



The Use of Phonological Awareness Instruction in Improving English Word Reading Ability of Thai Primary Students

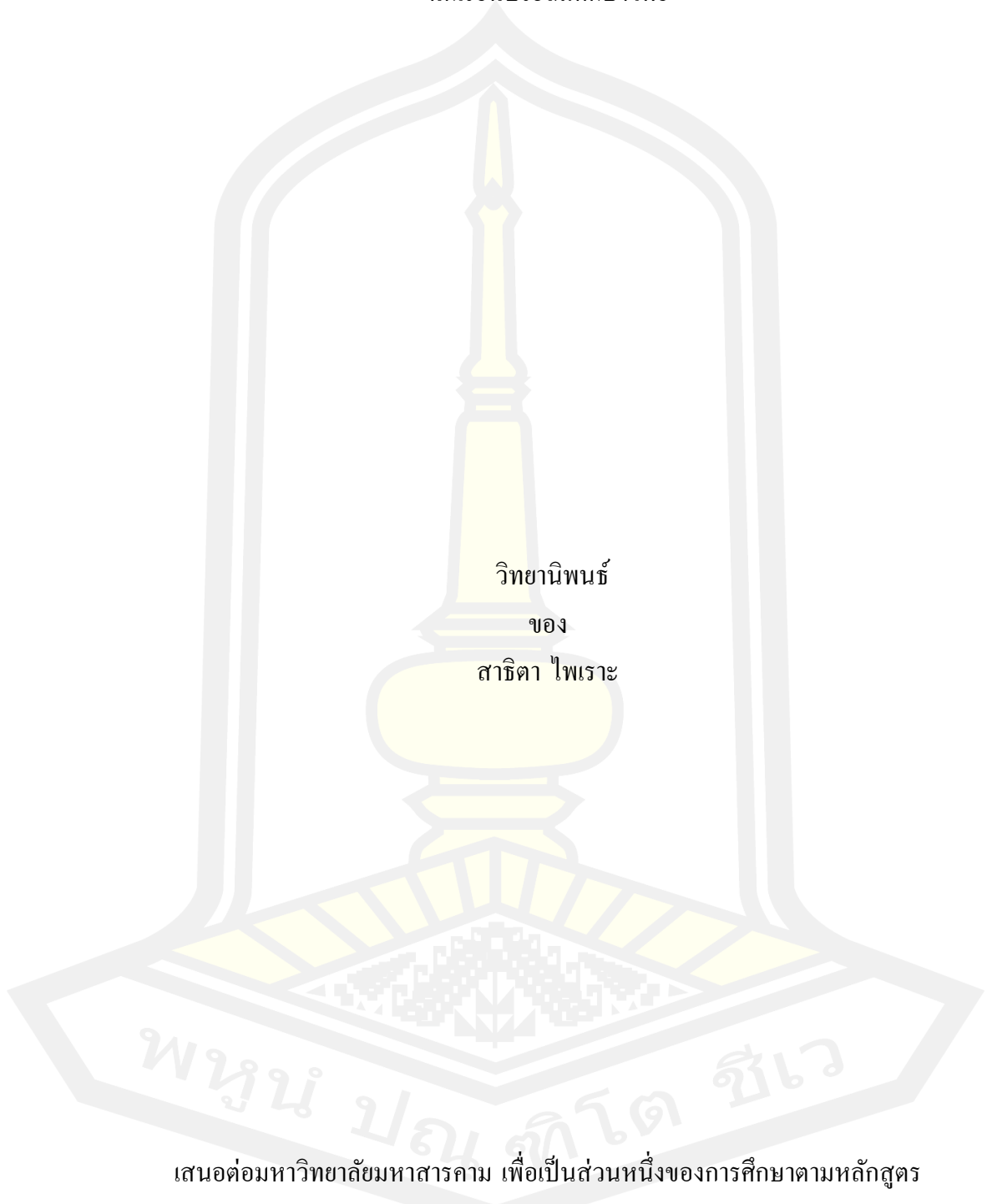
Satita Pairor

A Thesis Submitted in Partial Fulfillment of Requirements for
degree of Master of Education in English Language Teaching

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ABSTRACT

English word reading is a necessary skill for students who learn English as a foreign language. It is the process to obtain the meaning from the written text. As phonological awareness instruction assists students in word reading, this present study attempt to examine the effect of phonological awareness instruction in improving English word reading in Thai second grade students and investigate features of the phonological awareness instruction that improve students' English word reading ability. Phonological awareness instruction was adopted as an instructional strategy proposed to improve students' English word reading. The participants consisted of twelve second grade students who study in a small-type school in northeastern of Thailand. The implementation of the current study lasted six weeks with 55 minutes of in each section of English instruction every day. The instruments for collecting the data were English word reading pretest and posttest, and a student semi-structure interview. The finding of the study showed that there was a statistically significant difference between students' English word reading ability after using phonological awareness at the 0.05 level. According to students' semi-structure interview, it was show that letter-sound knowledge and phoneme awareness help students in reading word the most.

