and interpret emotions with greater accuracy, learners connected visual cues with the audio narration. Images provided before or during listening helped activate background knowledge, confirm predictions, and strengthen storyline understanding. From a Dual Coding Theory perspective (Paivio, 1971), combining visual and verbal input enhances recall and comprehension by anchoring meaning to imagery.

S1 said: *"The teacher helps by introducing the topic or showing pictures to give hints about the story. When I see the images first, I already have some idea of what will happen, and it's easier for me to keep up when I listen."*

S7 noted how visuals sustained interest: *"Seeing the accompanying images while listening makes it more engaging. I can connect the pictures to the words, and it keeps me interested in the story."*

S12 used visuals more actively: *"While I'm listening, I imagine what will happen next while looking at the pictures. It's like I'm using the images to guess the next scene and check if I'm right when I hear it."*

These accounts show how learners use multiple audiobook features in complementary ways to enhance both listening accuracy and narrative engagement. Clear pronunciation provided a foundation for decoding and comprehension, adjustable playback speed gave learners control over cognitive pacing, segmentation created opportunities for reflection and recall, and visual cues anchored meaning while stimulating prediction. While the core benefits of each feature were experienced across proficiency levels, their application developed in sophistication over time —

from basic comprehension support among lower-level learners, to strategic listening and anticipation at mid-levels, and finally to higher-order analysis, inferencing, and prosodic awareness among more advanced listeners. This progression reflects how well-designed multimodal input can evolve from being a scaffold for understanding into a tool for deeper and more independent engagement with extended spoken narratives.

4.4.2 Theme 2: Improving Sound Discrimination

The theme *Improving Sound Discrimination* reflects how learners across all proficiency levels perceived the use of digital graded audiobooks as enhancing their ability to notice, distinguish, and accurately identify subtle differences in English sounds. In this study, Improving Sound Discrimination refers to the capacity to differentiate phonemes, stress patterns, intonation contours, and connected speech features such as elision or linking all of which are essential for accurate decoding and comprehension. This skill enables learners to follow spoken input more precisely, detect meaning-bearing contrasts, and better align what they hear with their internal phonological representations.

To maintain clarity of individual sounds, recognize stress and rhythm patterns, and detect how words connect in natural speech, learners relied on story segmentation to manage listening load. Breaking narratives into smaller, self-contained units gave them time to process each section in detail before moving on, reducing the risk of missing important sound cues. This process is supported by Schema Theory (Carrell & Eisterhold, 1983), which highlights how structured input helps integrate new information with existing knowledge, and by Chang and Millett's (2014) findings that segmentation reduces cognitive overload, allowing listeners to sustain focus for longer periods.

S1 explained: *"The story is divided into small parts, so I can follow each part and understand what is happening. If it was all in one long piece, I would get confused and probably miss important parts. This way, I can focus on one scene at a time and know where I am in the story."*

For S5, the pause between sections created space for reflection and anticipation: *“The division into parts gives me time to think about what just happened before starting the next scene. It’s like a pause that helps me remember, and sometimes I can guess what might come next based on what I just heard.”*

S11 described using segmentation to connect events and analyze sound patterns that signal cause–effect relationships: *“With sections, I can see how each part links to the next. I can follow the characters’ actions and understand why things happen in the story. It’s easier to see how one event leads to another, and that makes the story more meaningful.”*

To visualize sound–meaning connections and support accurate decoding, learners also used accompanying visuals as listening aids. From a Dual Coding Theory perspective (Paivio, 1971), the combination of verbal and visual input strengthens recall and comprehension by linking auditory signals to concrete images. For lower- and mid-level learners, visuals clarified events and reduced ambiguity, while higher-level learners used them to predict and interpret implied meanings.

S2 shared: *“When I see the pictures, I know where the story is happening and what the characters are doing. It helps me understand the scene better because I can connect the words to the images, and it makes the situation clear in my mind.”*

For S7, visuals supported imagination and kept attention anchored: *“The images make it easier to imagine the story, so I can follow what is going on without getting lost. When I see the pictures, I can build the scene in my head, and it keeps me interested in listening until the end.”*

S12, from the high-score group, described a more analytical use: *“I look at the pictures and think about what might happen next or why a character feels a certain way. It helps me understand the deeper meaning, not just the events. Sometimes I can guess the twist in the story from small details in the images.”*

These accounts indicate that improving sound discrimination was supported through features that allowed learners to slow down and focus on discrete listening units while reinforcing meaning through visual support. For lower-level learners, this meant maintaining clarity and avoiding confusion; for mid-level learners, it involved reflection and anticipation; and for higher-level learners, it extended to analyzing relationships between events and interpreting implicit narrative cues. Over time, these strategies moved from basic auditory recognition to more sophisticated integration of phonological, contextual, and visual information.

4.4.3 Theme 3: Improving Understanding of Accents

The theme *Improving Understanding of Accents* highlights how digital graded audiobooks helped students become more comfortable with different English accents, particularly American and British. In this study, Improving Understanding of Accents refers to the ability to adapt to variations in pronunciation, rhythm, and intonation patterns without losing comprehension. This competence is essential for real-world communication, where English is spoken with diverse phonological features. Prior research on accent familiarity (Gass & Varonis, 1984; Harding, 2012) suggests that sustained exposure to varied accents builds the listener's capacity to adjust without significant loss of understanding.

To adapt to and follow speech in unfamiliar accents, learners first needed clear articulation to hear each word distinctly and recognise sounds accurately despite variation in accent patterns. This precision supported the identification of individual phonemes and syllables, making it easier to map unfamiliar pronunciations onto known vocabulary. Such clarity reflects Noticing Theory (Schmidt, 1990), in which articulated input draws attention to prosody, and aligns with Rost's (2011) view that precise pronunciation underpins phonological awareness and adaptation to new accent patterns.

S1 explained: *"When the speaker pronounces clearly, I can still understand even if the accent is different. Without clear speech, I get lost very quickly. Clear pronunciation gives me more time to think about the meaning and follow the story."*

S7 described how this clarity helped separate words in a way that supported recognition: *“Even if the accent is not what I’m used to, I can follow because I can hear every word clearly. It’s like the words are separated enough for me to notice them, even if the voice sounds different from what I usually hear.”*

For S12 articulation became a comparative tool: *“Clear pronunciation makes it easier to notice small differences between accents, so I can adapt more quickly when I hear a new one. I try to remember those differences, so next time I hear the same accent, I can understand right away.”*

To further manage the challenge of new accents, students relied on controlled pacing to give themselves extra processing time. Slowing the narration allowed them to isolate each word and syllable, notice how sounds connected, and match them to familiar vocabulary before the next phrase arrived. This extra time reduced the cognitive load of rapid speech, enabling active monitoring of meaning and pronunciation. Over time, learners increased playback speed to transition toward authentic speech rates, consistent with Griffiths (1992) and Rost (2011), who note that slower delivery supports comprehension before shifting to natural pacing.

S2 explained: *“If the speech is slow, I can hear each word, even with a different accent. If it’s fast, I get confused and lose the meaning. Slow speech gives me a chance to catch the words and think about them before the next sentence comes.”*

S5 described how pacing supported both comprehension and phonological focus: *“Slower speed helps me understand the accent and the meaning at the same time. I can focus on the way the words sound and still follow the story. Later, when I am used to it, I can listen faster without losing the meaning.”*

S9 saw pacing as part of training for adaptability: *“When the speech is slow at first, I can catch the pattern of the accent. Then, when I hear it faster, I already know what to expect. It’s like I am training my ears to adjust from slow to normal speed.”*

Finally, repeated exposure to the same native speaker voices provided a pathway from initial unfamiliarity to confidence. Hearing the same narrator across multiple listens allowed learners to internalize the rhythm, intonation, and pronunciation patterns of the accent. As novelty decreased, they could redirect attention from decoding to meaning. This process reflects Automaticity Theory (LaBerge & Samuels, 1974), where repetition strengthens decoding speed and accuracy, enabling rapid adaptation across speakers.

S3 shared: *“When I listen many times to the same accent, it becomes easier. At first, it sounds strange, and I have to work hard to understand, but after a while, I can catch more words and follow the story better.”*

S8 noted how repetition-built familiarity with pronunciation patterns: *Hearing the same voice again and again helps me get used to the way they say words. After that, when I hear other people with the same accent, I can understand them faster because I already know what to expect.”*

S10 described a more refined benefit: *“The more I hear different British or American speakers, the easier it is to catch the meaning right away. I start to notice the small sound changes that are part of the accent, and this makes it easier for me to understand even if the speaker talks quickly.”*

In summary, improving understanding of accents involves progressing from basic recognition to rapid adaptation. Clear articulation gave all learners a foundation for distinguishing words; controlled pacing reduced processing demands before transitioning to natural speed; and repeated exposure-built familiarity, allowing them to anticipate pronunciation patterns. Lower-level learners used these features to sustain comprehension, mid-level learners to increase accuracy and speed, and higher-level learners to refine their ability to detect subtle phonological variations across accents.

4.4.4 Theme 4: Acquiring New Vocabulary Knowledge

The theme *Acquiring New Vocabulary Knowledge* captures how students benefited from repeated and contextual exposure to new words and phrases through digital

graded audiobooks. In this study, Acquiring New Vocabulary Knowledge refers to learners' ability to notice, recall, and use unfamiliar lexical items encountered in meaningful listening contexts. This involves recognizing the form and sound of new words, understanding their meaning in varied contexts, and developing the capacity to integrate them into receptive and productive language use. Research on extensive listening (Nation, 2013; Webb & Chang, 2015) emphasizes that repeated encounters with new vocabulary in context promote both recognition and recall, with optimal learning occurring when learners know 95–98% of the running words in a text (Nation & Newton, 2009).

To meet new vocabulary without becoming overwhelmed, learners benefited from leveled content that balanced accessibility and challenge. Appropriately leveled audiobooks ensured that most words were already familiar while introducing a manageable number of new terms that could be inferred from context. This balance aligns with Nation and Newton's (2008) principle that vocabulary growth occurs when the majority of words are known, leaving room for focused learning of the unknown items.

S1 explained, *"The words are not too difficult, so I can understand the story and learn some new words at the same time. If there are too many hard words, I cannot follow the story, and I lose interest. With this level, I can enjoy the story and still learn."*

S6 noted: *"Each story has some new words, but most of the words I already know. This makes it easier to guess the meaning and remember the new ones because I can focus on just a few at a time, not too many."*

S11 shared, *"Because the level is right for me, I can focus on the new words and see how they are used in different sentences. I notice how the meaning changes depending on the situation, and that helps me remember and use them later."*

To strengthen form–meaning connections, learners also relied on focused vocabulary, where key lexical items were intentionally introduced, embedded multiple times within the story, and revisited in varied contexts. This repeated contextualization

reflects Webb's (2007) findings that encountering a word across multiple contexts deepens understanding and supports retention and aligns with Brown et al. (2008) on the role of repeated exposure in promoting productive vocabulary use.

S2 described how this made comprehension smoother: *"When I see the words before listening, I can understand the story better. I don't get stuck on the new words because I already know them. It's like I have a map of the important words before I start."*

S8 highlighted the benefit of meeting the words again in different contexts: *"The words we focus on help me check the meaning after I finish listening. I can remember better when I see them again and think about how they were used in the story. Sometimes I highlight the ones I want to keep learning."*

S9 explained, *"The focus words remind me of vocabulary I can try to use in speaking or writing. It's not just knowing the meaning, but also how to use them naturally in conversation or essays. When I hear the same word many times in the story, it becomes much easier to remember and apply."*

Overall, acquiring new vocabulary knowledge through digital graded audiobooks involved a progression from basic recognition to productive use. Leveled content enabled all learners to sustain comprehension while gradually expanding their lexical repertoire, and focused vocabulary provided targeted reinforcement through repeated contextual exposure. Lower-level learners used these features to reduce difficulty and pre-learn key terms, mid-level learners to guess meanings and review usage, and higher-level learners to integrate new words into their own speaking and writing. Together, these features fostered vocabulary growth by embedding learning within enjoyable, meaningful listening experiences.

4.4.5 Theme 5: Learning Language in Real-Life Contexts

The theme *Learning Language in Real-Life Contexts* reflects how students perceived digital graded audiobooks as a source of English they could apply directly to everyday communication. In this study, Learning Language in Real-Life Contexts refers to the ability to notice and internalize language from listening input that mirrors authentic, contextualized situations, making it easier to remember and more relevant to practical

use. This aligns with research showing that language learning is more effective when input reflects real communicative purposes and contexts (Gilmore, 2007; Richards, 2015).

To gain access to language that could be used naturally in daily interaction, learners benefited from authentic expressions and conversational language embedded in the audiobooks. Hearing idioms, formulaic sequences, and conversational structures that resembled spontaneous speech rather than scripted textbook dialogues provided them with pragmatically appropriate models for communication. This reflects Nation and Newton's (2008) principle that exposure to formulaic language builds fluency and communicative competence, and Gilmore's (2007) emphasis on authentic input as a direct bridge to real-world use.

S1 noted the value of hearing simple but natural expressions that could be immediately reused: *"I hear sentences that I can use, like greetings or short questions. When the character says it in the story, I know I can say it to people too. It feels real, not just practice."*

S7 described recognizing expressions that sounded authentic and memorable: *"Some sentences sound like what real people say, not like in the textbook. I remember them better because I can imagine using them in the same way when I talk with friends or classmates."*

S10 commented on noticing variation in phrasing and adapting language for context: *"I learn different ways to say the same thing. For example, instead of only saying 'I am sorry,' I hear other ways people apologize. It helps me choose the right words in different situations, like formal or casual."*

To strengthen their understanding of when and how to use new language, students relied on contextualized usage of vocabulary and grammar within the stories. Following events in a narrative provided clear semantic and pragmatic cues, allowing learners to connect form with function in a meaningful way. This process aligns with research showing that contextualized input supports deeper processing (Ellis, 2003) and with Webb and Nation's (2017) argument that vocabulary and grammar are more memorable when tied to purposeful exchanges.