Keyword : Word reading, Phonological awareness instruction

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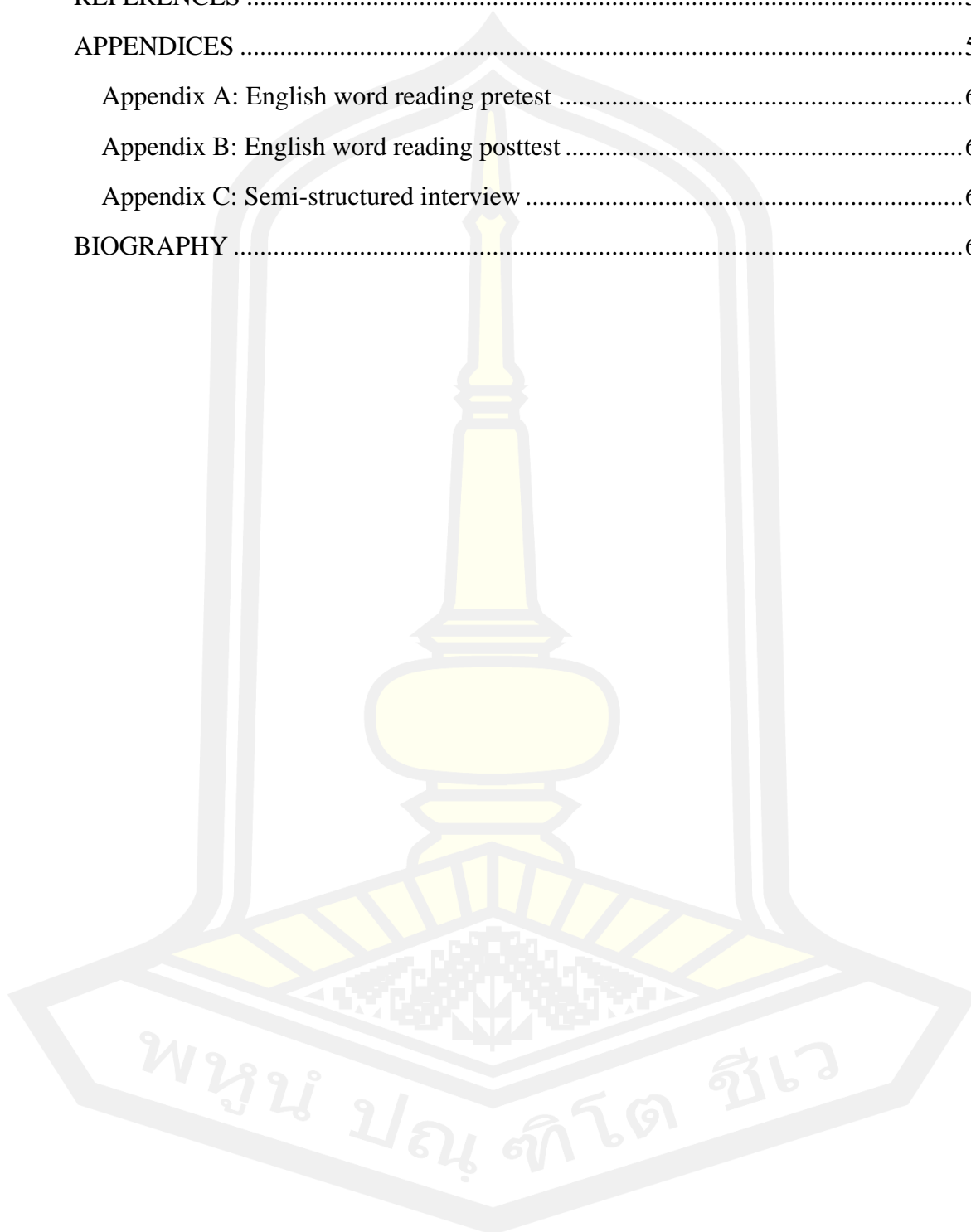
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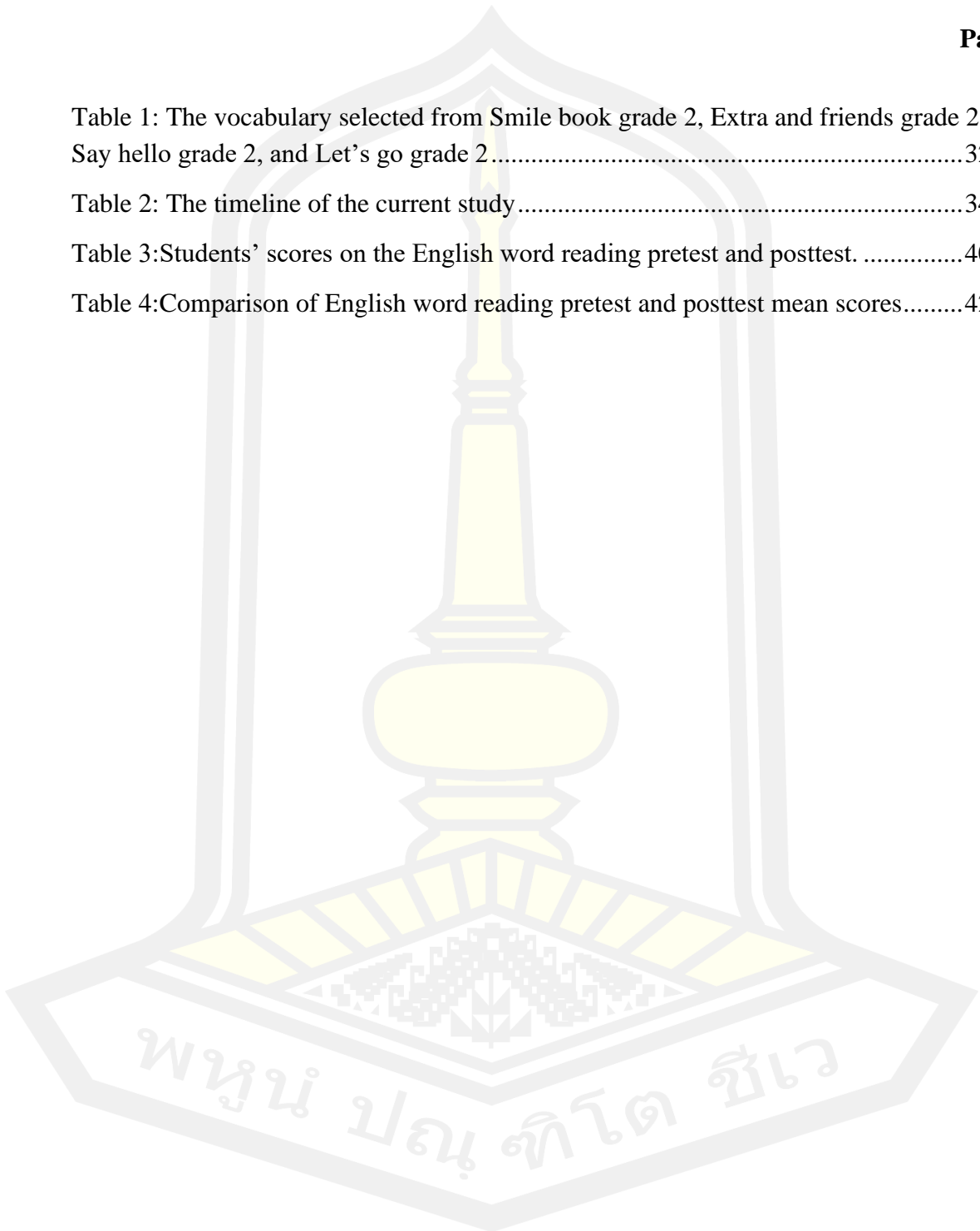
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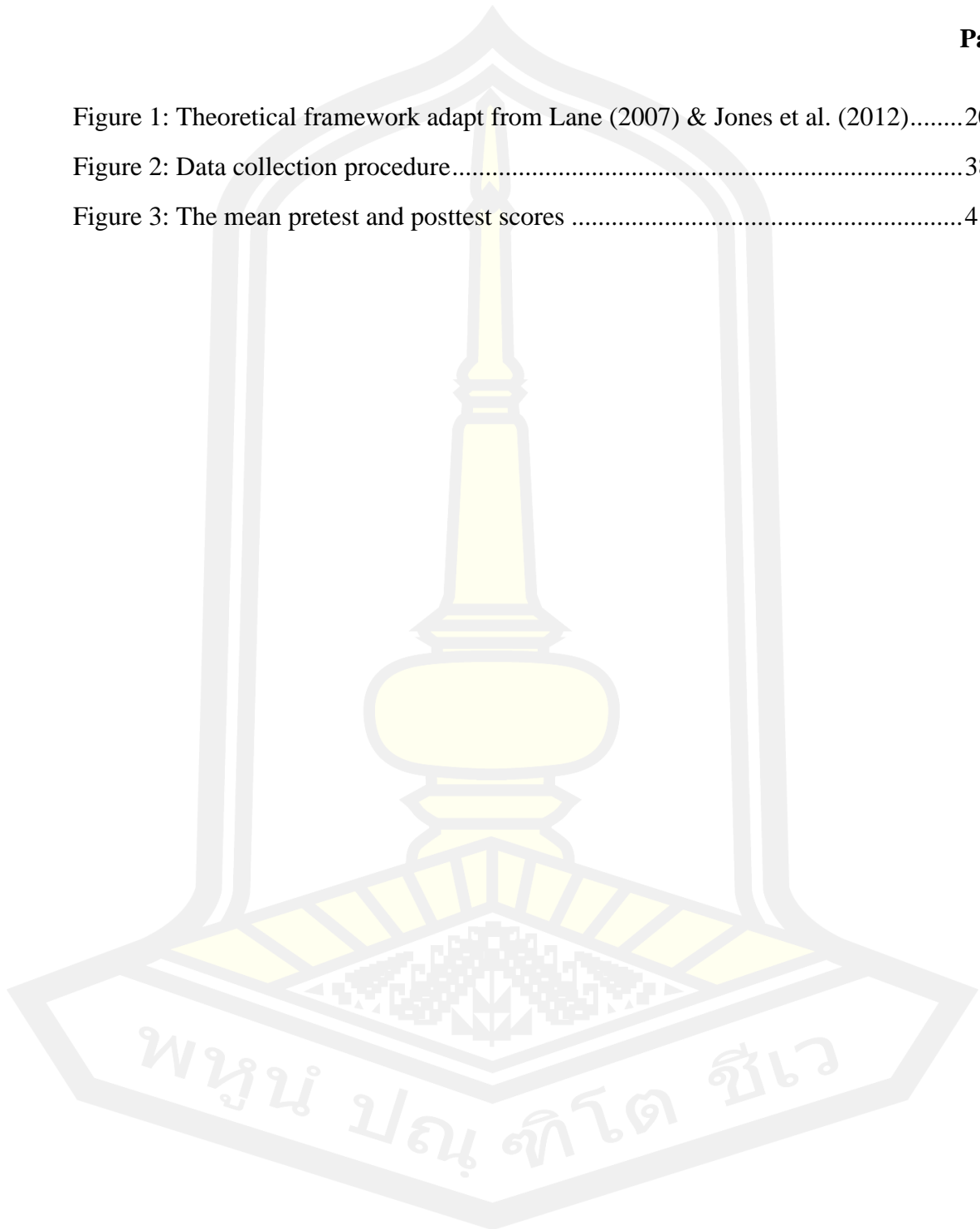
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CHAPTER I

INTRODUCTION

1.1 Background of the study

English word reading is a necessary skill for students who learn English as a foreign language. It is the process to obtain the meaning from the written text. To develop English reading skill, fluency in English word reading is required (Gough & Tunmer, 1986). Many scholars had proved the importance of English word reading ability to reading skill. It provides an importance basis for reading development. When students become automatic in word reading skills, they will be able to concentrate entirely on the meaning of text. It paves the way to reading comprehension and fluency (Espy et al., 2004; Lane, 2020; Tamimi and Rabab'ah, 2007). Likewise, deficit word reading skill is one of serious barriers in the successful education (Ring et al., 2007).

The school where the researcher teaches is a small-sized school located in northeastern part of Thailand. There are 56 students with 8 classes and only 6 teachers. As such, the teachers have a heavy workload and must take care of more than one class at one period of teaching. Moreover, English teaching method is not quite effective to help students improve their word reading ability. As a result, most of the students seem to lack word reading ability. According to the Basic Education core curriculum (The ministry of education, 2008), second-grade students should be able to spell and read words and simple sentences. However, students in the researcher's class do not do well about reading and recognizing English words. From the researcher's observation, this problem encompasses various factors. For example, firstly, the teaching approach is not appropriate. On the early stage of learning, the focus of English teaching is on handwriting practice by tracing on dotted line but do not teach them which sound each alphabet represent. Hence, students cannot remember all English letters and cannot distinguish the sound that close to one another. The teacher always teaches new words by asking students to copy the new vocabulary on the board, but do not teach them how to read. Some activities do not promote a literature skill such as drawing or coloring. Therefore, students lack letter knowledge and do not know which sound a letter represents. As a result, students

cannot read the new words even it is short or long. However, some students can read the new words but took a long time because they learn by remembering not understanding. Rote-learning is not a long-term memory as it has been proved that rote learning style is not effective for learning vocabulary (Safdar, 2013). Another factor is the family background. Most of their parents are farmers and having low economic status. They speak Esan as their mother tongue and do not graduate from the high level of education. Thus, they do not have much knowledge of English to help their children with an English homework.

Many researchers try to propose the teaching approach that can improve English word reading skill of primary school students. Phonological awareness is one of the instructions that have got attention from several scholars as it significantly improves early literacy (Adams et al.,1998; Al-Tamimi & Rabab'ah, 2007; Chien et al., 2008; Dessemontet & Chambrier, 2015; Fälth et al., 2017; etc.). Phonological awareness refers to the ability to concentrate on the sounds of a language rather than the meaning. Phonological awareness comprises a variety of skills from basic to more complex (Schuele&Boudrea, 2008; Hismanoglu, 2011; Konza, 2016; Falth et al., 2017). The most basic step is word awareness which is the ability to isolate individual words from sentence. Syllable awareness is the capacity to combine and divide chunks within words. The next level is onset-rime level which is the capability to manipulate intra-syllabic units. The initial consonant blend, digraph, or sound in syllable or a one syllable word is referred to as the onset. The initial vowel phoneme is the rime, which is followed by all of the other phonemes. The most complex level is phoneme awareness which is the ability to manipulate and identify individual phonemes within spoken words.

Phonological awareness has received exceptional attention as a strong predictor of early literacy success because it can accelerate and enhance learning to read (e.g., Gillon & Macfarlane, 2017; Jamaludin et al., 2014; Milankov et al., 2021). Falth et al. (2017) revealed that phonological training effected with articulation for preschool students in word decoding and phonological ability. Moreover, children were better off in new words and phonemes that were not included in the program. Besides, Kjeldsen (2019) stated that receiving phonological intervention in kindergarten

kindergarten to Grade 9 can improve both word reading and reading comprehension. Furthermore, Milankov et al. (2021) informed that the phonological awareness development could facilitate reading acquisition among students who were learning to read a transparent orthography.

Phonological awareness training has been used to develop early literacy all around the world even in countries that use English as a foreign language. Adam & Mohammed (2017) demonstrated that training in phonological awareness skills greatly enhanced the reading performance of Najran University's preparatory year students in Saudi Arabia. In the same way as Abdel- Maksod (2020) insisted the efficacy of phonological awareness strategies in promoting EFL oral reading fluency in 4th graders. As well as Odo (2021) has reviewed research literature about the results of several phonological awareness and/or phonics instructional interventions on pseudo word and word reading published from 1990 to 2019. It was clear that phonological awareness and phonics-based instruction has upon reading in English as a foreign language.

However, research on phonological awareness training in Thai context has not been widely popular. To my knowledge, only little research studied on phonological awareness training in Thailand for past decade. Wei & Zhou (2013) investigated the transferring between reading ability and phonological awareness from Thai language to English. Many phonological awareness studies on English language teaching were also emphasized. As the same way as Vibulpatanavong & Evans (2018) investigated reading improvement, phonological development, and the relationship between and reading ability and phonological awareness in Thai language. As mentioned earlier, some researchers have paid particular attention in the relationship between using phonological awareness in Thai language and English language; nevertheless, the focus on using phonological awareness in English language teaching among Thai students is less attention. Thajakan & Sucaromana (2014) used a multimedia CALL program to enhance the English phonemic awareness among Thai first grade students while learning the English language using the approach known as the whole word approach. Furthermore, Akkradetthanapong (2021) found that the participants in an experimental group had the outperformed in post-test of phonological awareness

skills, word reading and pseudo word reading after took phonological awareness training. Although phonological awareness training is significant toward word reading according to much research mentioned above, it has got less attention among Thai EFL researchers. Thereby, this is one of the reasons to use phonological awareness in improving English word reading of Thai EFL students.

Nevertheless, some researchers argued that phonological awareness cannot stand alone to make a successful of reading. Letter-sound knowledge is important for complex tasks like onset and rime level and phoneme level. Phonological awareness should be taught along with letter-sound knowledge in learning to read. (Ball & Blachman, 1988; Snowling et al., 2005; Hulme et al., 2012; Dessemontet & Chambrier, 2015; Pfof et al.,2019) Teaching phonemic awareness and letter-sound correspondences together has more benefits than only teaching either phonemic awareness or phonics alone (Ball & Blachman, 1988). Snowling et al. (2005) disagree with Castles and Coltheart (2004) that the link between phonological awareness and student reading success has yet to be proved. According to Snowling (2005), children' ability to learn to read is dependent on their phonological abilities. They proposed that learning to read is probably definitely influenced by other components of a child's knowledge, notably letter-sound information, which develops rapidly and in parallel with phoneme awareness. Foy and Mann (2006) suggested that letter sound knowledge with variable name-sound links, letter sound correlations that do not follow regular patterns, and performance in more complex phoneme awareness activities appear to be bidirectionally associated with phonological awareness. Kyritsi (2008) showed that in the development of phonological awareness, letter-sound information appears to be particularly crucial. Hulme et al. (2012) agreed that significant increases in phonological awareness and letter-sound skills, as well as word-level reading, were seen after using a phonology and reading intervention that involved both phoneme awareness and letter-sound knowledg. Therefore, it is important to teach letter-sound knowledge along with teaching phonological awareness. In 2006, Lerner and Lonikan found from their research that phonological awareness and letter-name knowledge were bidirectionally associated, with the beginning level of one remarkably predicting improvement in the other. Dessemontet

& Chambrier (2015) revealed that after one school year and two school years after the experiment, phonological awareness and letter-sound knowledge at 6–8 years of age predicted growth in word and non-word reading. Additionally, Pfost et al. (2019) showed that phonological awareness and letter knowledge has a significant impact on children's phonological awareness and letter knowledge.