S3 explained how context anchored meaning: *“When the words are in the story, I know when to use them. If I just learn them from the list, I forget faster. But when I hear them in a scene, I remember because I can picture the situation.”*

S6 described how context reinforced grammar patterns: *“In the story, I see how the grammar works when people are talking. Like when they use past tense to talk about what happened, I remember it better because I can connect it to the event in the story.”*

S9 highlighted how observing language in context refined accuracy and nuance: *“I notice the words and grammar in the scene and understand why they are used that way. Later, I can use them in my own sentences with more confidence because I know they fit the situation.”*

To bridge receptive knowledge with productive use, learners engaged in language transfer to personal communication. This reflects Ellis’s (2005) concept of uptake, where learners consciously incorporate new language into their active repertoire. For many, familiarity with expressions from the audiobook reduced the risk of error and encouraged experimentation.

S2 shared the satisfaction of using familiar phrases: *“When I hear something easy, I try to say it to my friends in English class. It makes me feel good when I can use it, and they understand me.”*

S8 noted a growing confidence in appropriating language directly from the audiobooks: *“Sometimes I use the same sentences from the story when I talk to classmates. It’s easier because I know they are correct and sound natural.”*

S12 explained how they adapted expressions to suit their own purposes: *“I take words or phrases from the story and change them a little to fit my situation. It feels natural, and people understand me. Sometimes I combine phrases from different stories to make new sentences.”*

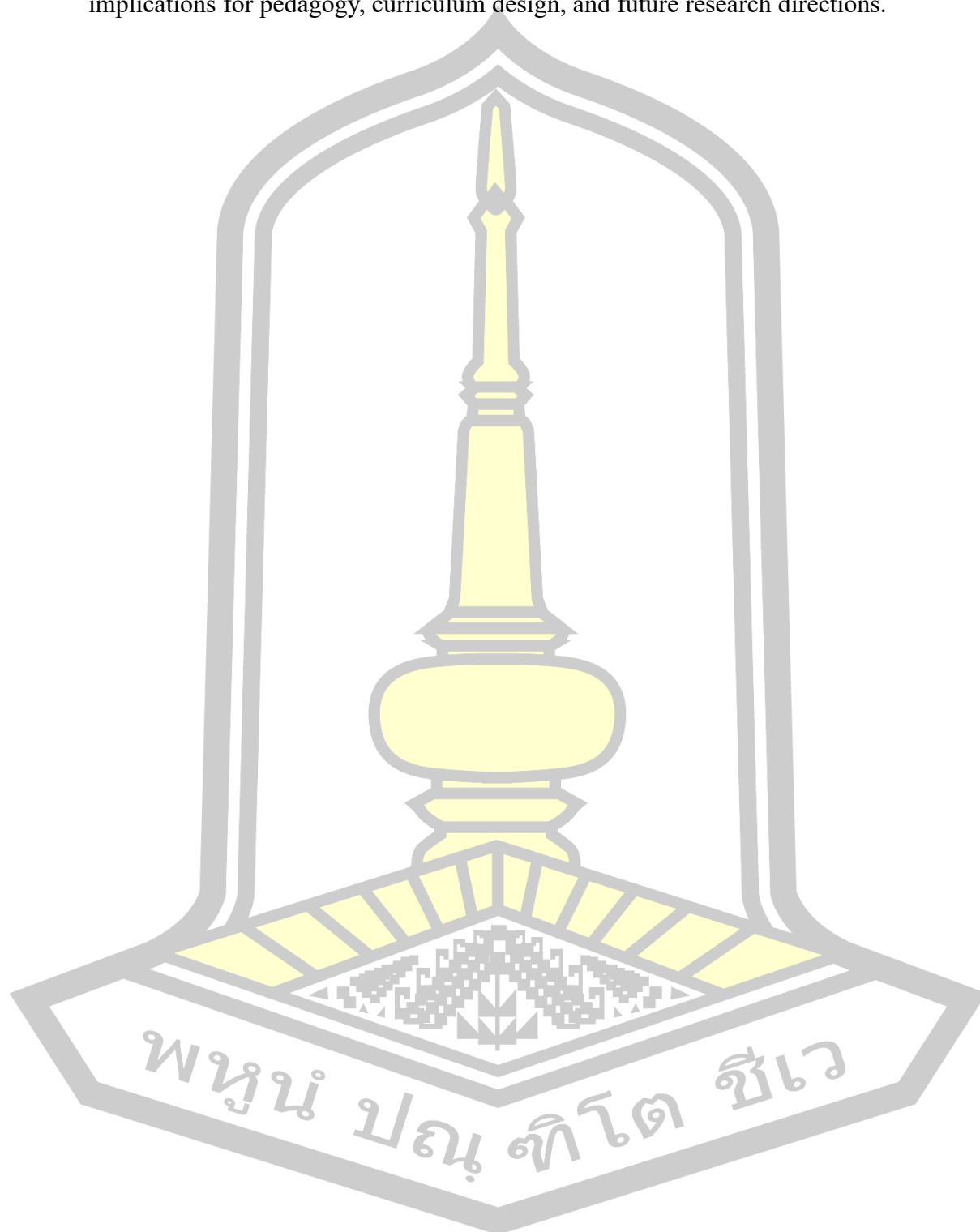
In summary, digital graded audiobooks facilitated real-life language learning by combining authentic expressions, contextualized vocabulary and grammar, and

opportunities for language transfer. Lower-level learners tended to repeat short, ready-to-use phrases, mid-level learners experimented with these expressions in familiar situations, and higher-level learners adapted them flexibly for varied contexts. This progression illustrates a shift from receptive recognition to confident, creative use, reinforcing the role of digital graded audiobooks as a bridge between classroom input and everyday communication.

4.5 Summary of the Chapter

This chapter reported the results of a mixed-methods investigation into the effects of digital graded audiobooks on Thai EFL students' listening comprehension, listening fluency, and perceptions of audiobook use. Quantitative findings from pretest and posttest data demonstrated that both the control and experimental groups improved after instruction. However, the experimental group, which participated in the graded audiobook program, achieved significantly higher gains in both comprehension and fluency. These outcomes were confirmed through paired-samples and independent-samples t-tests, with effect size calculations indicating not only statistical significance but also meaningful practical impact. In addition to these quantitative results, qualitative findings from semi-structured interviews provided a more detailed account of learner experiences. Thematic analysis identified five interconnected themes: enhancing listening and deep story understanding, improving sound discrimination, improving understanding of accents, acquiring new vocabulary knowledge, and learning language in real-life contexts. Students reported that audiobooks supported narrative comprehension, sharpened their awareness of sounds and stress patterns, increased their ability to adapt to different English accents, expanded their vocabulary knowledge, and exposed them to authentic expressions that could be applied in everyday communication. The integration of statistical evidence and thematic insights suggests that digital graded audiobooks are highly effective in promoting listening development in Thai EFL classrooms. The intervention not only improved measurable outcomes such as comprehension and fluency but also fostered deeper engagement, more precise noticing of linguistic features, and greater readiness to apply English in authentic contexts. The next chapter will interpret these results in relation to the

research objectives, theoretical frameworks, and previous studies, and will discuss implications for pedagogy, curriculum design, and future research directions.



CHAPTER FIVE

DISCUSSIONS AND CONCLUSION

This chapter builds on the quantitative and qualitative findings by placing them within the wider body of existing literature. It offers a comprehensive interpretation of how the results correspond with, differ from, or extend previous research on second language listening development. The findings contribute to closing important gaps in our understanding of how digital graded audiobooks support listening comprehension among Thai EFL learners in low-input contexts. By combining measurable outcomes with learner perceptions, this chapter provides a nuanced discussion of the pedagogical value of digital graded audiobooks. It highlights their potential to enhance listening abilities while also fostering greater learner engagement, independence, and confidence in using English.

5.1 Overview of the Findings

This study investigated the effects of an integrated digital graded audiobook-based listening activities on Thai EFL undergraduates' listening comprehension. It also examined learners' perceptions of the digital graded audiobook experience in order to better understand the pedagogical value and learner engagement associated with this listening environment. A quasi-experimental mixed-methods design was employed to compare learning outcomes between an experimental group using digital graded audiobooks and a control group receiving traditional textbook-based instruction.

The participants included 74 non-English major students at a rural Thai university, divided into control and experimental groups. Quantitative data were collected through pretests and posttests in listening comprehension. In addition, qualitative insights were drawn from semi-structured interviews with 12 students, stratified by listening comprehension proficiency to address their perceived benefits and challenges regarding audiobook use.

Findings from the quantitative data addressed Research Questions 1, focusing on measurable gains in listening comprehension. The experimental group showed statistically significant improvements, outperforming the control group, which received conventional instruction. These results support the use of digital graded

audiobooks as effective input, consistent with Krashen's Input Hypothesis and Cognitive Load Theory. In particular, learners benefited from level-appropriate, repetitive exposure to authentic yet simplified spoken English, which facilitated comprehension and reduced processing overload.

Participants described the audiobook-based intervention as both engaging and supportive, emphasizing its effectiveness in fostering listening comprehension, fluency, and confidence. Quantitative findings confirmed that students in the experimental group achieved significantly greater gains than those in the control group, with large effect sizes indicating both statistical and practical significance. Complementing these results, qualitative analysis highlighted five core aspects of learners' experiences: enhancing listening and deep story understanding, improving sound discrimination, improving understanding of accents, acquiring new vocabulary knowledge, and learning language in real-life contexts. These outcomes were closely linked to specific audiobook features, particularly clear pronunciation, adjustable playback speed, segmentation of stories into smaller sections, and visual cues. Together, these features created a scaffolded and adaptable listening environment that reduced cognitive demands, sustained learner engagement, and facilitated meaningful interaction with the narratives. As a result, students not only processed spoken English with greater ease but also developed strategies to transfer language into real-life communication, progressively building confidence to handle more complex listening input.

The following sections provide a detailed discussion of each research question, contextualizing the findings within established theoretical perspectives and relevant empirical studies

5.2 Discussion on Effects of Digital Graded Audiobooks on Listening Comprehension of Thai EFL Undergraduates

The results revealed that the experimental group significantly outperformed the control group on the listening comprehension test, indicating a positive effect of using digital graded audiobooks as a supplementary learning tool. This outcome demonstrates the core features of digital graded audiobooks, such as leveled content, clear pronunciation, adjustable playback speed, story segmentation, and visual cues

align with second language acquisition principles by providing sustained, comprehensible input. Qualitative findings reinforced this, with students across proficiency levels noting that these features helped them follow the storyline, recognize words more accurately, and connect events within the narrative. This suggests that consistent exposure to level-appropriate auditory input, combined with engaging content, can meaningfully enhance learners' ability to process and understand spoken language. Although both groups demonstrated improvements from the pre-test to the post-test, likely reflecting the impact of regular classroom instruction, the experimental group exhibited a markedly greater gain, which aligns with student reports of using audiobook features to manage listening challenges and sustain focus over longer periods, underscoring the added benefits of integrating digital graded audiobooks into the learning environment.

These findings align with a growing body of literature that underscores the pivotal role of extensive listening in second language acquisition (Nation & Newton, 2008; Renandya & Farrell, 2011). Extensive listening, particularly when supported by accessible and appropriately leveled materials, has been shown to enhance both vocabulary acquisition and overall comprehension (Brown, Waring, & Donkaewbua, 2008; Chang & Millett, 2015). For instance, Bauer and Nation (1993) argue that graded materials, texts specifically designed to match learners' proficiency levels, facilitate the development of lexical knowledge and comprehension skills by ensuring that learners are not overwhelmed by excessive amounts of unfamiliar language. This is consistent with the present study's qualitative results, where lower- and mid-proficiency learners reported that leveled content allowed them to follow the plot while acquiring new words without feeling discouraged. This feature reflects Krashen's Input Hypothesis by ensuring that the input is comprehensible and slightly above learners' current level ($i+1$). Such materials allow learners to focus on meaning without the constant interruption of unknown words, thereby promoting smoother, more fluent processing. In a similar vein, Schmitt and Meara (1997) and Schmitt and Zimmerman (2002) emphasize the importance of repeated exposure to high-frequency vocabulary and common syntactic patterns within comprehensible input. This repetition directly supports Automaticity Theory by enabling lower-level decoding

skills to become automatic, freeing up attention for higher-level meaning-making. Student accounts also reflected this, with many describing how repeated listening and segmentation helped them retain details and connect story events more effectively. Graded listening texts, by nature of their design, maximize opportunities for such repetition, which is widely regarded as essential for the development of listening fluency and long-term vocabulary retention (Webb & Nation, 2017). Furthermore, Carlisle and Katz (2006) highlight the unique advantages offered by digital formats in facilitating extensive listening. Features such as adjustable playback speed, pausing, and replay reflect Cognitive Load Theory by reducing extraneous load and allowing learners to manage intrinsic load through self-paced listening. This matches students' reported strategies of slowing playback to focus on challenging sections or replaying parts until meaning became clear. Overall, the study's findings suggest that digital graded audiobooks can significantly enhance listening comprehension by providing accessible, engaging, and level-appropriate input.

Moreover, the improved listening comprehension observed among participants can be attributed to the in-class guided activities that were integrated with structured listening stages, namely pre-listening, while-listening, and post-listening, with the use of digital graded audiobooks. This sequencing of activities reflects well-established instructional design principles in listening pedagogy, in which each stage connects to a specific theory of learning. In the pre-listening stage, students began by brainstorming vocabulary related to emotions and relationships, which helped activate their prior knowledge and prepared them to better understand the story's themes. In practice, this activity was conducted on the whiteboard, where students contributed words they already knew, and the teacher provided additional target words from the audiobook's glossary. This stage is consistent with Schema Theory (Anderson, 1984; Carrell & Eisterhold, 1983), as it activates existing mental frameworks to facilitate comprehension by linking new information to familiar concepts. They then made predictions about the story's content by examining the title and cover image projected on screen. Students worked in pairs to discuss possible settings, characters, and conflicts, and then shared their ideas with the class before listening. This encouraged them to think critically and set a purposeful goal for listening, supporting findings

from research by Grellet (1981) that prediction enhances engagement and comprehension. This also reduces extraneous cognitive load, as predicted in Cognitive Load Theory (Chandler & Sweller, 1991), by helping learners focus on relevant concepts before listening begins. Teacher guidance at this stage included pre-listening scaffolding (providing key vocabulary, background knowledge, and visual predictions) and directing attention through questions (e.g., “Who do you think the main character will be?” or “What problem might occur in this story. These strategies lowered cognitive load, primed students for the content, and encouraged active engagement. One student from the high-level group mentioned, *“Looking at the cover and guessing the story first made me curious to know if my guess was right, so I listened more carefully”*, illustrating how the activity promoted both motivation and focused attention.

In the while-listening stage, students listened to the first half of the audiobook twice. The first play-through was used for overall gist, while the second allowed learners to confirm predictions, note key vocabulary, and catch details missed the first time. The teacher paused briefly between tracks to check understanding and answer clarification questions. Repeated listening has been shown (Vandergrift, 2007; Chang, 2011; Waring & Takaki, 2003) to improve learners’ ability to catch details, increase familiarity with the language, and deepen overall comprehension. This approach aligns with Krashen’s Input Hypothesis by reinforcing comprehensible input, and with Automaticity Theory by automating decoding processes through meaningful repetition. Listening to the second half once encouraged focus on key plot points and character development, which helps build both global and local understanding (Field, 2008). To support comprehension, students were provided with a listening guide containing space to note main events, characters, and problem–solution sequences while listening. Teacher actions at this stage included using verbal signals during listening (pausing to refocus attention), highlighting discourse markers to show story structure, and paraphrasing unclear parts to make challenging sections comprehensible. This reflects Noticing Theory (Schmidt, 1990) by directing learners’ attention to salient features in the input during a single, purposeful listen. As one mid-level student explained, *“The second time I listened, I could hear words I missed*

before, and when I wrote them in my notes, I remembered them later”, showing the value of repetition and active monitoring during listening.

In the post-listening stage, students completed multiple-choice and true/false questions to assess comprehension and reinforce understanding, reflecting research suggesting that immediate feedback and testing can improve retention and motivation (McDonough, 2005). These tasks were graded in class with instant feedback, and explanations were given for both correct and incorrect answers so that learners could consolidate understanding immediately. These comprehension checks promote germane cognitive load (Sweller, 2010) by encouraging deeper processing of language content. Pair discussions allowed students to engage socially, promoting collaborative learning and critical thinking as supported by Vygotsky’s sociocultural theory (1978), which stresses learning through interaction. These discussions often led to debates over character motives and plot predictions, further encouraging analytical thinking. Reviewing key vocabulary strengthened language acquisition by reinforcing form and meaning connections, consistent with Nation’s (2001) emphasis on repeated exposure and active vocabulary use. The teacher elicited example sentences from students and corrected pronunciation where necessary, ensuring both receptive and productive vocabulary knowledge were addressed. Writing journal entries helped students reflect and synthesize ideas, fostering deeper cognitive processing as noted by Bereiter and Scardamalia (1987). These journals often included personal reactions, connections to students’ own experiences, and summaries of the story, which helped them internalize language structures.

Finally, weekly out-of-class tasks and listening logs encouraged autonomous learning and consistent practice, which are critical for developing listening skills over time according to Rubin (1994). Teacher feedback on logs provided guidance for improving independent listening strategies. A high-level student commented, *“When I had to write in the log every week, I made sure I listened at home and found time to finish the story. It helped me listen more often than before”*.

The students’ improved listening comprehension strongly supports Krashen’s Input Hypothesis, which argues that language acquisition is most effective when learners are exposed to input that is both comprehensible and slightly beyond their current

level of proficiency, often referred to as *i+1* (Krashen, 1982, 1985). The digital graded audiobooks in this study demonstrate this principle by introducing new vocabulary and structures within meaningful contexts, as confirmed by students' ability to follow and retell stories with minimal difficulty. One B2-level student reflected, "*Even if there were new words, I could still follow the story because the rest was easy to understand.*" This aligns with Vandergrift's (2007) research highlighting the benefits of repeated listening, showing that hearing the same material multiple times enables learners to catch details missed initially, deepen comprehension, and reinforce retention. In addition, the structured pre-listening activities reflect findings by Grellet (1981) and Anderson (1984), who demonstrate that activating prior knowledge makes incoming input more meaningful and easier to process. Furthermore, the students' improved listening comprehension can be well explained through Cognitive Load Theory, which emphasizes the importance of managing learners' mental effort to optimise learning (Sweller, 1988; Paas, Renkl, & Sweller, 2003). The vocabulary brainstorming and prediction activities in the pre-listening stage reduced extraneous load by focusing attention on relevant schema. Breaking the audiobook into smaller, manageable segments and repeating sections during while-listening aligns with Leahy and Sweller's (2011) findings that segmentation helps manage intrinsic load. Post-listening tasks like comprehension questions and discussions promoted germane load, enabling schema construction and automation (Paas & van Merriënboer, 1994).

Beyond managing cognitive load, the results align with Automaticity Theory (LaBerge & Samuels, 1974; Segalowitz, 2010). The repeated listening and structured practice built automatic recognition of vocabulary and syntax, freeing cognitive resources for meaning-focused processing. This supports McLaughlin's (1987) view that repeated practice and retrieval are essential for automatization. One low-level student observed, "*The more I listened, the faster I could catch the words without thinking too much.*" Similarly, the findings support Noticing Theory (Schmidt, 1990, 2001), which asserts that conscious awareness of language features is essential for acquisition. The comprehension questions, vocabulary reviews, and discussions deliberately directed learners' attention to key lexical and grammatical elements in context (Tomlin & Villa, 1994; VanPatten, 2004). Finally, the study reflects Dual

Coding Theory (Paivio, 1986; Mayer, 2001; Mayer & Moreno, 2003). The integration of visual cues, such as the story cover and written vocabulary, with the audio input provided learners with two complementary channels for processing, leading to richer mental representations and better recall.

5.3 Discussion on Students' Perceptions on the Features of Digital Graded Audiobooks in Enhancing Students' Listening Comprehension

The findings of this study indicate that students perceived the features of digital graded audiobooks as highly supportive in enhancing their listening comprehension. The semi-structured interviews revealed that participants consistently associated their comprehension gains with specific technological affordances embedded in the Oxford Reading Club platform, including clear pronunciation, adjustable playback speed, segmentation of stories into shorter sections, visual cues through synchronized text, and mobile accessibility that enabled flexible learning. These features were not regarded as isolated conveniences but as integral tools that shaped the overall learning environment, aligning with theoretical frameworks in second-language acquisition and educational technology.

One of the most salient perceptions concerned clear pronunciation, which enabled learners to notice individual phonemes, stress patterns, and intonation in ways that traditional classroom listening materials rarely provided. This perception aligns with Schmidt's (1990) *Noticing Hypothesis*, which posits that conscious awareness of linguistic features is a prerequisite for acquisition. Exposure to consistent and intelligible input helped students detect reduced forms and connected speech, thereby improving their bottom-up processing skills. Simultaneously, clarity lowered the *affective filter* (Krashen, 1982), increasing confidence that comprehension was achievable.

The adjustable playback speed was another feature learners strongly valued. Participants explained that slower playback reduced cognitive load by allowing time to process meaning, whereas normal or faster speeds served as training for building listening stamina. This adaptability mirrors principles of *Cognitive Load Theory* (Sweller, 1988), in which learners manage mental resources by controlling task complexity. It also operationalizes Krashen's *i+1* concept of comprehensible input,

since adjustable speed lets learners maintain an optimal balance between ease and challenge. The ability to self-regulate listening pace supported incremental progress and enhanced learner autonomy, linking closely to Bandura's (1997) notion of self-efficacy.

The segmentation of stories into smaller sections provided another essential scaffold. Short, clearly divided narrative units created natural pauses for reflection, prediction, and comprehension monitoring. This structure mirrors the pre-, while-, and post-listening cycle in communicative pedagogy and corresponds to Vygotsky's (1978) *Zone of Proximal Development*, where learning occurs most effectively when tasks are supported within manageable boundaries. Learners reported that segmentation reduced fatigue and made long stories more approachable, increasing persistence and deeper engagement with the storyline.

Equally significant were visual cues such as synchronized text and illustrations. The combination of auditory and textual modes created a multimodal environment consistent with Paivio's (1991) *Dual Coding Theory*, where verbal and visual information reinforce each other to strengthen comprehension and recall. Learners used textual support strategically to confirm meaning when encountering unfamiliar vocabulary, which reduced anxiety and fostered confidence. As listening proficiency improved, several participants noted that they relied less on text, suggesting a gradual internalization of auditory decoding skills.

The addition of mobile accessibility and flexible listening options, highlighted in Theme 5, further illuminated the motivational dimension of audiobook learning. Learners described the ability to listen *anytime and anywhere* as a key factor sustaining engagement and practice. This aligns with the *Self-Determination Theory* (Deci & Ryan, 2000), particularly the components of autonomy and competence. Mobile access empowered students to integrate English exposure into daily routines, transforming listening from a classroom-bound task into an autonomous habit. The sense of convenience and self-control reduced pressure and fostered intrinsic motivation to continue listening voluntarily.

Personalization of learning through adjustable settings, such as speed control and replay, also contributed to motivation by giving learners agency over the learning process. The option to tailor tasks to one's proficiency corresponds to *Zimmerman's (2000) self-regulated learning framework*, in which learners plan, monitor, and reflect on their performance. Participants explained that repeating difficult passages until comprehension was achieved gave a tangible sense of improvement, which strengthened perseverance and self-efficacy.

Students further emphasized that engaging storylines and the combination of audio-visual supports stimulated emotional involvement, turning listening into an enjoyable experience rather than an obligatory exercise. Enjoyment and curiosity are recognized drivers of *intrinsic motivation* (Dörnyei & Ushioda, 2011), which promotes sustained engagement and longer exposure to input. Participants' preference for varied, meaningful narratives indicates that affective engagement is not merely supplementary but central to maintaining attention and reinforcing comprehension through repeated listening.

From a technology-acceptance perspective, these findings reaffirm that audiobook features enhanced both perceived ease of use and perceived usefulness—core constructs in Davis's (1989) *Technology Acceptance Model* and Venkatesh et al.'s (2003) *UTAUT* framework. Learners' appreciation of clarity, flexibility, and mobility directly influenced their behavioral intention to keep using the platform, which in turn sustained listening practice throughout the 12-week intervention.

Taken together, students' perceptions demonstrate that digital graded audiobooks provided more than comprehensible input; they created a scaffolded, adaptive, and motivating environment that addressed linguistic, cognitive, and affective barriers common among Thai EFL learners. The synergy between technological affordances and pedagogical principles enhanced learners' sense of autonomy, confidence, and readiness to engage with increasingly complex listening materials. This alignment between usability, enjoyment, and self-regulation explains why learners perceived the audiobook experience as both effective and sustainable.

Therefore, the discussion of student perceptions indicates that the effectiveness of digital graded audiobooks cannot be separated from the motivational and design affordances embedded in the platform. Features such as clear narration, adjustable playback, segmentation, visual reinforcement, and mobile accessibility collectively fostered engagement consistent with major SLA and motivation theories. For educators and designers, these insights highlight the importance of integrating pedagogical scaffolds and affective supports into audiobook platforms to ensure that technology not only delivers input but also inspires continuous, confident, and self-directed listening practice.

5.4 Discussion on Students' Perceptions of the Use of Digital Graded Audiobooks on Listening Comprehension

Participants in this study generally perceived digital graded audiobooks as highly effective tools for enhancing listening comprehension, with their positive evaluations centering on five interrelated areas: deep story comprehension, sound discrimination, accent awareness, vocabulary acquisition, and real-life language use. Across these domains, learners frequently highlighted how the multimodal format, level-appropriate design, and user control features supported their ability to process, retain, and apply language. These perceptions align with multiple strands of second language acquisition theory, underscoring the value of structured, comprehensible, and engaging input in promoting listening development.

5.4.1 The Role of Digital Graded Audiobooks in Enhancing Listening and Deep Story Understanding

The role of digital graded audiobooks in enhancing deep story understanding can be explained through their ability to provide multimodal, scaffolded, and engaging language input that supports comprehension beyond surface-level recall. In this study, learners across proficiency levels described how the integration of audio narration, synchronized text, and supporting visuals allowed them to connect spoken and written forms of language, reinforce recognition of key vocabulary, and notice prosodic features such as intonation, stress, and rhythm. These features carried emotional and interpretive weight, helping students to follow the plot more accurately, identify

character motivations, and connect events within a coherent mental representation of the story.

The multimodal presentation strengthened visualization of events, settings, and relationships, which in turn deepened comprehension of themes and subtext. For example, lower-level learners reported that clear pronunciation and slower pacing reduced listening anxiety and allowed them to process each word before moving on, maintaining plot awareness even in more challenging scenes. Mid-level learners used adjustable speed and replay functions to slow down difficult sections or speed up easier ones, enabling them to focus on tricky language while sustaining narrative flow. At higher proficiency, students used these same controls strategically to notice subtle changes in pronunciation, rhythm, and emphasis, which revealed additional layers of meaning and nuance in the text.

Because digital graded audiobooks were adapted to learners' proficiency levels, they reduced cognitive overload and freed attention for higher-order processes such as inference, prediction, and thematic interpretation. This was especially evident when students used segmentation of the story into smaller parts. Across levels, this structure allowed them to pause, reflect, and link earlier events with later developments. Lower-level learners used these pauses to consolidate understanding of individual scenes, mid-level learners used them to make and check predictions, and higher-level learners used them to analyze narrative cause–effect relationships and track thematic development.

Supporting visuals further activated background knowledge and guided attention to key details, in line with Dual Coding Theory (Paivio, 1971). For beginners, images anchored comprehension by clarifying setting and action. Mid-level students reported that visuals sustained engagement and aided recall by supporting mental imagery of events. More advanced learners used them as predictive and interpretive tools, identifying small visual cues that hinted at upcoming plot twists or revealed character emotions indirectly.