As previously stated, explicit phonological awareness instruction should be introduced in EFL classroom as an essential skill for further literacy skill such as decoding and encoding words. When students are fluent in decoding words, it is easier to read written text fluently, recognize vocabulary and comprehend written text. However, letter-sound knowledge should be taught together with phonological awareness in order to contribute word reading success. This study was conducted to examine phonological awareness training and letter-sound knowledge in improving English word reading ability of Thai primary school students and to investigate features of the phonological awareness instruction that improve students' English word reading ability.

1.2 Purposes of the study

This research aimed to enhance the English word reading ability of grade 2 Thai primary students through phonological awareness intervention. It also aimed to investigate grade 2 Thai primary students' attitudes toward features of the phonological awareness instruction that improve students' English word reading ability.

Research questions that guided this study are as follows:

1. Does phonological awareness instruction affect the English word reading ability of Thai primary students?
2. What features of the phonological awareness instruction improve students' English word reading ability?

1.3 Scope of the study

This study examined the use of phonological awareness on students' English word reading ability and the features that helped improve word reading ability. The participants were selected by purposive sampling. They were 12 students of grade 2 who study in a small school located in Khon Kaen province. They were at the

beginner level of English. The study was conducted within six weeks. This study was use one group pretest-posttest design. A pretest and a posttest were employed to see how much students' word reading ability develop after taking the instruction. Semi-structured interview was to investigate the most successful feature(s) of this instruction.

1.4 Significance of the study

The present study aimed to investigate the use of phonological awareness in improving students' English word reading ability. The finding was beneficial for teachers and students. The present study emphasized phonological awareness instruction which is one of the first steps to acquire further reading skills which can be a predictor for students' literacy skills. Therefore, phonological awareness instruction should be integrated into the EFL classroom at the kindergarten level in order to develop their early reading and literacy skill. Phonological awareness instruction can be integrated into the classroom as stand-alone activities or in lesson activities.

The present study can be used as a useful guideline to improve students' English word reading ability among low proficiency students. Students who have low proficiency in English word reading may be more likely to face other literacy problems as well. This issue can be a barrier to successful education. The present study focused on teaching phonological awareness of students who cannot read English words. The finding revealed which features of phonological awareness should be emphasized as the most proficient features.

1.5 Definition of key terms

Phonological awareness instruction refers to a kind of instruction that aims at enhancing young learners to be able to identify letter name and letter sound, to segment words from speech sounds, to isolate chunks within words, to manipulate initial sound and phoneme sounds within words, and to segment and blend the sounds in spoken words.

English word reading ability refers to the ability to encode and decode the printing text both in words.

Thai primary students refers to the second graders who study English as a foreign language at a primary school in a province in northeast Thailand. They have a beginning level of English language proficiency.

Features refers to aspects of phonological awareness which is a continuum of the complexity of phonological awareness ability. It consists of letter-sound knowledge, word awareness, syllable awareness, onset-rime awareness, and phoneme awareness.

1.6 Thesis proposal structure

This study will be divided into three chapters as follow:

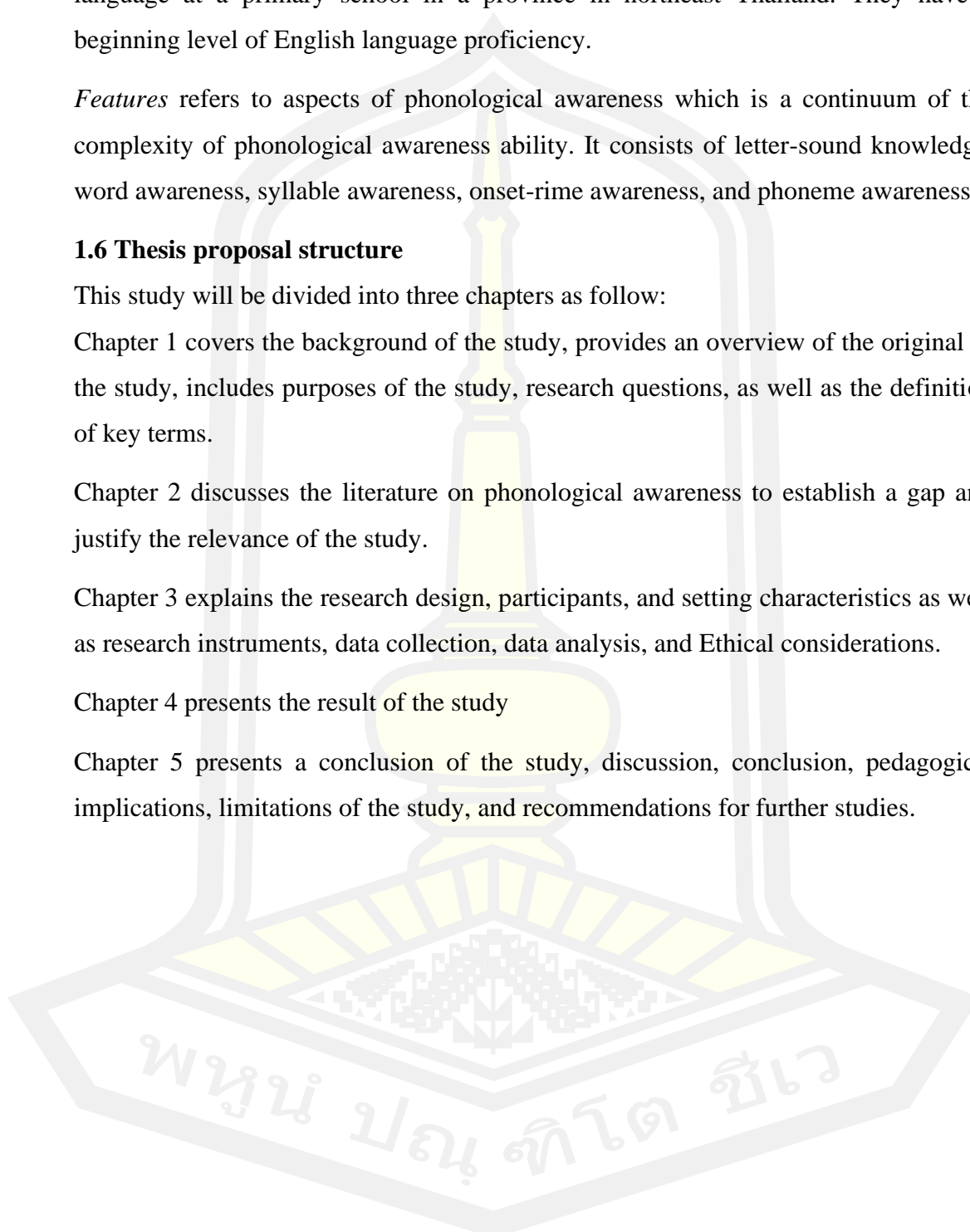
Chapter 1 covers the background of the study, provides an overview of the original of the study, includes purposes of the study, research questions, as well as the definition of key terms.

Chapter 2 discusses the literature on phonological awareness to establish a gap and justify the relevance of the study.