When combined with structured pre-listening, while-listening, and post-listening activities, these features encourage learners to connect the story to personal

experiences, evaluate characters' decisions, and identify broader lessons embedded in the narrative. High-quality narration with expressive delivery was repeatedly noted as a factor that fostered emotional engagement, allowing learners to empathize with characters, interpret unspoken intentions, and retain plot and thematic details over time. The flexibility of the digital format particularly the ability to replay, adjust speed, and read along reinforced story cohesion, promoted noticing of narrative patterns, and encouraged learners to re-engage with sections for deeper insight.

5.4.2 The Role of Digital Graded Audiobooks in Enhancing Listening and Improving Sound Discrimination

The role of digital graded audiobooks in improving sound discrimination lies in their ability to provide repeated, high-quality auditory input aligned with learners' proficiency levels and reinforced through synchronized text, enabling sustained attention to subtle differences in phonemes, stress, and intonation patterns. In this study, students across all levels described how professionally narrated audio allowed them to hear clearly articulated target sounds and identify distinctions such as /b/ vs. /p/, /ʃ/ vs. /s/, or vowel contrasts that were previously difficult to perceive, especially when these contrasts did not exist in their first language. Clear pronunciation and accurate pacing provided a reliable auditory model, reducing the ambiguity that often occurs in fast or casual speech and giving learners more time to notice differences in sound production.

The synchronized display of written text alongside audio narration reinforced the sound-symbol relationship, enabling learners to connect orthographic forms with their corresponding phonological patterns. This is consistent with Dual Coding Theory (Paivio, 1971), which posits that linking verbal and visual representations strengthens recall and recognition. Expressive narration also drew attention to suprasegmental features—rhythm, stress placement, and intonation contour that contributed to the meaning and emotional tone of utterances, aligning with Schmidt's (1990) Noticing Hypothesis and Rost's (2011) view that prosodic awareness is integral to bottom-up listening processes.

Because the audiobook materials were graded to match students' language levels, they minimized cognitive overload and allowed learners to focus on discriminating

between sounds without being hindered by excessive unfamiliar vocabulary. This scaffolding was particularly important for lower-proficiency learners, who often used slower playback speeds and repeated listening to isolate and rehearse difficult sound contrasts. At the mid-level, learners reported strategically adjusting playback speed to focus on both individual phonemes and connected speech features, such as linking or elision, that influence real-world listening comprehension. Higher-level learners, in turn, used repeated exposure to fine-tune their recognition of accent-specific pronunciation variants, making it easier to adapt when encountering different speakers.

The digital format allowed learners to replay short segments, slow down narration, and repeatedly focus on minimal pairs or key phrases, providing the type of massed and spaced practice necessary for strengthening auditory discrimination (Logan et al., 1991). For some, this repeated practice led to greater confidence in both listening comprehension and pronunciation accuracy, as they began to self-monitor and adjust their own speech to match the models they heard.

5.4.3 The Role of Digital Graded Audiobooks in Improving Understanding of Accents

The role of digital graded audiobooks in improving understanding of accents lies in their capacity to provide controlled, repeated, and authentic exposure to diverse varieties of spoken English while maintaining input that is linguistically accessible to learners at different proficiency levels. In this study, students were regularly exposed to narrators with distinct accent models primarily British and American across multiple stories. This sustained and structured exposure familiarized them with variation in vowel quality, consonant articulation, rhythm, stress placement, and intonation patterns, which are central to accent intelligibility in real-world communication. Because the audiobooks were adapted to graded language levels, learners could attend to these accent features without being overwhelmed by unfamiliar vocabulary or overly complex syntax.

The synchronization of audio narration with written text acted as a scaffold for accent adaptation, allowing learners to map unfamiliar sound patterns to orthographic forms and reduce misinterpretation of words. This aligns with Dual Coding Theory (Paivio,

1971), which posits that combining visual and auditory channels strengthens recognition and recall, and with Schmidt's (1990) Noticing Hypothesis, which emphasizes the role of attention in detecting new linguistic features. By repeatedly matching what they heard to what they saw, learners began to anticipate how certain phonemes, stress patterns, or connected speech processes would appear in a given accent.

Repeated exposure played a particularly important role in moving learners from initial unfamiliarity to confident comprehension. The ability to replay audio segments and adjust playback speed created opportunities for focused listening, allowing learners to isolate difficult phonemes, examine linking and assimilation patterns, and notice how intonation contours differed between accents. This aligns with Griffiths' (2015) observation that controlled pacing reduces processing load during initial exposure, and with Automaticity Theory (LaBerge & Samuels, 1974), which explains how repeated practice leads to faster, more accurate decoding.

Lower-level learners in this study often relied on slow playback to separate words and reduce the cognitive demands of decoding speech in an unfamiliar accent. Mid-level learners used the same tools more strategically slowing down to focus on accent-specific features and then gradually returning to normal speed to simulate real-world conditions. Higher-level learners leveraged these repeated encounters to fine-tune their recognition of subtle pronunciation differences, enabling them to adapt quickly when hearing a new speaker with a similar accent in other contexts.

Consistent narrator voices also helped learners internalize accent-specific prosody and connected speech phenomena such as elision, assimilation, and vowel reduction, which are key to achieving authentic-sounding comprehension. Over time, these repeated and scaffolded interactions reduced listening anxiety, increased perceptual flexibility, and strengthened learners' ability to comprehend a broader range of English accents in authentic settings.

5.4.4 The Role of Digital Graded Audiobooks in Acquiring New Vocabulary Knowledge

The role of digital graded audiobooks in acquiring new vocabulary knowledge lies in their ability to combine comprehensible input, multimodal reinforcement, and repeated contextual exposure in an engaging format that aligns with learners' proficiency levels. In this study, students encountered new words embedded within simplified but meaningful narratives, ensuring that vocabulary learning occurred in rich, comprehensible contexts rather than through isolated lists. This approach is consistent with Nation's (2013) emphasis on meeting unfamiliar words within 95–98% known-word coverage, which supports guessing from context, and with Webb and Chang's (2015) findings that repeated encounters in narrative contexts enhance both recognition and retention.

The combination of audio narration and synchronized written text enabled learners to connect orthographic, phonological, and semantic representations of each new word. From a Dual Coding Theory perspective (Paivio, 1971), this dual-channel processing—seeing and hearing the word simultaneously strengthens encoding in memory and supports later retrieval. Clear, accurate narration also reinforced correct pronunciation and stress patterns, while the visual text allowed learners to confirm spelling and form–meaning links.

The narrative structure itself played a crucial role in facilitating incidental vocabulary acquisition. Story events, character interactions, and cause–effect relationships provided semantic and pragmatic clues that helped learners infer meanings naturally, without breaking the flow of comprehension. Because graded texts were matched to learners' proficiency levels, cognitive load was minimized, allowing them to focus on meaning rather than on decoding every word. This aligns with Cognitive Load Theory (Sweller, 1988), which suggests that reducing extraneous load enables more efficient processing of essential information, in this case, new vocabulary.

The digital format of the audiobooks amplified these benefits by providing flexible, learner-controlled repetition. Students could replay passages containing key words, slow down narration to focus on pronunciation, or pause to verify meanings without losing track of the story. Repeated encounters with the same vocabulary in varied

contexts such as dialogue, narration, and description deepened understanding and facilitated transfer to active use.

For lower-level learners in this study, pre-listening exposure to key vocabulary reduced comprehension barriers and increased readiness to engage with the story. Mid-level learners benefited from recognising and consolidating vocabulary through repeated encounters during listening, often noting how meaning shifted with different contexts. Higher-level learners used these repeated exposures to refine their understanding of nuanced meanings and to integrate new words into their own spoken and written production. This progression reflects Webb's (2007) finding that repeated, meaningful encounters promote not only receptive knowledge but also productive use.

When supported by pre-, while-, and post-listening activities such as vocabulary prediction, meaning inference, and communicative application digital graded audiobooks encouraged deep lexical processing, including form recognition, meaning comprehension, and contextual usage. Over time, these multimodal and context-rich experiences led to stronger retention, improved pronunciation, and greater confidence in applying new vocabulary appropriately in real communication.

5.4.3 The Role of Digital Graded Audiobooks in Learning Language in Real-Life Contexts.

The role of digital graded audiobooks in learning language in real-life contexts lies in their ability to provide authentic, contextually rich, and meaningful input that mirrors how language is used outside the classroom, while maintaining accessibility through graded language levels. In this study, learners engaged with narratives that depicted everyday situations such as greetings, invitations, problem-solving, and emotional exchanges that closely resembled the types of communicative encounters they might face in their own lives. This reflects Gilmore's (2007) argument that exposure to authentic, pragmatically appropriate input supports the development of communicative competence, and aligns with Richards' (2015) emphasis on contextualizing language learning within real-life discourse.

By presenting vocabulary, expressions, and discourse patterns within functional contexts rather than isolated drills, digital graded audiobooks allowed learners to see

and hear language being used to achieve specific communicative purposes. Clear, expressive narration brought these exchanges to life, demonstrating how tone, intonation, and lexical choice shift according to social setting, interpersonal relationship, and communicative intent. The written text, synchronized with the narration, further supported this process by helping learners connect linguistic forms to their pragmatic functions. From the perspective of Sociocultural Theory (Vygotsky, 1978), this provided learners with scaffolds for understanding how language operates in socially situated interaction.

Because the stories were leveled, learners could attend to pragmatic features—such as politeness markers, turn-taking cues, and idiomatic expressions—without being hindered by excessive grammatical or lexical difficulty. This balance reduced cognitive load (Sweller, 1988) and allowed attention to shift from decoding meaning to noticing how language achieves its communicative goals. Over time, such noticing, as described in Schmidt's (1990) Noticing Hypothesis, promoted greater awareness of how context influences both form and meaning.

The digital format reinforced these benefits by offering replay and selective listening functions. Learners could revisit specific dialogue exchanges or narrative moments, paying closer attention to how speakers negotiated meaning, softened refusals, or built rapport. This repeated, targeted listening allowed them to internalize patterns for later use. When integrated with structured tasks such as role-plays, group discussions, or reflective journals these audiobook experiences supported Ellis's (2015) concept of "uptake," where new language is actively incorporated into a learner's repertoire.

Findings from this study showed a developmental progression in how learners applied such language. Lower-level learners tended to repeat short, ready-to-use expressions directly from the stories, gaining confidence in basic real-life exchanges. Mid-level learners began to reuse expressions with contextual awareness, selecting them for situations similar to those in the audiobooks. Higher-level learners adapted and recombined expressions creatively, modifying them to suit different communicative purposes. This shift from direct repetition to flexible adaptation reflects the movement from receptive competence toward productive, context-sensitive use.

5.5 Implications

The findings of this study carry significant implications across multiple dimensions of second language listening development, including theoretical understanding, research methodology, and practical teaching approaches. By examining how digital graded audiobooks enhance listening comprehension among low-proficiency EFL learners, the study not only contributes to academic knowledge but also offers actionable guidance for educators and curriculum designers working in low-input environments. These implications highlight the importance of integrating comprehensible, scaffolded, and motivating listening resources supported by effective instructional strategies to foster meaningful language acquisition. The following sections elaborate on the theoretical, methodological, and pedagogical implications derived from the research.

5.5.1 Theoretical Implication

The findings provide robust support for several theoretical perspectives in second language acquisition. First, the results validate Krashen's Input Hypothesis (1985) by demonstrating that graded audiobooks supplied comprehensible input slightly above learners' current proficiency ($i+1$). The use of simplified vocabulary, controlled grammar, and predictable story structures allowed students to access challenging input without being overwhelmed, ensuring that learning was incremental yet sustained.

Additionally, the findings highlight the relevance of Sweller's Cognitive Load Theory (1988) to listening instruction. The audiobook features minimized intrinsic cognitive load by embedding linguistic content within familiar narratives, while technological affordances such as adjustable playback speed and segmentation reduced extraneous load. These scaffolds enabled learners to allocate more cognitive resources to meaning-making and schema construction. The results therefore illustrate how careful instructional and technological design can mitigate overload for low-proficiency learners in listening tasks, a critical factor in resource-constrained environments (Mayer & Moreno, 2003; Sweller, 2010).

The study also lends empirical support to Schmidt's Noticing Hypothesis (1990). Students frequently reported that repeated exposure to meaningful language in audiobook contexts allowed them to notice vocabulary, grammatical patterns, and

prosodic features without explicit teaching. This natural noticing process highlights the pedagogical value of salient and recurring input delivered through stories, which facilitated incidental learning (Thornbury, 2017).

Similarly, the findings affirm Paivio's Dual Coding Theory (1991) by showing that the multimodal nature of digital graded audiobooks, particularly the synchronization of text with audio and the use of visual cues, enhanced comprehension. Learners explained that the ability to both hear and see language input reduced anxiety, reinforced understanding, and supported memory retention. These multimodal affordances played a critical role in bridging comprehension gaps, especially for low-proficiency learners in low-input educational contexts.

From a socio-interactionist perspective, the results also align with Vygotsky's Zone of Proximal Development (1978). In-class scaffolding activities such as vocabulary previews, teacher guidance, and group discussions enabled learners to achieve comprehension levels beyond what they could manage independently. Importantly, this study extends the application of the Zone of Proximal Development by showing that sustained independent comprehension with audiobooks is most effective when preceded by guided support. Therefore, a phased model of learning that begins with teacher mediation and gradually progresses toward autonomous engagement enriches theoretical understanding by linking structured input with progressive independence in listening development.

Finally, the study contributes to the theoretical frameworks of Technology Acceptance Model (Davis, 1989) and UTAUT (Venkatesh et al., 2003). Students' positive perceptions of audiobook features such as clear pronunciation, playback control, and segmentation illustrate how perceived ease of use and perceived usefulness foster sustained engagement. These perceptions reinforce the notion that technological affordances are not neutral but actively shape learners' willingness to engage with input, which in turn drives comprehension gains.

5.5.2 Methodologies Implications

This study offers methodological contributions relevant for researching listening comprehension development in low-proficiency EFL learners, particularly in low-input contexts. The mixed-methods design integrated quantitative and qualitative approaches, providing both measurable outcomes and rich insights into learner perceptions of audiobook features and benefits. This triangulation ensured that findings were not only statistically reliable but also pedagogically meaningful.

The use of a pretest–posttest quasi-experimental design with control and experimental groups strengthened the study’s ability to isolate the effects of audiobook exposure. The design captured measurable changes in comprehension, demonstrating the potential of digital graded audiobooks to significantly enhance listening outcomes. Future research is encouraged to employ similar comparative frameworks while ensuring baseline equivalence and control over external variables such as teacher influence or incidental exposure to English.

The inclusion of diverse assessment formats such as multiple-choice, true/false, and matching tasks proved effective in evaluating comprehension at different levels, from detail recognition to global understanding. This multifaceted assessment design mitigated the limitations of single-format testing and provided a more reliable measure of comprehension gains (Buck, 2001; Lynch, 2017). Researchers investigating similar populations are advised to adopt varied assessment instruments to capture nuanced dimensions of comprehension.

The incorporation of semi-structured interviews provided essential qualitative depth, offering insights into how learners interacted with audiobook features and why they found them beneficial. This methodological choice emphasized the importance of understanding learner perspectives in technology-enhanced listening, aligning with recommendations for mixed-methods inquiry in applied linguistics (Dörnyei, 2007). Similarly, the use of listening journals supported longitudinal tracking of comprehension processes, offering a reflective dimension that enriched the dataset. Future research should continue to integrate learner-generated data, such as journals or reflective diaries, to document cognitive and affective responses over time.

The methodological value of this study also lies in its authentic integration of digital learning platforms. By employing the Oxford Reading Club app, which mirrors real-world extensive listening environments, the research demonstrated the importance of ecological validity in technology-mediated studies. The app's playback and visualization features not only enhanced comprehension but also provided naturalistic data on learner engagement. Future studies may build on this by leveraging digital analytics, such as tracking listening frequency or feature usage, to complement traditional test and interview data.

Nevertheless, methodological challenges emerged. Reliance on self-reported data in interviews and journals carries risks of subjectivity, such as social desirability bias or selective recall. Future research should triangulate self-report with objective digital tracking or observational measures. Furthermore, while the 12-week intervention produced significant comprehension gains, long-term retention and transfer remain untested. Longitudinal designs extending beyond one semester would provide stronger evidence of sustained comprehension development.

5.5.3 Pedagogical Implications

The findings yield clear pedagogical guidance for teachers, curriculum developers, and policymakers in EFL contexts with limited input. Digital graded audiobooks, when integrated systematically, provide learners with accessible and engaging listening input that is both linguistically manageable and pedagogically rich.

First, teachers should incorporate graded audiobooks into listening curricula to supply controlled, meaningful input aligned with students' proficiency levels. By presenting vocabulary and grammar in simplified yet authentic narrative contexts, audiobooks provide comprehensible input that fosters comprehension without overwhelming learners. Carefully selected audiobooks tailored to learner interests and CEFR levels also enhance motivation, ensuring that listening remains both achievable and enjoyable.

Second, the study underscores the importance of a blended approach combining in-class scaffolding with out-of-class practice. Classroom activities such as pre-listening vocabulary previews, guided predictions, and post-listening discussions prepare

learners for successful engagement with audiobooks, reducing anxiety and promoting comprehension. Once equipped with strategies, learners can then engage in autonomous out-of-class listening, where audiobook features such as playback control, segmentation, and synchronized text allow for adaptive practice. This combination reflects the principle that guided support is essential before learners can successfully transition into independent listening in low-input contexts.

Third, the findings highlight the value of explicit listening strategy instruction. Teachers should train learners to use prediction, monitoring, note-taking, and reflective journaling as part of audiobook engagement. Such strategies help students become active listeners who can manage comprehension difficulties, draw inferences, and consolidate learning. Journals in particular encourage students to reflect on vocabulary and linguistic patterns, thereby deepening comprehension and reinforcing long-term retention.

Fourth, fostering a supportive and low-anxiety learning environment is critical. Audiobook features such as adjustable playback speed and synchronized text reduced the affective filter, making input more accessible. Teachers should build on this by encouraging risk-taking, validating partial comprehension, and emphasizing progress rather than perfection. A positive classroom climate amplifies the benefits of digital graded audiobooks by reinforcing learners' confidence in their ability to comprehend spoken English.

Finally, curriculum designers and policymakers should embed graded audiobooks within extensive listening frameworks that provide varied genres, culturally relevant themes, and learner choice. Offering a range of audiobook options ensures sustained engagement while exposing learners to diverse linguistic and cultural input. In doing so, curricula can provide systematic exposure to authentic English within controlled parameters, bridging the gap between classroom instruction and real-world listening demands.

5.6 Limitations and Recommendations for Future Research

This study, while yielding valuable insights into the use of digital graded audiobooks for listening comprehension, is subject to several limitations that should be addressed in future research.

First, the study was conducted with a relatively small sample of 74 participants drawn from a single rural university in northeastern Thailand. This narrow demographic profile restricts the generalizability of findings to wider populations. The results therefore reflect the experiences of learners within a specific educational and cultural context, which may differ significantly from those in urban universities, private institutions, or international settings where resources and exposure to English are more abundant. To strengthen external validity, future studies should employ larger and more diverse participant pools, encompassing learners from multiple institutions, regions, and socio-economic backgrounds. Comparative cross-regional or cross-national studies could also provide valuable insights into how contextual variables influence the effectiveness of digital graded audiobooks, thereby generating recommendations applicable across varied EFL contexts.

Second, the intervention spanned only twelve weeks, a relatively short duration to capture the full trajectory of listening comprehension development. While short-term gains were evident, it remains unclear whether these improvements would persist, diminish, or evolve with prolonged exposure. Listening comprehension, particularly at beginner levels, requires consistent reinforcement over extended periods to ensure retention and transfer. Future research should therefore adopt longitudinal designs, extending over an academic year or more, to track developmental patterns and the durability of comprehension gains. Multiple testing phases and delayed follow-ups would further illuminate the sustainability of audiobook-based interventions and provide evidence for optimal program length.

Third, the qualitative data relied primarily on self-reported instruments, including semi-structured interviews and reflective journals. Although these tools provided valuable learner perspectives, they are vulnerable to biases such as selective recall or social desirability, where learners may present themselves more positively to satisfy perceived expectations. To enhance validity, future research should employ

methodological triangulation by incorporating additional data sources. Possible approaches include classroom observations, teacher interviews, peer evaluations, and automated logs of audiobook engagement. Anonymous surveys or diary studies designed to reduce social desirability bias could also strengthen the authenticity of learner-reported experiences.

Fourth, the study was limited to Starter (A1) and Level 1 (A2) graded audiobooks, which matched participants' proficiency levels but did not allow for investigation of higher-level materials. This restriction constrains understanding of how audiobook use influences learners at intermediate or advanced stages, nor does it address how learners progress through increasing levels of linguistic and cognitive complexity. Future studies should therefore examine a wider range of graded audiobook levels, including B1 and above, to capture the learning trajectories of students as they advance. Such research could also investigate how scaffolding strategies must adapt to support learners transitioning between proficiency levels.

Another limitation concerns the narrow range of genres and accents used in the audiobook materials. The audiobooks primarily consisted of narrative stories with British or neutral accents. While effective for structured comprehension practice, this lack of diversity restricts exposure to the broader range of listening demands learners will encounter in authentic communication, such as dialogues, interviews, news reports, or workplace discourse. Accent diversity was similarly limited, leaving learners less prepared for exposure to American, Australian, or non-native English varieties. Future research should explore the effects of genre and accent variation on listening comprehension and learner motivation. Such investigations would provide evidence for designing more inclusive listening programs that better prepare students for the realities of global communication.

In addition, the study employed traditional testing instruments and qualitative interviews without utilizing advanced technological tools that could yield richer data on comprehension processes. Tools such as eye-tracking, speech analytics, or automated digital logs offer opportunities to capture more precise evidence of learner engagement, attention, and processing strategies. For example, eye-tracking can reveal how learners interact with synchronized text, while automated platform logs

can provide objective measures of playback adjustments, repetition frequency, and time spent on tasks. Incorporating such tools would improve both the accuracy and the depth of data collection, complementing traditional methods.

Finally, the study did not assess the long-term retention of comprehension skills or their transfer to real-life listening situations beyond the classroom. Without follow-up data, it is difficult to determine whether gains achieved through audiobook practice extend to spontaneous communication, academic performance, or professional contexts. Future studies should therefore include delayed post-tests and authentic listening tasks to examine the transferability of comprehension gains. Measuring learners' ability to apply listening strategies and understanding in real-world settings would provide stronger evidence for the practical value of digital graded audiobooks.

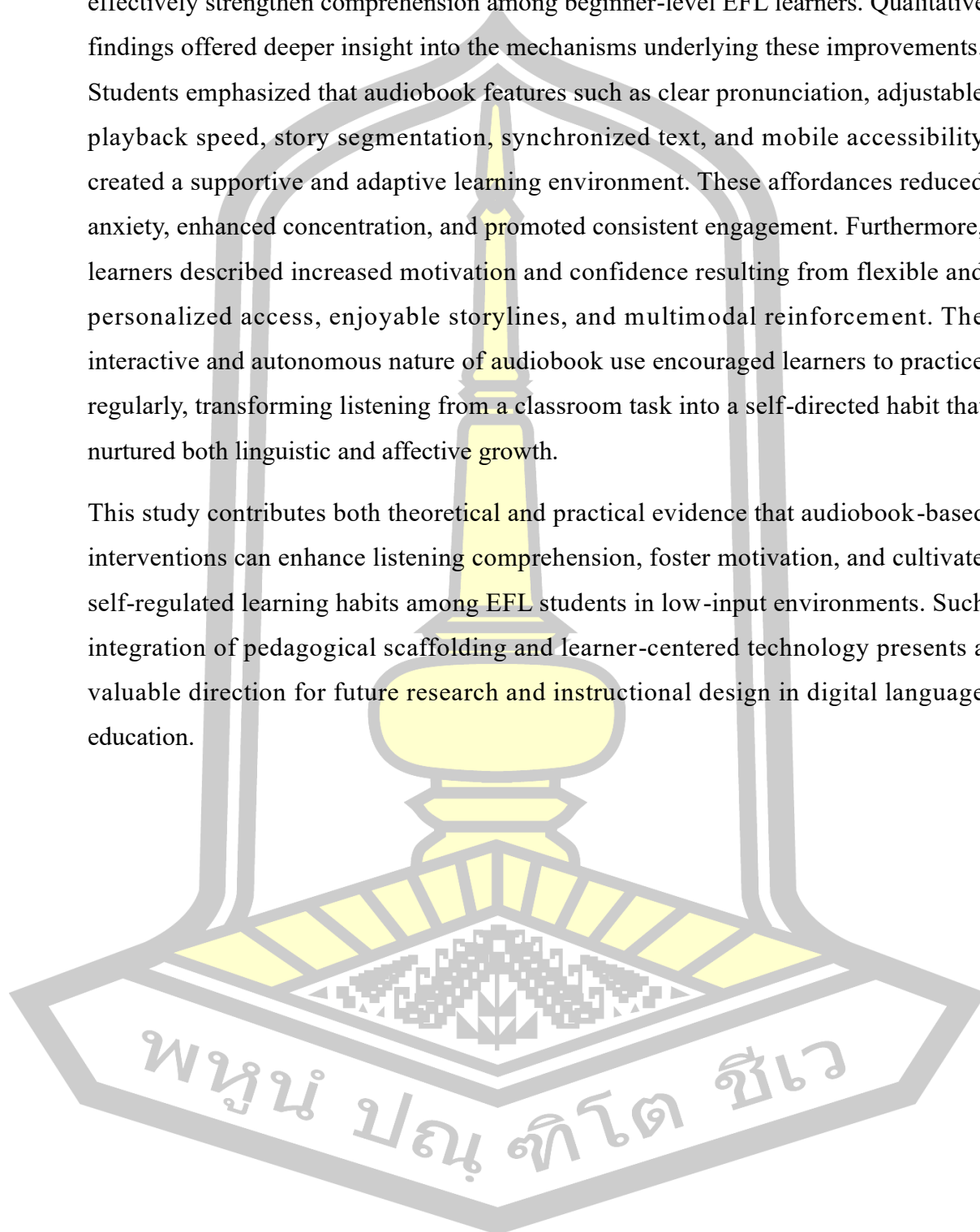
In sum, although the present study demonstrates the effectiveness of digital graded audiobooks in enhancing listening comprehension for low-proficiency EFL learners, future research should expand the scope by including larger and more diverse samples, adopting longitudinal designs, triangulating data sources, exploring higher proficiency levels, diversifying audiobook genres and accents, and leveraging advanced technological tools. Such extensions would deepen theoretical understanding, refine methodological practices, and ensure more robust and generalizable pedagogical recommendations.