Chapter 3 explains the research design, participants, and setting characteristics as well as research instruments, data collection, data analysis, and Ethical considerations.

Chapter 4 presents the result of the study

Chapter 5 presents a conclusion of the study, discussion, conclusion, pedagogical implications, limitations of the study, and recommendations for further studies.



CHAPTER II

LITERATURE REVIEW

This chapter elaborates on the concepts of phonological awareness, letter-sound knowledge, phonological awareness training, and phonological awareness and English word reading ability. Previous studies on phonological awareness are also discussed.

2.1 Phonological awareness

Phonological awareness is a metalinguistic awareness. It refers to the ability to shift focus from a language or word as a meaningful entity to a language or word as a sound structure (Campbell and Sais, 1995) and recognition of speech sounds inside words or the understanding that words can be broken down into sequences of constituent sound segments. It has been repeatedly found from many studies that it is directly related to reading ability and is a predictor of future reading ability (Lieberman, 1989; Bryant et al., 1990;). It is also reported to be the primary decoding mechanism in English (Durgunoglu, 2002) and other languages such as Thai (Wei & Zhou, 2013; Vibulpatanavong & Evans, 2019), Chinese (Chien, Kao & Wei, 2008; Wang, Yang & Cheng, 2009), Japanese (Allen-Tamai, 2000), Korean (Wang, Park, & Lee, 2006), and so on, when phonemes (prints) and graphemes (sounds) are extremely systematically mapped.

Most educators describe phonological awareness as the ability to recognize and manipulate sounds. Phonological awareness is also described as the capacity to comprehend the sounds in a word rather than the word meanings (Trehearne & Healy, 2003). It is the capability to comprehend the structure of spoken words. The structure of spoken language is composed of words, and that words are composed of sounds, rhymes, and syllables. Gillon (2004), refers phonological awareness to the ability to break down words into smaller pieces, whereas Goswami (2008) defines it as a children's ability to manipulate and identify component sounds that create words of various piece sizes. A similar, Lane (2007) included the skill to find, segment, match, blend, or manipulate the sounds in a spoken language in different levels, such as words, syllables, onsets – rimes, and phonemes as phonological awareness.

Phonological awareness can capture attention from the researchers in EFL setting. Wei and Zhou (2013) identified phonological awareness as the understanding that

sentences are comprised of words, words consist of groupings of sounds or syllables, and syllables are comprised of particular sounds, or phonemes. Likewise, Hu (2019) gave the meaning of phonological awareness as the ability to perceive and manipulate speech, and it is divided into three levels: shallow syllable awareness, deep phoneme awareness, and intermediate onset-rhythm awareness. Tasks are used in phonological awareness in order to measure distinct processing skills of all three levels of phonological awareness which include differentiation, detection, segmentation, blending, deletion, and substitution.

As discussed above, it can be concluded that phonological awareness is the ability to manipulate and distinguish speech sound, and to understand that speech sound can be divided into a smaller part from sentence into words, from word into syllables, and syllable into phonemes. Phonological awareness is important for early reading in children. It is a primary skill for decoding in English and other languages. Furthermore, it can be a predictor of future reading ability.

2.2 Phonological awareness and English word reading ability

The most widely accepted view is that According to results from decades of study, most children who struggle to learn to read have a basic deficit in phonological awareness and associated processing abilities. (Melby-Lervåg & Lyster, 2012; Phillips et al., 2015). According to SickKids (2009), children with phonological awareness difficulties may have trouble identifying environmental sounds with appropriate objects, and they are less likely to engage in sound-related activities. When students struggle with phonological awareness, it will be difficult for them to decode the sound-to-symbol code for reading. Early reading skills, particularly the capacity to sound out words in print, will be slowed as a result of this. This is referred to as "decoding." Spelling problems can also be caused by phonological awareness issues. A child's ability to map the sounds of words to letters and clusters of letters that form sounds is required for spelling.

In children's word reading development, it focuses on their ability to translate written words into a spoken code, as evaluated by the accuracy and speed with which they read aloud. Thus, students who have a strong understanding of phonological awareness may be better able to understand how the alphabetic principle works.

(Phillips et al., 2015). According to International Reading Association (n.d.), students can understand the logic of alphabetic print if they understand that speech is made up of a series of sounds; that is, if they are phonologically aware. They discover that the symbols on a page represent those units of sound as they learn to read. For students who lack phonological awareness, printed symbols may appear arbitrary.

As discussed above, phonological awareness is important because it helps children understand and apply the alphabetic principle when reading and writing. National Reading Panel, 2000 illustrates the importance of word recognition and comprehension in learning to read as follows:

1. Phonemic awareness is the ability to recognize and manipulate individual sounds in spoken words.
2. Phonics is the capacity to decode words using knowledge of letter-sound correlations.
3. Fluency refers to the ability to read quickly and accurately. When learning to read, it is critical to be able to read automatically, accurately, and fast.
4. Vocabulary is the understanding the meaning of a wide range of words as well as the structure of written language.
5. Comprehension is understanding the meaning and intent of the text.

Therefore, recognizing sound is the starting step for reading. It is necessary to ensure that students have excellent phonological awareness skills before introducing them to print. Students must determine how the words they hear and say correspond to the letters on the page. Many children do not develop phonological awareness abilities early on, and as a result, they struggle greatly with reading. Phonics, the next step, makes little meaning without phonemic awareness because phonemic awareness is required for decoding an alphabetic script and learning phonics (Schuele&Boudrea, 2008; University of Oregon center on teaching and learning, 2009).

Phonological awareness in early children accurately predicts subsequent reading and spelling. However, it can only explain about 10–15 percent of the later variation in reading and spelling ability. As a result, phonological awareness should be viewed as

simply one element, alongside others (Kirby et al., 2010). However, students with low phonological awareness have difficulties understanding or acting on the notion that words can be broken down into distinct phonemes. Students who do not know how to decipher new words may have learning impairments as a result of a lack of phonological awareness. Furthermore, decoding issues exacerbate difficulty with fluent reading and understanding of a written text (Adam & Mohammed, 2017). When students encounter letters or text, they have a greater understanding of the sound structure of speaking language, which helps the development of their phonological awareness. Furthermore, letter knowledge may result in a qualitatively altered representation of oral language sound structure (Lenel, 2005).

To summarize, phonological awareness is an important component of early reading development. It can predict reading achievement, and phonological awareness training can influence changes in reading outcomes. To be successful communicators, beginning learners must comprehend language and the principles for ordering and mixing its sounds. From the simplest to the most complex activities, children must have an explicit level of phonological awareness. One of the most important aspects of phonological awareness for children to understand is the alphabetic principle. For students who do not naturally pick up on the alphabetic principle, phonological awareness instruction can fill in the gaps.

2.3 Phonological awareness training

A term of Phonological awareness (PA) is used to describe various levels of metalinguistic skill. As stated by Trehearne and Healy (2003), phonological awareness is a comprehension of language's sound structure that language is composed of rhymes, words, syllables, and phonemes. Based on Lane (2007), phonological awareness is described as a wide concept that incorporates various levels of metalinguistic abilities used to benefit from decoding and spelling training. It is separated into four levels which consist of word level, syllable level, onset-rime level, and phoneme level. Thus, phonological awareness is considered including word awareness, syllable awareness, onset-rime awareness and phoneme awareness.

2.3.1. Word awareness

Word awareness involves the ability to separate individual words from the sentence. It is a student's capacity to manipulate words in phrases or within compound words, such as the word "goldfish" which is generated from the words "gold" and "fish." Activities that involve deleting one word from a complex word can also be used to assess a student. For example, the word "base" can be formed by removing the word "ball" from the compound word "baseball" (Phillips et al., 2008).