5.7 Conclusion

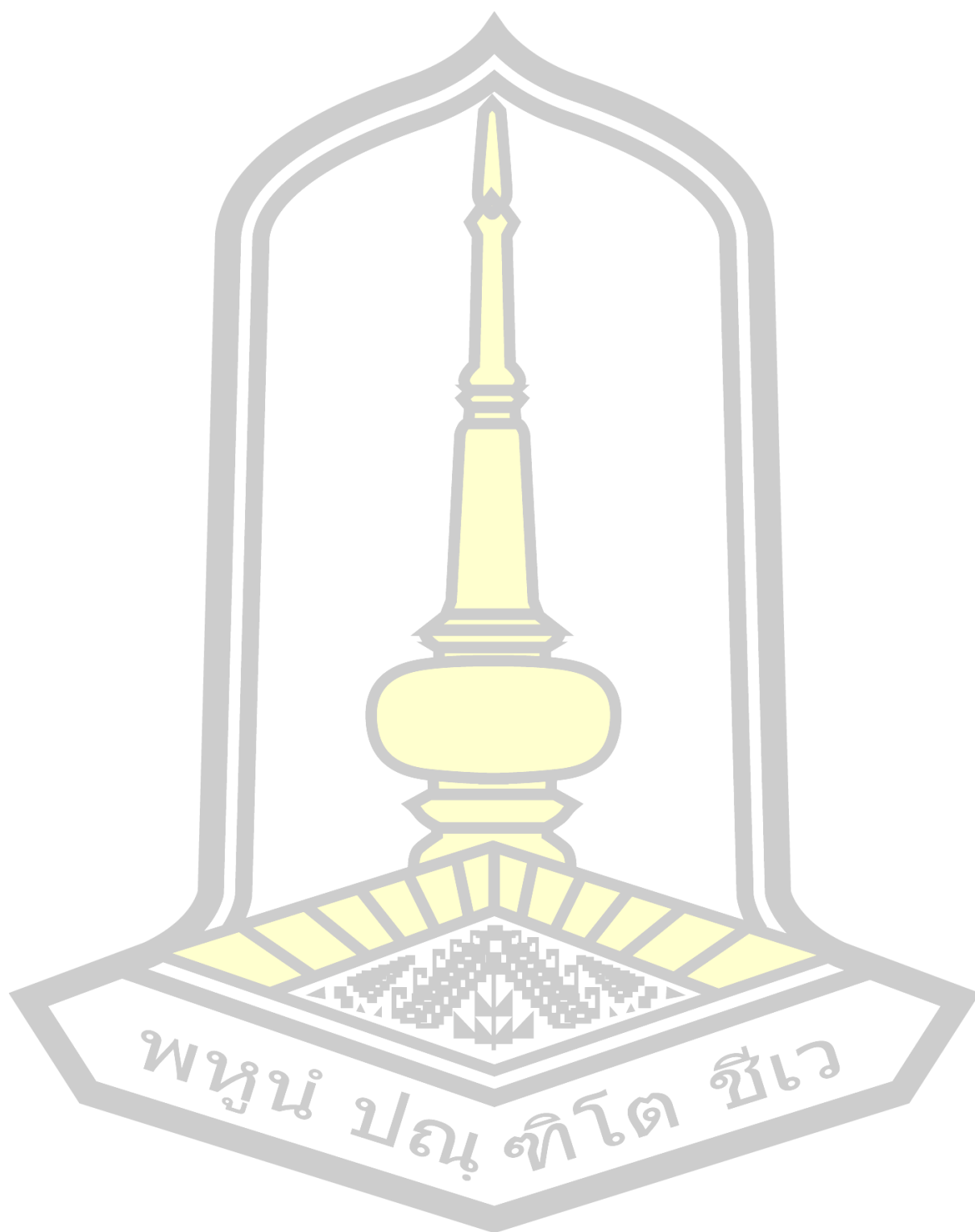
This study investigated the effects of digital graded audiobooks on the listening comprehension of low-proficiency Thai EFL undergraduate students, while also exploring learners' perceptions of using these audiobooks within an extensive listening framework. Employing a mixed-methods design that combined quantitative pretest–posttest assessments with qualitative interviews and reflective journals, the research provided a comprehensive account of how audiobook-based interventions support listening development in a low-input educational context. Quantitative findings revealed significant improvements in the experimental group's listening comprehension compared with the control group. Learners demonstrated enhanced ability to identify main ideas, follow narrative sequences, and extract supporting details from spoken texts. These results indicate that when integrated with scaffolded

in-class activities and extended out-of-class practice, digital graded audiobooks can effectively strengthen comprehension among beginner-level EFL learners. Qualitative findings offered deeper insight into the mechanisms underlying these improvements. Students emphasized that audiobook features such as clear pronunciation, adjustable playback speed, story segmentation, synchronized text, and mobile accessibility created a supportive and adaptive learning environment. These affordances reduced anxiety, enhanced concentration, and promoted consistent engagement. Furthermore, learners described increased motivation and confidence resulting from flexible and personalized access, enjoyable storylines, and multimodal reinforcement. The interactive and autonomous nature of audiobook use encouraged learners to practice regularly, transforming listening from a classroom task into a self-directed habit that nurtured both linguistic and affective growth.

This study contributes both theoretical and practical evidence that audiobook-based interventions can enhance listening comprehension, foster motivation, and cultivate self-regulated learning habits among EFL students in low-input environments. Such integration of pedagogical scaffolding and learner-centered technology presents a valuable direction for future research and instructional design in digital language education.



REFERENCES



REFERENCES

- Aljaafreh, A., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal*, 78(4), 465–483. <https://doi.org/10.1111/j.1540-4781.1994.tb02064.x>
- Al-Jarf, R. (2021). Mobile audiobooks and EFL college students' listening comprehension. *Journal of Education and e-Learning Research*, 8(1), 20–28. <https://doi.org/10.20448/journal.509.2021.81.20.28>
- Anderson, J. R. (2010). *Cognitive psychology and its implications* (7th ed.). Worth Publishers.
- Anderson, R. C. (1984). Role of the reader's schema in comprehension, learning, and memory. In R. C. Anderson, J. Osborn, & R. J. Tierney (Eds.), *Learning to read in American schools: Basal readers and content texts* (pp. 243–257). Lawrence Erlbaum Associates.
- Anderson, A., & Lynch, T. (1988). *Listening*. Oxford University Press.
- Bachman, L. F., & Palmer, A. S. (2010). *Language assessment in practice: Developing language assessments and justifying their use in the real world*. Oxford University Press.
- Baddeley, A. (2003). Working memory: Looking back and looking forward. *Nature Reviews Neuroscience*, 4(10), 829–839. <https://doi.org/10.1038/nrn1201>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- Bauer, L., & Nation, P. (1993). Word families. *International Journal of Lexicography*, 6(4), 253–279. <https://doi.org/10.1093/ijl/6.4.253>
- Benson, P. (2011). *Teaching and researching autonomy* (2nd ed.). Pearson Education.
- Bodie, G. D., Vickery, A. J., Cannava, K., & Jones, S. M. (2015). The role of "active listening" in informal helping conversations: Impact on perceptions of listener helpfulness, sensitivity, and supportiveness and discloser emotional improvement. *Western Journal of Communication*, 79(2), 151–173. <https://doi.org/10.1080/10570314.2014.943429>
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school*. National Academy Press.

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brown, H. D. (2004). *Language assessment: Principles and classroom practices*. Pearson Education.
- Brown, H. D. (2014). *Principles of language learning and teaching* (6th ed.). Pearson Education.
- Brown, H. D., & Abeywickrama, P. (2010). *Language assessment: Principles and classroom practices* (2nd ed.). Pearson Education.
- 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.
- Brownell, J. (2012). *Listening: Attitudes, principles, and skills* (5th ed.). Pearson.
- Buck, G. (2001). *Assessing listening*. Cambridge University Press.
- Burston, J. (2013). Mobile-assisted language learning: A selected annotated bibliography of implementation studies 1994–2012. *Language Learning & Technology*, 17(3), 157–224.
- Burston, J. (2015). Twenty years of MALL project implementation: A meta-analysis of learning outcomes. *ReCALL*, 27(1), 4–20. <https://doi.org/10.1017/S0958344014000159>
- Carlisle, R. D., & Katz, A. (2006). Effects of word and fragment writing during L2 vocabulary learning. *Language Learning*, 56(4), 569–597. <https://doi.org/10.1111/j.1467-9922.2006.00389.x>
- Carrell, P. L., & Eisterhold, J. C. (1983). Schema theory and ESL reading pedagogy. *TESOL Quarterly*, 17(4), 553–573. <https://doi.org/10.2307/3586613>
- Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. *Psychological Bulletin*, 132(3), 354–380. <https://doi.org/10.1037/0033-2909.132.3.354>
- Chaiyanara, M., & Puttinaovarat, S. (2016). *Factors influencing Thai university students' engagement with extensive listening programs* [Unpublished master's thesis]. Kasetsart University.

- Chandler, P., & Sweller, J. (1991). Cognitive load theory and the format of instruction. *Cognition and Instruction*, 8(4), 293–332. https://doi.org/10.1207/s1532690xci0804_2
- Chang, A. C.-S. (2009). Gains to L2 listeners from reading while listening vs. listening only in comprehending short stories. *System*, 37(4), 652–663. <https://doi.org/10.1016/j.system.2009.09.009>
- Chang, A. C.-S. (2011). The effect of reading while listening to audiobooks: Listening fluency and vocabulary gain. *Asian Journal of English Language Teaching*, 21, 43–64.
- Chang, A. C.-S., & Millett, S. (2014). The effect of extensive listening on developing L2 listening fluency: Some hard evidence. *ELT Journal*, 68(1), 31–40. <https://doi.org/10.1093/elt/cct052>
- Chang, A. C.-S., & Millett, S. (2015). Improving reading rates and comprehension through audio-assisted extensive reading for beginner learners. *System*, 52, 91–102. <https://doi.org/10.1016/j.system.2015.05.003>
- Chapelle, C. A. (2001). *Computer applications in second language acquisition*. Cambridge University Press.
- Chapelle, C. A., & Jamieson, J. (2008). *Tips for teaching with CALL: Practical approaches to computer-assisted language learning*. Pearson Education.
- Chapelle, C. A., & Sauro, S. (2017). *The handbook of technology and second language teaching and learning*. Wiley-Blackwell.
- Chwo, G. S. M., Marek, M. W., & Wu, W.-C. V. (2018). Meta-analysis of MALL research and design. *System*, 74, 62–72. <https://doi.org/10.1016/j.system.2018.02.009>
- Chutisilp, S., & Ratanapinyowong, N. (2022). Thai EFL learners' perceptions of teacher-guided instruction in extensive reading programs. *LEARN Journal*, 15(1), 123–145.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Houghton Mifflin.

- Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment*. Cambridge University Press.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Danan, M. (2004). Captioning and subtitling: Undervalued language learning strategies. *Meta*, 49(1), 67–77. <https://doi.org/10.7202/009021ar>
- Darasawang, P., & Watson Todd, R. (2012). The effect of policy on English language teaching at secondary schools in Thailand. In E. L. Low & A. Hashim (Eds.), *English in Southeast Asia: Features, policy and language in use* (pp. 207–220). John Benjamins.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Day, R. R., & Bamford, J. (1998). *Extensive reading in the second language classroom*. Cambridge University Press.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- DeKeyser, R. M. (2001). Automaticity and automatization. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 125–151). Cambridge University Press.
- Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge University Press.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.
- Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Pearson Education.

- Duangstri, S. (2015). *Factors influencing Thai university students' engagement with extensive listening programs* [Unpublished doctoral dissertation]. Chulalongkorn University.
- Duman, G., Orhon, G., & Gedik, N. (2015). Research trends in mobile assisted language learning from 2000 to 2012. *ReCALL*, 27(2), 197–216. <https://doi.org/10.1017/S0958344014000287>
- Egbert, J., Paulus, T. M., & Nakamichi, Y. (2002). The impact of CALL instruction on classroom computer use: A foundation for rethinking technology in teacher education. *Language Learning & Technology*, 6(3), 108–126.
- Ellis, R. (2001). *Introduction to applied linguistics*. Oxford University Press.
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.
- Ellis, R. (2005). *Principles of instructed language acquisition*. *System*, 33(2), 209–224. <https://doi.org/10.1016/j.system.2004.12.006>
- Ellis, R. (2015). *Understanding second language acquisition* (2nd ed.). Oxford University Press.
- Esteves, K. J., & Whitten, C. (2011). Helping students become more self-directed learners: A critical theory approach. *Community College Journal of Research and Practice*, 35(7), 559–574. <https://doi.org/10.1080/10668926.2011.567169>
- Faramarzi, S., Elekaei, A., & Tabrizi, H. H. (2019). Using digital stories to enhance EFL learners' speaking proficiency and motivation. *Computer Assisted Language Learning Electronic Journal*, 20(2), 20–40.
- Farrell, T. S. C. (2013). *Reflective practice in ESL teacher development groups: From practices to principles*. Palgrave Macmillan.
- Field, J. (2008). *Listening in the language classroom*. Cambridge University Press.
- Flowerdew, J., & Miller, L. (2005). *Second language listening: Theory and practice*. Cambridge University Press.
- Foley, J. A. (2005). English in Thailand. *RELC Journal*, 36(2), 223–234. <https://doi.org/10.1177/0033688205055578>
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2021). *How to design and evaluate research in education* (10th ed.). McGraw-Hill.

- Fulcher, G., & Davidson, F. (2007). *Language testing and assessment: An advanced resource book*. Routledge.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). Pearson Education.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. Edward Arnold.
- Gass, S. M. (1997). *Input, interaction, and the second language learner*. Lawrence Erlbaum Associates.
- Geertz, C. (1973). *The interpretation of cultures*. Basic Books.
- Gilakjani, A. P., & Ahmadi, M. R. (2011). A study of factors affecting EFL learners' English listening comprehension and the strategies for improvement. *Journal of Language Teaching and Research*, 2(5), 977–988. <https://doi.org/10.4304/jltr.2.5.977-988>
- Gilmore, A. (2007). Authentic materials and authenticity in foreign language learning. *Language Teaching*, 40(2), 97–118. <https://doi.org/10.1017/S0261444807004144>
- Godwin-Jones, R. (2011). Emerging technologies: Mobile apps for language learning. *Language Learning & Technology*, 15(2), 2–11.
- Godwin-Jones, R. (2017). Smartphones and language learning. *Language Learning & Technology*, 21(2), 3–17.
- Godwin-Jones, R. (2018). Second language writing online: An update. *Language Learning & Technology*, 22(1), 1–15.
- Goh, C. C. M. (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. C. M. (2008). Metacognitive instruction for second language listening development: Theory, practice and research implications. *RELJ Journal*, 39(2), 188–213. <https://doi.org/10.1177/0033688208092184>
- Goleman, D. (1998). *Working with emotional intelligence*. Bantam Books.
- Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Cambridge University Press.