Both conversational wordplay and exploration and exposure to text can help students promote word awareness. Understanding where individual words start and end is not vital for oral communication. However, it can help with reading and spelling word boundaries. The exposure to print and classroom activities can help children grasp how words, particularly more abstract terms, operate enhances their understanding of the notion of a word. They could concentrate on all of the syllables in the phrase rather than the words, and function terms might be included in the concrete words. Students, for example, may believe that "the king" is a single word. Word segmentation will improve as children learn to track print. This will begin to appear in writing, with spaces between words, even if the words are just random strings of letters.

According to Lane (2007) and Trehearne and Healy (2003), activities that help promote word awareness skill for students who use English as a first language are as follow:

Tapping words: Children may be instructed to tap each word in a sentence or phrase by using a rhythm stick or a finger. Most children learn this skill with little or no instruction. Teachers can help pupils who are struggling with tapping words by modeling and guiding them. Children that have difficulty with this task frequently mix together words and syllables. It is important to make this distinction clear.

Word segmentation can also be used to measure a student's level of awareness. A teacher could ask a student to draw blocks to symbolize the amount of words in a sentence to assess them. For example, the question "What is your name?" is made up of four words. As a result, four blocks are the correct solution.

2.3.2 Syllable awareness

Syllable awareness is the ability to blend and segment chunks within words. It is the level of consciousness at which a student recognizes that a word can be broken down into syllables. A syllable awareness exam can be used to indicate whether the child recognizes that each syllable has a vowel and understands how syllables are segmented and consonants that cannot be grouped together are not at the start or end of a syllable. For example, *nl* in the word "only" is not considered as a "legal cluster" because this particular word can only be divided as "on-ly." In addition, the word cannot be divided as "o-nly" or "onl-y." Syllables are frequently separated according to a word's stress pattern, with the stress syllable containing as many consonants as possible. For example, the term "patrol" is pronounced "pa-trol" rather than "pat-rol."

Most kindergarten students can distinguish the number of beats or syllables in a word, and they have some understanding of "syllables," but they do not grasp what a syllable is. This is the most primitive level of word segmentation. The majority of kindergarten students should know how to blend and segment two and three-syllable words. Nonetheless, lengthier words with four to five syllables may be more difficult. By the end of kindergarten, pupils should be able to detect the syllables in three-syllable words due to modeling and repetition. Students must practice blending, segmenting, and blending if they cannot hear the rhythms or syllables in words.

Syllable awareness activities suggested by Gillon (2004) are in four methods: syllable segmentation, syllable blending, syllable deletion, and syllable identity.

Syllable segmentation can be done by having pupils jump or clap in an activity to count syllables in a word. The word "cowboy," for example, has two syllables. As a result, the student would have to jump or clap their hands twice.

The process of asking students to complete the other half of a word is known as syllable blending. In this situation, a teacher may display a picture of the word "rabbit" and say the first part which is "rab-" before asking the student to fill in the second component "-bit" to make "rabbit."

Syllable deletion: In this practice, students will be asked to speak a word, and the teacher will have to figure out what the new word is when a section of it is removed.

For example, the teacher will say, "Say the word blueberry". Say it again, but this time don't say blue." Begin with compound words (e.g., cowboy, notebook, seafood, etc.). Once the students are comfortable with this, go on to remove syllables from words with two to four syllables (for example, "Say umbrella. Say it again, but this time don't say um-."). The teacher can begin by removing introductory syllables before moving on to deleting end syllables.

Comparing words with the same syllables is known as syllable identity. For example, a teacher may question the students, "Which part of the phrases "competition" and "compare" sound the same?"

2.3.3. Onset-rime awareness

Onset-rime awareness is recognized as the intrasyllabic phonological awareness level (Gillon, 2004; Ravitz, 2013). Onsets refer to consonant sounds that come before a vowel in a syllable. The initial C in a CVC (consonant-vowel-consonant) structure is the onset. In a word like sit, the onset is "s," while the rime unit of the syllable is "it." There is no onset in a word with a VC (vowel-consonant) structure, such as "it" and "is." A word with two syllables, such as "candy," has an onset in each syllable. Rimes are used to determine whether two words rhyme or not. Rime is the sequence of nucleus and tail in a typical syllable pattern. The nucleus is a vowel, whereas the tail is a consonant. When two words rhyme, they are said to have the same rime units.

Many children knowing how to detect and/or generate rhymes, but trouble rhyming may be a sign of a more widespread phonological awareness problem (Trehearne and Healy, 2003). To be able to rhyme verbally, students must first comprehend the concept of rhyme and then be able to:

- segment: b-at section (to know where to segment in the word)
- delete: remove -at (to know to take one sound away)
- substitute with c-at (to know how to add a new sound at the beginning)
- blend cat (to know how to blend the segments together)

Comparing words with the same syllable is called syllable identity. Rhyming words with more than one syllable may be difficult for certain children. Furthermore,

students may typically generate only one set of rhymed words. Rhyming is unlikely to be properly established until the learner be able to fluently produce many rhymes. Learners may not yet be able to segment deliberately at the onset-rime boundary (e.g., c-at) until they have received specific teaching and modeling, even if they can rhyme rather fluently. The students will be able to learn how to segment onset and rime rapidly if they have a good rhyme and segmenting ability. The usage of word analogies in reading and writing is made easier by knowing how to segment and blend words into onsets and rimes. By the end of kindergarten, all kids should be able to detect and produce rhyme based on teaching and modeling.

To acquire onset-rime awareness, Lane (2007) suggested classroom activities as follow.

Rhyme recognition: Learners can be taught to identify two one-syllable words rhyme. As a result of their extensive exposure to language and print, some students have an inherent knowledge of rhymes. Other students may require specific instruction on what a rhyme is if they have not yet developed this concept (i.e., words rhyme when they sound the same in the middle and at the end). Rhyme recognition involves the student determining whether two spoken words rhyme or not. Instead of just presenting a number of phrases to improve rhyming recognition, the teacher can say, "Cat and sat both have an at." Is there an at in hat?"

Rhyme generation: It is difficult to reach up with a word or a list of rhymed words with a word given than it is to identify if two given words rhyme. Some students find it difficult to generate rhymes because of the added cognitive and verbal requirements. However, a student's capacity to make rhymes is a great sign of his or her ability to apply phonological information. A lot of students enjoy playing rhyming word games on the spur of the moment. This enjoyable method of practicing abilities should be promoted. In such activities, using nonsense words promotes the child's attention to sounds.

Rhyme oddity detection is also known as rhyme anomaly detection. This activity requires students to identify which of three or four words in a list does not rhyme with the other words in the list.

Rhyme matching: Students identify which of three or four words from a list rhyme with a target term. For example, the teacher might ask, "Which of the following words rhymes with stamp: map, lip, or lamp?"

2.3.4. Phoneme awareness

Phoneme awareness refers to the ability to disassemble a word and manipulate individual sounds. It all relates directly to phoneme knowledge. A phoneme is the smallest distinguishing element of a spoken sound that differentiates two words. It is the students' last and most in-depth knowledge of speech (Stahl & Murray, 1994). The comparisons between "tall" and "ball," "rat" and "cat," and "fin" and "fan" demonstrate how using different consonants or vowels can affect the meaning of two words.

Even though they do not know which letter relates to which sound, some children may recognize that words begin with the same sound. In phonological awareness, blending and segmenting separate sounds within words is difficult to master and is closely linked to learning to read (Adams et al., 1998; Snowling et al., 1998). Because phonemic awareness keeps increasing in a symbiotic (hand-in-hand) relationship with learning to read, some students may struggle at first. Students, on the other hand, will benefit from classroom exposure to phonemic awareness exercises like reading and wordplay. When kindergarten students do well in sound awareness tasks, they will probably need to be guided for acquiring phonological awareness. They will further benefit from the typical classroom focus on how words work.

Phoneme awareness activities suggest by Lane (2007) are used to develop phoneme awareness as follow

Phoneme segmentation is that phonemes are being counted. Elkonin (1963) developed a strategy for improving phonemic segmentation skills that has grown in popularity in recent years. Picture cards with boxes under each picture showing the number of phonemes in the word are used in the Elkonin boxes technique. While slowly pronouncing the word sound by sound, the learner places a marker in each box to represent each sound in the word. This Elkonin boxes activity can be adapted to allow the teacher and the learner to verbally practice the skill . The teacher shows how to

count phonemes by raising one finger for each phoneme pronounced. With teacher support, the student should be able to count phonemes independently.

Phoneme deletion is the same as the removal of a phoneme. Students must be able to recognize and modify sounds within a word. Students are tasked with removing a certain sound from a target word. For this activity teacher may ask the students to say the word “seat” Then, the teacher later asks them to say “seat” without the /t/ sound. Again, when doing this activity, start with the initial sounds and work your way up to the final and, finally, medial noises.

Blending and segmenting: The most advanced phonological awareness skills, as well as the most crucial for decoding. There are various techniques to teach blending and segmenting. Teaching young children to converse in a secret language using a puppet or toy robot is one of the most effective strategies for helping them comprehend the concepts of phonemic mixing and segmentation. This strategy was utilized by Torgesen and Bryant (1994) in Phonological Awareness Training for Reading, but it is easily adaptable to informal instruction.

In summary, phonological awareness is the ability to hear, understand, and manipulate spoken language sounds. Phonological awareness is a set of abilities that includes a student's capacity to acknowledge how many words can be found in a sentence (word level), segment and blend words of at least three syllables (syllable level), recognize and generate rhyming words (rhyme level), divide the beginning or ending sounds in words, segment and blend sounds in a word with three sounds, change a sound in a word to make a new word in familiar games and songs (sound level).

2.4 Letter-sound knowledge

All students must be taught how to become increasingly sophisticated and self-sufficient decoders. Because the language is opaque, there are not enough letters of the alphabet to express all of our speech sounds, according to the English orthography, which is based on an alphabetic system of 26 letters and about 44 sounds (phonemes) (Garcia & Cain, 2013) while learning letter-sound correspondence to introducing single letter sounds and advancing to combining the letter sounds might be challenging, how to pronounce sounds in words is highly predictable (Bayetto, n.d.).

However, letter-sound knowledge alone will not assure that students will be autonomous and effective readers, because it is possible to decode words without comprehending their meaning or the message of the author. Therefore, Gillion (2008) suggested to integrated with phonological awareness activities with letter sound knowledge training. As the same as Dessemontet and Chambrier (2014) included letter-sound knowledge with phonological awareness to their reading intervention.

Letter-sound knowledge is now widely accepted in languages with alphabetic orthographies that letter knowledge and phoneme awareness are crucial precondition skills that act in tandem to enhance early reading in children. Many longitudinal studies have found strong connections between letter knowledge and later decoding ability (Badian, 1998; Roth, Speece, & Cooper 2002; Georgiou & Kirby,2008). Letter-sound knowledge is essential for a student's understanding of the alphabetic principle: how individual speech sounds in spoken words are represented by letters in printed words (Byrne & Fielding-Barnsley, 1989). Through the understanding of letter-sound correspondencesIt is an important component for learning to read since it allows students to adopt a self-teaching strategy to decode new words by sounding them out letter by letter. A learner can add unfamiliar words to his or her collection of words that he or she can identify by sight by successfully decoding them. Learning letter names and sounds may also serve as a meter for the sort of visual-phonological learning required for reading (Melby-Lervåg, Lyster, & Hulme, 2012).

Letter knowledge is related to the precursor to phoneme awareness. It is important and sufficient to promote the phoneme awareness development. Before segmentation and blending abilities have been established, the teacher should teach letter-sound representations along with phonological awareness intervention (Ball & Blachman, 1988, 1991; Blachman, Tangel, Ball, Black, & McGraw, 1999). Over early inclusion of letter-sound representations might cause confusion if the child has not yet understood that words are comprised of sounds, (Spector, 1995). Furthermore, students with strong knowledge of phonemic awareness recognize that words are comprised of of separate sounds (Caldwell & Leslie, 2013; Roe & Smith, 2012; Schuele & Boudreau, 2008) because they have developed the ability to audibly segment and blend sounds in words (Rightmyer, McIntyre, & Petrosko, 2006)

Students who know letter sounds perform better on phonemic awareness activities, according to research (Mann & Wimmer, 2002), and the inclusion of letters representing sounds being modified generalizes to reading and spelling better than comparative interventions (Bradley & Bryant, 1985). Caravolas and Carroll (2005) stated that phoneme awareness cannot exist independent of letter knowledge. Similarly, to Lane (2007) and Gillion (2008) who claimed that phonological awareness activities should be integrated with letter-sound knowledge training. Hulme (2020) investigated a phonological and reading intervention that included letter-sound knowledge and phoneme awareness. It was found that these two skills, as well as later word-level reading and spelling skills, improved significantly. The development in letter-sound knowledge and phoneme awareness can completely mediate the development of children's word-level literacy skills five months after the intervention ended.

To sum up, phonological awareness, letter name knowledge, and letter-sound knowledge can build this conceptual understanding and support reading and writing improvements. This can be achieved when students employ their knowledge of the normal links between sounds and letters to sound out unfamiliar words (Ehri et al., 2001; Foorman et al., 2003; Phillips & Torgesen, 2006; Share & Stanovich, 1995).

2.4.1 Letter-sound knowledge activities

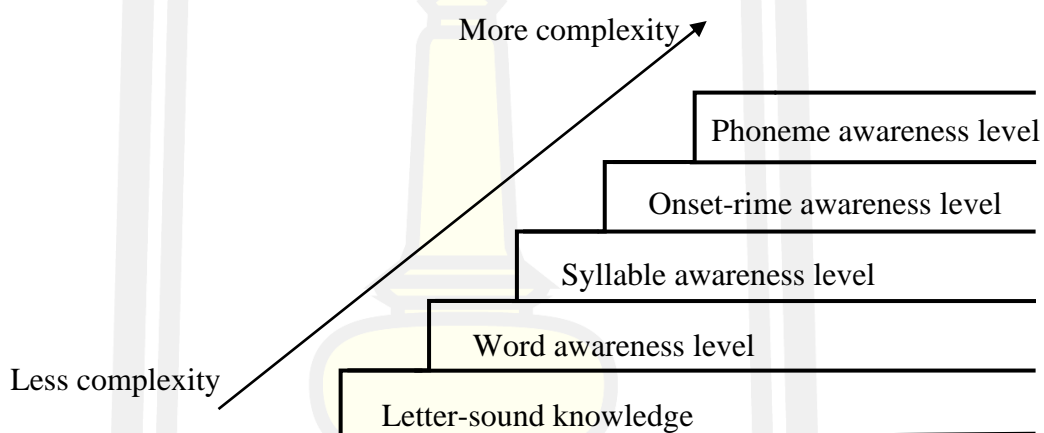
As we know that letter-sound knowledge correlate with phonological awareness especially on phoneme level. It is important to teach students letter-sound knowledge to provide the strong basis for the future learning. Jones et al. (2012) suggested steps of activity to help students gain alphabet knowledge and administer their knowledge to the context of reading and writing.

1. Students are taught to identify the name and sound of the uppercase and lowercase forms of each letter.
2. Students quickly learn to recognize the letter in context in books and other written text such as identifying the letter in charts of classmates' names
3. Students learn how to build letter forms for writing.

Moreover, Berninger et al. (2006) suggest that instruction that includes both visual and verbal modeling of letter writing improves students' letter formation automaticity as well as their word reading ability. Writing alphabet letters can bring young children's focus on the key features that determine one letter from another, while also enhancing their knowledge of letter names and sounds (Aram, 2005). Furthermore, students' handwriting movements while writing letters can facilitate their letter memorization and identification (Longcamp et al., 2005).