- 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., & Macaro, E. (2008). Strategy instruction in listening for lower-intermediate learners of French. *Language Learning*, 58(4), 747–783. <https://doi.org/10.1111/j.1467-9922.2008.00478.x>
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255–274. <https://doi.org/10.3102/01623737011003255>
- Grellet, F. (1981). *Developing reading skills: A practical guide to reading comprehension exercises*. Cambridge University Press.
- Griffiths, R. (1992). Speech rate and listening comprehension: Further evidence of the relationship. *TESOL Quarterly*, 26(2), 385–390. <https://doi.org/10.2307/3587015>
- Harding, L. (2012). Accent, listening assessment and the potential for a shared-L1 advantage: A DIF perspective. *Language Testing*, 29(2), 163–180. <https://doi.org/10.1177/0265532211421161>
- Hargie, O. (2011). *Skilled interpersonal communication: Research, theory and practice* (5th ed.). Routledge.
- Hamouda, A. (2013). An investigation of listening comprehension problems encountered by Saudi students in the EL listening classroom. *International Journal of Academic Research in Progressive Education and Development*, 2(2), 113–155.
- Helgesen, M. (2003). Listening. In D. Nunan (Ed.), *Practical English language teaching* (pp. 24–46). McGraw-Hill.
- Hill, D. R. (2008). Graded readers in English. *ELT Journal*, 62(2), 184–204. <https://doi.org/10.1093/elt/ccn011>
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). SAGE Publications.
- Hsu, H.-H. (2013). The acceptance of Moodle: An empirical study based on UTAUT. *Creative Education*, 4(12), 44–46. <https://doi.org/10.4236/ce.2013.412A2007>

- Hubbard, P. (2013). Making a case for learner training in technology enhanced language learning environments. *CALICO Journal*, 30(2), 163–178. <https://doi.org/10.11139/cj.30.2.163-178>
- Hughes, A. (2003). *Testing for language teachers* (2nd ed.). Cambridge University Press.
- Hulstijn, J. H., Hollander, M., & Greidanus, T. (1996). Incidental vocabulary learning by advanced foreign language students: The influence of marginal glosses, dictionary use, and reoccurrence of unknown words. *The Modern Language Journal*, 80(3), 327–339. <https://doi.org/10.1111/j.1540-4781.1996.tb01614.x>
- Jantasode, W., & Ruangjaroon, S. (2025). *The effects of ESL podcasts on Thai low-proficiency university students' listening comprehension* [Unpublished master's thesis]. Thammasat University.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14–26. <https://doi.org/10.3102/0013189X033007014>
- Kampiranon, S. (2021). *Implementation challenges of extensive listening programs in Thai universities* [Unpublished doctoral dissertation]. Mahidol University.
- Kartal, G., & Simsek, M. R. (2017). The effects of audiobooks on EFL learners' reading comprehension. *International Journal of Linguistics*, 9(4), 87–100. <https://doi.org/10.5296/ijl.v9i4.11614>
- Khamkhien, A. (2010). Teaching English speaking and English speaking tests in the Thai context: A reflection from Thai perspective. *English Language Teaching*, 3(1), 184–190. <https://doi.org/10.5539/elt.v3n1p184>
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). Guilford Press.
- Kochkorova, M. (2025). Innovative approaches to teaching listening skills in English language classrooms. *Journal of Language and Linguistic Studies*, 21(1), 45–62.
- Komin, S. (1990). *Psychology of the Thai people: Values and behavioral patterns*. National Institute of Development Administration.
- Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press.

- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Longman.
- Krashen, S. D. (2004). *The power of reading: Insights from the research* (2nd ed.). Libraries Unlimited.
- Krashen, S. D., & Terrell, T. D. (1983). *The natural approach: Language acquisition in the classroom*. Pergamon Press.
- Kukulska-Hulme, A. (2013). Mobile-assisted language learning. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics* (pp. 3701–3709). Wiley-Blackwell.
- Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20(3), 271–289. <https://doi.org/10.1017/S0958344008000335>
- Kulakhmetova, A., & Daulbaeva, A. (2024). Digital tools for enhancing listening comprehension in EFL contexts. *International Journal of Educational Technology*, 18(2), 112–130.
- LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6(2), 293–323. [https://doi.org/10.1016/0010-0285\(74\)90015-2](https://doi.org/10.1016/0010-0285(74)90015-2)
- Lam, W. S. E. (2000). L2 literacy and the design of the self: A case study of a teenager writing on the Internet. *TESOL Quarterly*, 34(3), 457–482. <https://doi.org/10.2307/3587739>
- Lantolf, J. P. (2000). Introducing sociocultural theory. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 1–26). Oxford University Press.
- Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford University Press.
- Laohajatsang, T. (2017). *Mobile-assisted language learning adoption among Thai university students* [Unpublished doctoral dissertation]. Chulalongkorn University.
- Larsen-Freeman, D., & Anderson, M. (2013). *Techniques and principles in language teaching* (3rd ed.). Oxford University Press.

- Laufer, B., & Hill, M. (2000). What lexical information do L2 learners select in a CALL dictionary and how does it affect word retention? *Language Learning & Technology*, 3(2), 58–76.
- Leahy, W., & Sweller, J. (2011). Cognitive load theory, modality of presentation and the transient information effect. *Applied Cognitive Psychology*, 25(6), 943–951. <https://doi.org/10.1002/acp.1787>
- Levy, M. (2009). Technologies in use for second language learning. *The Modern Language Journal*, 93(s1), 769–782. <https://doi.org/10.1111/j.1540-4781.2009.00972.x>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.
- Little, D. (2007). Language learner autonomy: Some fundamental considerations revisited. *International Journal of Innovation in Language Learning and Teaching*, 1(1), 14–29. <https://doi.org/10.2167/illt040.0>
- Lynch, T. (2009). *Teaching second language listening*. Oxford University Press.
- Lynch, T. (2017). *Listening: Questions of level*. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (Vol. 3, pp. 62–79). Routledge.
- Macaro, E., Handley, Z., & Walter, C. (2018). A systematic review of CALL in English as a second language: Focus on primary and secondary education. *Language Teaching*, 45(1), 1–43. <https://doi.org/10.1017/S0261444811000395>
- Malmqvist, J., Hellberg, K., Möllås, G., Rose, R., & Shevlin, M. (2019). Conducting the pilot study: A neglected part of the research process? Methodological findings supporting the importance of piloting in qualitative research studies. *International Journal of Qualitative Methods*, 18, 1–11. <https://doi.org/10.1177/1609406919878341>
- Mandarsari, D. (2023). Enhancing listening skills through digital resources in EFL settings. *Journal of Applied Linguistics and Education*, 12(3), 78–95.
- Mashudi, E., Toharudin, M., & Rusdi, A. (2022). Digital storytelling for improving students' language skills. *Journal of Language Education and Research*, 8(2), 145–162.
- Mayer, R. E. (2001). *Multimedia learning*. Cambridge University Press.
- Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.

- Mayer, R. E. (2014). *The Cambridge handbook of multimedia learning* (2nd ed.). Cambridge University Press.
- Mayer, R. E., & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational Psychologist*, 38(1), 43–52. https://doi.org/10.1207/S15326985EP3801_6
- Mayora, C. A. (2017). Extensive listening in a Colombian university: Process, product, and perceptions. *How*, 24(1), 101–121. <https://doi.org/10.19183/how.24.1.311>
- McDonough, K. (2005). Identifying the impact of negative feedback and learners' responses on ESL question development. *Studies in Second Language Acquisition*, 27(1), 79–103. <https://doi.org/10.1017/S0272263105050047>
- McLaughlin, B. (1987). *Theories of second-language learning*. Edward Arnold.
- Mendelsohn, D. J. (1994). *Learning to listen: A strategy-based approach for the second-language learner*. Dominie Press.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). SAGE Publications.
- Milliner, B. (2017). The impact of audio delivery on perceived reading gains from extensive reading. *Reading in a Foreign Language*, 29(2), 217–231.
- Milliner, B. (2020). Using graded readers with audio support to improve English learners' reading fluency. *Reading Matrix*, 20(1), 110–122.
- Montero Perez, M., Van Den Noortgate, W., & Desmet, P. (2014). Captioned video for L2 listening and vocabulary learning: A meta-analysis. *System*, 41, 720–739. <https://doi.org/10.1016/j.system.2013.10.010>
- Mueangklan, T., & Chinwonno, A. (2022). Thai EFL learners' perceptions of digital reading materials with audio support. *LEARN Journal*, 15(2), 89–108.
- Nadig, A. (2013). *Listening comprehension*. In F. R. Volkmar (Ed.), *Encyclopedia of autism spectrum disorders* (pp. 1743–1745). Springer.
- Nakata, T. (2011). Computer-assisted second language vocabulary learning in a paired-associate paradigm: A critical investigation of flashcard software.

- Computer Assisted Language Learning*, 24(1), 17–38.
<https://doi.org/10.1080/09588221.2010.520675>
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- 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. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press.
- Nation, I. S. P., & Deweerdt, J.-P. (2001). A defence of simplification. *Prospect*, 16(3), 55–67.
- Nation, I. S. P., & Newton, J. (2008). *Teaching ESL/EFL listening and speaking*. Routledge.
- Nation, I. S. P., & Newton, J. (2009). *Teaching ESL/EFL listening and speaking*. Routledge.
- Nguyen, P. M., Terlouw, C., & Pilot, A. (2009). Culturally appropriate pedagogy: The case of group learning in a Confucian Heritage Culture context. *Intercultural Education*, 17(1), 1–19. <https://doi.org/10.1080/14675980500502172>
- Noom-ura, S. (2013). English-teaching problems in Thailand and Thai teachers' professional development needs. *English Language Teaching*, 6(11), 139–147.
<https://doi.org/10.5539/elt.v6n11p139>
- Norton, B., & McKinney, C. (2011). An identity approach to second language acquisition. In D. Atkinson (Ed.), *Alternative approaches to second language acquisition* (pp. 73–94). Routledge.
- Nunan, D. (1998). Teaching grammar in context. *ELT Journal*, 52(2), 101–109.
<https://doi.org/10.1093/elt/52.2.101>
- Nunan, D. (2001). *Designing tasks for the communicative classroom*. Cambridge University Press.
- Nunan, D. (2003). *Practical English language teaching*. McGraw-Hill.
- Oxford, R. L. (1993). Research update on teaching L2 listening. *System*, 21(2), 205–211. [https://doi.org/10.1016/0346-251X\(93\)90042-F](https://doi.org/10.1016/0346-251X(93)90042-F)

- Oxford, R. L. (2003). *Language learning styles and strategies: An overview*. *GALA*, 1–25.
- Paas, F., Renkl, A., & Sweller, J. (2003). Cognitive load theory and instructional design: Recent developments. *Educational Psychologist*, 38(1), 1–4. https://doi.org/10.1207/S15326985EP3801_1
- Paas, F., & van Merriënboer, J. J. G. (1994). Variability of worked examples and transfer of geometrical problem-solving skills: A cognitive-load approach. *Journal of Educational Psychology*, 86(1), 122–133. <https://doi.org/10.1037/0022-0663.86.1.122>
- Pagram, J., & Pagram, P. (2006). Issues in e-learning: A Thai case study. *Electronic Journal of Information Systems in Developing Countries*, 26(1), 1–8. <https://doi.org/10.1002/j.1681-4835.2006.tb00180.x>
- Paivio, A. (1971). *Imagery and verbal processes*. Holt, Rinehart, and Winston.
- Paivio, A. (1986). *Mental representations: A dual coding approach*. Oxford University Press.
- Paivio, A. (1991). *Dual coding theory: Retrospect and current status*. *Canadian Journal of Psychology*, 45(3), 255–287. <https://doi.org/10.1037/h0084295>
- Paivio, A. (2007). *Mind and its evolution: A dual coding theoretical approach*. Lawrence Erlbaum Associates.
- Panyawong, N., & Panyawong, S. (2019). Mobile-assisted language learning in Thai universities: Current state and future directions. *Journal of Educational Technology in Thailand*, 12(1), 34–51.
- Park, S. Y. (2009). An analysis of the technology acceptance model in understanding university students' behavioral intention to use e-learning. *Educational Technology & Society*, 12(3), 150–162.
- Park, Y. (2016). 8 Digital literacy and privacy for the quantified self. *Big Data & Society*, 3(1), 1–2. <https://doi.org/10.1177/2053951716650211>
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE Publications.
- Phanthavong, S., & Hoshino, Y. (2017). Extensive listening combined with shadowing for Thai high school students. *PASAA: A Journal of Language Teaching and Learning*, 53, 130–156.

- Phetdaen, N. (2020). Thai learners' perceptions of technology use in language learning. *Journal of Language and Culture*, 39(2), 67–84.
- Plass, J. L., Chun, D. M., Mayer, R. E., & Leutner, D. (2003). Cognitive load in reading a foreign language text with multimedia aids and the influence of verbal and spatial abilities. *Computers in Human Behavior*, 19(2), 221–243. [https://doi.org/10.1016/S0747-5632\(02\)00015-8](https://doi.org/10.1016/S0747-5632(02)00015-8)
- Plass, J. L., & Jones, L. C. (2005). Multimedia learning in second language acquisition. In R. E. Mayer (Ed.), *The Cambridge handbook of multimedia learning* (pp. 467–488). Cambridge University Press.
- Prapphal, K. (2008). Issues and trends in language testing and assessment in Thailand. *Language Testing*, 25(1), 127–143. <https://doi.org/10.1177/0265532207083748>
- Pressley, M., & Afflerbach, P. (1995). *Verbal protocols of reading: The nature of constructively responsive reading*. Lawrence Erlbaum Associates.
- Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., Griffey, R., & Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(2), 65–76. <https://doi.org/10.1007/s10488-010-0319-7>
- Purdy, M. (1997). What is listening? In M. Purdy & D. Borisoff (Eds.), *Listening in everyday life: A personal and professional approach* (2nd ed., pp. 1–20). University Press of America.
- Rahimi, M., & Miri, S. S. (2014). The impact of mobile dictionary use on language learning. *Procedia - Social and Behavioral Sciences*, 98, 1469–1474. <https://doi.org/10.1016/j.sbspro.2014.03.567>
- Reinhardt, J., & Zander, V. (2011). Social networking in an intensive English program classroom: A language socialization perspective. *CALICO Journal*, 28(2), 326–344. <https://doi.org/10.11139/cj.28.2.326-344>
- Renandya, W. A., & Farrell, T. S. C. (2011). 'Teacher, the tape is too fast!' Extensive listening in ELT. *ELT Journal*, 65(1), 52–59. <https://doi.org/10.1093/elt/ccq015>

- Renandya, W. A., & Jacobs, G. M. (2016). Extensive reading and listening in the L2 classroom. In W. A. Renandya & H. P. Widodo (Eds.), *English language teaching today* (pp. 97–110). Springer.
- Richards, J. C. (2015). *Key issues in language teaching*. Cambridge University Press.
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- Robinson, P. (1995). Attention, memory, and the "noticing" hypothesis. *Language Learning*, 45(2), 283–331. <https://doi.org/10.1111/j.1467-1770.1995.tb00441.x>
- Rodgers, M. P. H., & Webb, S. (2011). Narrow viewing: The vocabulary in related television programs. *TESOL Quarterly*, 45(4), 689–717. <https://doi.org/10.5054/tq.2011.268062>
- Rose, D. H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal design for learning*. Association for Supervision and Curriculum Development.
- Rost, M. (2011). *Teaching and researching listening* (2nd ed.). Pearson Education.
- Rubery, M. (2011). *Audiobooks, literature, and sound studies*. Routledge.
- Rubin, J. (1994). A review of second language listening comprehension research. *The Modern Language Journal*, 78(2), 199–221. <https://doi.org/10.1111/j.1540-4781.1994.tb02034.x>
- Rukthong, A. (2021). Extensive listening in Thai higher education: Implementation and outcomes. *REL C Journal*, 52(1), 118–132. <https://doi.org/10.1177/0033688219898562>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Sadoski, M. (2005). A dual coding view of vocabulary learning. *Reading & Writing Quarterly*, 21(3), 221–238. <https://doi.org/10.1080/10573560590949359>
- Sadoski, M., & Paivio, A. (2001). *Imagery and text: A dual coding theory of reading and writing*. Lawrence Erlbaum Associates.
- Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach to explaining

- teachers' adoption of digital technology in education. *Computers & Education*, 128, 13–35. <https://doi.org/10.1016/j.compedu.2018.09.009>
- 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>
- Schmidt, R. W. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 3–32). Cambridge University Press.
- Schmidt, R. W., & Frota, S. N. (1986). Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. In R. R. Day (Ed.), *Talking to learn: Conversation in second language acquisition* (pp. 237–326). Newbury House.
- Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), 329–363. <https://doi.org/10.1177/1362168808089921>
- Schmitt, N., & Meara, P. (1997). Researching vocabulary through a word knowledge framework: Word associations and verbal suffixes. *Studies in Second Language Acquisition*, 19(1), 17–36. <https://doi.org/10.1017/S02722263197001022>
- Schmitt, N., & Zimmerman, C. B. (2002). Derivative word forms: What do learners know? *TESOL Quarterly*, 36(2), 145–171. <https://doi.org/10.2307/3588328>
- Segalowitz, N. (2010). *Cognitive bases of second language fluency*. Routledge.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin.
- Sharwood Smith, M. (1993). Input enhancement in instructed SLA: Theoretical bases. *Studies in Second Language Acquisition*, 15(2), 165–179. <https://doi.org/10.1017/S02722263100011943>
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75. <https://doi.org/10.3233/EFI-2004-22201>
- Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research*, 78(1), 153–189. <https://doi.org/10.3102/0034654307313795>

- Sirisrimangkorn, L. (2018). *The effect of project-based learning and web-based learning on students' English learning* [Unpublished doctoral dissertation]. Kasetsart University.
- Siti, N. (2022). Young EFL learners' perceptions of the Erlangga Book Reader Application. *Indonesian Journal of Applied Linguistics*, 12(2), 345–358.
- Steel, C. (2012). Fitting learning into life: Language students' perspectives on benefits of using mobile apps. In M. Brown, M. Hartnett, & T. Stewart (Eds.), *Future challenges, sustainable futures: Proceedings of ASCILITE 2012* (pp. 875–880). ASCILITE.
- Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of the platform. *Language Learning & Technology*, 14(2), 95–110.
- Stockwell, G. (2013). Technology and motivation in English-language teaching and learning. In E. Ushioda (Ed.), *International perspectives on motivation: Language learning and professional challenges* (pp. 156–175). Palgrave Macmillan.
- Sukying, A. (2023). Thai university students' attitudes toward technology-enhanced language learning. *LEARN Journal*, 16(1), 78–95.
- Suwannoppharat, K., & Kaewsua, W. (2019). Technology adoption in English language teaching across Thai universities. *Journal of Educational Technology in Thailand*, 12(3), 112–135.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257–285. https://doi.org/10.1207/s15516709cog1202_4
- Sweller, J. (2010). Element interactivity and intrinsic, extraneous, and germane cognitive load. *Educational Psychology Review*, 22(2), 123–138. <https://doi.org/10.1007/s10648-010-9128-5>
- Sweller, J. (2011). Cognitive load theory. In J. P. Mestre & B. H. Ross (Eds.), *Psychology of learning and motivation* (Vol. 55, pp. 37–76). Academic Press.
- Sweller, J., van Merriënboer, J. J. G., & Paas, F. (1998). Cognitive architecture and instructional design. *Educational Psychology Review*, 10(3), 251–296. <https://doi.org/10.1023/A:1022193728205>
- Sweller, J., Ayres, P., & Kalyuga, S. (2011). *Cognitive load theory*. Springer.

- Taguchi, E., Gorsuch, G., & Mitamura, T. (2012). Development of second language listening fluency in English: How training affects performance in one-on-one listening tests. *System*, 40(2), 210–218. <https://doi.org/10.1016/j.system.2012.05.001>
- Tarhini, A., Hone, K., Liu, X., & Tarhini, T. (2017). Examining the moderating effect of individual-level cultural values on users' acceptance of e-learning in developing countries: A structural equation modeling of an extended technology acceptance model. *Interactive Learning Environments*, 25(3), 306–328. <https://doi.org/10.1080/10494820.2015.1122635>
- Tauroza, S., & Allison, D. (1990). Speech rates in British English. *Applied Linguistics*, 11(1), 90–105. <https://doi.org/10.1093/applin/11.1.90>
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. SAGE Publications.
- Teo, T. (2009). Modelling technology acceptance in education: A study of pre-service teachers. *Computers & Education*, 52(2), 302–312. <https://doi.org/10.1016/j.compedu.2008.08.006>
- Thanakit, S., & Pruksawan, N. (2021). Mobile applications for language learning in Thai contexts. *Journal of Educational Technology Research*, 14(2), 56–73.
- Thornbury, S. (2017). *Scott Thornbury's 30 language teaching methods*. Cambridge University Press.
- Thorne, S. L., Black, R. W., & Sykes, J. M. (2009). Second language use, socialization, and learning in Internet interest communities and online gaming. *The Modern Language Journal*, 93(s1), 802–821. <https://doi.org/10.1111/j.1540-4781.2009.00974.x>
- Thorndyke, P. W. (1977). Cognitive structures in comprehension and memory of narrative discourse. *Cognitive Psychology*, 9(1), 77–110. [https://doi.org/10.1016/0010-0285\(77\)90005-6](https://doi.org/10.1016/0010-0285(77)90005-6)
- Tomlin, R. S., & Villa, V. (1994). Attention in cognitive science and second language acquisition. *Studies in Second Language Acquisition*, 16(2), 183–203. <https://doi.org/10.1017/S0272263100012870>

- Tragant, E., Muñoz, C., & Spada, N. (2016). Maximizing young learners' input: An intervention program. *Canadian Modern Language Review*, 72(2), 234–257. <https://doi.org/10.3138/cmlr.2942>
- Underwood, M. (1989). *Teaching listening*. Longman.
- Ushioda, E. (2011). Motivating learners to speak as themselves. In G. Murray, X. Gao, & T. Lamb (Eds.), *Identity, motivation and autonomy in language learning* (pp. 11–24). Multilingual Matters.
- van den Broek, P., Rapp, D. N., & Kendeou, P. (2005). Integrating memory-based and constructionist processes in accounts of reading comprehension. *Discourse Processes*, 39(2–3), 299–316. <https://doi.org/10.1080/0163853X.2005.9651685>
- 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. (2007). Recent developments in second and foreign language listening comprehension research. *Language Teaching*, 40(3), 191–210. <https://doi.org/10.1017/S0261444807004338>
- Vandergrift, L., & Baker, S. C. (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. C. M. (2012). *Teaching and learning second language listening: Metacognition in action*. Routledge.
- VanPatten, B. (2004). Input processing in SLA. In B. VanPatten (Ed.), *Processing instruction: Theory, research, and commentary* (pp. 5–31). Lawrence Erlbaum Associates.
- Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences*, 39(2), 273–315. <https://doi.org/10.1111/j.1540-5915.2008.00192.x>
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>

- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412>
- Verbert, K., Manouselis, N., Xavier, O., Wolpers, M., Drachsler, H., Bosnic, I., & Duval, E. (2012). Context-aware recommender systems for learning: A survey and future challenges. *IEEE Transactions on Learning Technologies*, 5(4), 318–335. <https://doi.org/10.1109/TLT.2012.11>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.
- Wade, S. E., Trathen, W., & Schraw, G. (1999). An analysis of spontaneous study strategies. *Reading Research Quarterly*, 25(2), 147–166. <https://doi.org/10.2307/747863>
- Wannagat, U. (2017). *Extensive reading programs in Thai universities: Implementation challenges* [Unpublished master's thesis]. Prince of Songkla University.
- Waring, R. (2008). *Developing fluency with extensive reading* [Unpublished manuscript]. Notre Dame Seishin University.
- Waring, R. (2012). *The "what," "where," and "how" of extensive reading*. In C. Coombe, P. Davidson, B. O'Sullivan, & S. Stoyhoff (Eds.), *The Cambridge guide to second language assessment* (pp. 177–185). Cambridge University Press.
- Waring, R., & Takaki, M. (2003). At what rate do learners learn and retain new vocabulary from reading a graded reader? *Reading in a Foreign Language*, 15(2), 130–163.
- Warschauer, M. (1996). Computer-assisted language learning: An introduction. In S. Fotos (Ed.), *Multimedia language teaching* (pp. 3–20). Logos International.

- Warschauer, M. (1997). Computer-mediated collaborative learning: Theory and practice. *The Modern Language Journal*, 81(4), 470–481. <https://doi.org/10.1111/j.1540-4781.1997.tb05514.x>
- Warschauer, M. (2003). *Technology and social inclusion: Rethinking the digital divide*. MIT Press.
- Warschauer, M., & Kern, R. (Eds.). (2000). *Network-based language teaching: Concepts and practice*. Cambridge University Press.
- Webb, S. (2007). The effects of repetition on vocabulary knowledge. *Applied Linguistics*, 28(1), 46–65. <https://doi.org/10.1093/applin/aml048>
- Webb, S., & Chang, A. C.-S. (2012). Vocabulary learning through assisted and unassisted repeated reading. *Canadian Modern Language Review*, 68(3), 267–290. <https://doi.org/10.3138/cmlr.1204.1>
- Webb, S., & Chang, A. C.-S. (2015). How does prior word knowledge affect vocabulary learning progress in an extensive reading program? *Studies in Second Language Acquisition*, 37(4), 651–675. <https://doi.org/10.1017/S02722263114000606>
- Webb, S., & Nation, I. S. P. (2017). *How vocabulary is learned*. Oxford University Press.
- West, M. (1953). *A general service list of English words*. Longman.
- Wiersma, W., & Jurs, S. G. (2005). *Research methods in education: An introduction* (8th ed.). Pearson.
- Willis, D., & Willis, J. (2007). *Doing task-based teaching*. Oxford University Press.
- Wilson, M. (2008). The impact of multiple-choice tests versus open-ended questions on listening anxiety. *System*, 36(3), 442–456. <https://doi.org/10.1016/j.system.2008.02.003>
- Wiriyaichitra, A. (2002). English language teaching and learning in Thailand in this decade. *Thai TESOL Focus*, 15(1), 4–9.
- Wolfe, J., & Neuwirth, C. M. (2001). From the margins to the center: The future of annotation. *Journal of Business and Technical Communication*, 15(3), 333–371. <https://doi.org/10.1177/105065190101500304>
- Wolvin, A., & Coakley, C. G. (2019). *Listening* (5th ed.). McGraw-Hill.

- Wong, K. T. (2013). Understanding student teachers' behavioural intention to use technology: Technology acceptance model (TAM) validation and testing. *International Journal of Instruction*, 6(1), 89–104.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17(2), 89–100. <https://doi.org/10.1111/j.1469-7610.1976.tb00381.x>
- Yanguas, I. (2009). Multimedia glosses and their effect on L2 text comprehension and vocabulary learning. *Language Learning & Technology*, 13(2), 48–67.
- Yeh, Y., & Wang, C.-W. (2003). Effects of multimedia vocabulary annotations and learning styles on vocabulary learning. *CALICO Journal*, 21(1), 131–144. <https://doi.org/10.1558/cj.v21i1.131-144>
- Yonezawa, Y., Kurihara, H., & Durand, S. (2015). Graded reader CDs: Do students use them and do they help? *Extensive Reading in Japan*, 8(1), 2–7.
- Zhao, Y. (1997). The effects of listeners' control of speech rate on second language comprehension. *Applied Linguistics*, 18(1), 49–68. <https://doi.org/10.1093/applin/18.1.49>
- Zhao, Y. (2016). From technology integration to transformation: Using the SAMR model to think about and plan for technology uses in schools. In C. Dede, J. Richards, & B. Saxberg (Eds.), *Learning science: Theory, research, and practice* (pp. 128–147). SAGE Publications.
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press.
- Zou, D., Xie, H., & Wang, F. L. (2020). Future trends and research issues of technology-enhanced language learning: A technological perspective. *Knowledge Management & E-Learning*, 12(4), 478–503. <https://doi.org/10.34105/j.kmel.2020.12.025>

BIOGRAPHY

NAME	Davika Sakkampang
DATE OF BIRTH	6 November 1988
PLACE OF BIRTH	Sakon Nakhon, Thailand
ADDRESS	273 Moo 3 Tumbon Sawangdaengin Amphor Sawangdaengin Sakon Nakhon Thailand
POSITION	Lecturer
PLACE OF WORK	Rajamangala University of Technology Isan Sakon Nakhon Campus
EDUCATION	2010 B.A. (Business English) 2015 M.A. (English) 2025 Ph.D. (English Language Teaching)