2.5 Theoretical framework

Figure 1: Theoretical framework adapt from Lane (2007) & Jones et al. (2012)



The present study will investigate the use of phonological awareness instruction in improving the English word reading ability of Thai primary students. The framework used in the study is adapted from phonological awareness training by Lane (2007). According to, Hulme et al. (2005) stated that letter-sound knowledge should be introduced in phonological awareness training. Therefore, in the current study, letter-sound knowledge is integrated. Students will learn the letter name and the sound of each letter in order to be familiar with the sound. Letter-sound knowledge will help them to decode the new word in the future. Then, they will be taught to have awareness of words in a sentence by tapping and segmenting words in a sentence or a phrase. After they have awareness of words, syllable awareness will be taught. They will do activities that are segment, blend, delete and identify syllables within a word. The onset-rime awareness will be taught in the next step. This step of awareness

requires a basic knowledge of letter-sound to identify the consonant sound and vowel sound in a word. The most important step is phoneme awareness. Students will learn to recognize individual sounds in a speech sound. That is the reason why letter-sound knowledge is important to phonological awareness instruction. They will learn to segment and blend the phonemes. At this stage, it is the foundation of decoding and future reading skills.

2.6 Related studies

2.6.1 Previous studies on phonological awareness instruction in a global context

Phonological awareness is an approach that has been proven by scholars in several countries to overcome early reading problems.

Dessementet and Chambrier (2015) studied whether phonological awareness and letter-sound knowledge predicted reading progress in children with intellectual impairments (ID) of unknown cause. They conducted a study among children who were 6–8 years old. In their study, an academic success test was given to the children, as well as one and two school years later. After expressive vocabulary, IQ, age, type of placement, and spoken language were controlled, researchers discovered that phonological awareness and letter-sound knowledge of 6–8 year old children could predict growth in word and non-word reading after one and two school years. At 6–8 years old, phonological awareness and letter-sound knowledge predicted growth in reading comprehension after one and two school years.

Fei (2015) investigated the correlation between English phonological awareness and early reading ability in Chinese preschoolers in Yunnan province, China. The study's goal was to determine whether there was a significant relationship between English phonological awareness and early reading proficiency among Chinese preschoolers, as well as which phonological awareness elements were significant, and which were not. This study was carried out at a government kindergarten in Dali, China. Participants were third-year kindergarten preschoolers with an average age of six who had completed a three-part test. To examine the results, the Pearson Correlation Coefficient and simple linear regression analysis were utilized. There was a considerable positive link discovered between English phonological awareness and early reading performance. English syllable awareness, in particular, demonstrated a

moderately positive connection with English early reading proficiency. It was found that English phoneme awareness had a strong positive link with English early reading performance and was a substantial predictor of English early reading performance level. However, there was a minimal association between onset-rhyme awareness and English early reading performance, indicating that it was not a major factor in predicting the level of English early reading ability. The findings of this study suggest that phonological awareness is important for the early reading ability to the phoneme awareness levels of the learners with more specific tasks on phoneme identification and phoneme deletion and samples from different grades to identify EFL learners with reading difficulties and carry out English phonological awareness training studies to help them improve their reading skills.

Adam and Mohammed (2017) conducted a study using a descriptive and experimental approach to analyze the effect of increasing phonological awareness on EFL reading comprehension skills among Najran University Preparatory Year students (NU). The purpose of this study was to determine the effect of phonological awareness training and gender on the reading performance of NU preparatory year students. One hundred and sixty students were included in the sample, with eighty males and eighty girls. The Phonological Awareness Skills Test and the Cronbach Alpha Coefficient were used to assess the development of four phonological awareness skills during a reading passage: word deletion, word recognition, word blending, and word rhyming. The participants' reading levels were assessed using the Pre- and Post-Cloze Test. Furthermore, a simple percentage and T-Test were used to statistically assess the data. The findings demonstrated that phonological awareness skills training considerably enhanced the reading performance of the experimental group's students.

Zhang and Lee (2017) examined the link between English phonological awareness, reading ability, and vocabulary size in Chinese high school students with learning disabilities, with the goal of determining how reading and vocabulary interrelate and influence L2 learners' phonological awareness. This study included phonological awareness assessments, reading activities, and vocabulary size tests. Thirty-six students with learning disabilities were evaluated (group one). In the meantime, another 43 pupils (group two) took phonological awareness and vocabulary size

examinations. The Psycholinguistic Grain Size Theory was used to assess the test data. Finding discovered that group two had significant benefits over group one. Pearson correlation analysis demonstrated that word reading, and vocabulary size were connected to phonological awareness. However, the results from multiple regression analysis indicated that only word reading was associated with significant variance in phonological awareness.

Makiabadi and Kochaksaraie (2018) investigated the relationship between explicit phonological awareness, foreign accentedness, and speech comprehensibility in Iranian EFL learners as perceived by native and non-native English speaking EFL teachers. A set of activities was conducted to assess 34 EFL students' phonological awareness in five domains: rhyming, alliteration or onset, segmenting, blending, and manipulation. The participants were requested to read a brief sentence that was recorded and afterward scored on a 9-point scale for accentedness and comprehensibility. The findings revealed a substantial relationship between the learners' phonological awareness and their sense of foreign accentedness. The similar results were found in the relationship between phonological awareness and speech comprehension. Furthermore, a high positive association was discovered between foreign accentedness and comprehensibility, implying that foreign accentedness may affect L2 speech comprehensibility.

Falth, Gustafson and Svensson (2019) analyzed the effects of phonological training with articulation for children in a preschool class. In total, 69 students participated part, with 39 in the experimental group and 30 in the comparison group. The intervention comprised of phonological training with articulation and lasted the entire preschool class year; the experimental group spent a total of 2700 minutes on this training. All participants were examined individually on pre-reading skills four times: before the intervention began, mid-term, immediately after the intervention ended, and finally, six months after the intervention ended. Participants were separated into two subgroups based on their pre-reading abilities: those at risk of developing reading difficulties and those who were not. The results showed that both the at-risk and non-at-risk subgroups of the experiment group made more progress in word decoding and phonological ability than the comparison group at the follow-up test. Good outcomes

were observed for both speech sounds and words included in the training program as well as new speech sounds and words not included in the program, indicating transfer effects.

Hu (2019) studied the relationship between Chinese English learners' English phonological awareness and their three English skills (reading, spelling, and listening). The participants of this study consisted of 400 college students. The findings based on the correlation and regression analyses revealed that PA significantly correlated with the three skills and could predict spelling strongly, listening intermediately, and reading weakly. The study also showed that the three levels of PA had different effects on English skills. In addition, reading was found to be only significantly predicted by onset-rhyme and phoneme awareness, spelling by onset-rhyme and phoneme awareness, and listening by all levels of PA. Moreover, the findings indicated that task prediction effects were dependent on the degree of the processing skill required by the task.

Lin (2019) examines the impact of specific phonological awareness (PA) instruction on adult EFL students' word reading and spelling. The participants (63 freshmen at a university in Hsinchu, Taiwan) were divided into two groups, both of whom were enrolled in the General Education Center's Freshman English course. Both the experimental and control groups followed the university's program, but the experimental group also got PA instruction during the first 15 minutes of each lesson. Pre- and post-tests were given to both groups to assess their PA skills, and the data were analyzed using ANCOVA. Participants who had received PA instruction displayed increased phonological awareness at the syllable and phoneme levels, as well as considerably superior performance on English word reading and spelling tasks than the control group.

Abdel- Maksod, Abdel-Haq, and Amin (2020) used phonological awareness tactics to increase some EFL oral reading fluency of fourth graders. During the second semester of the 2018/2019 academic year, 60 fourth year students from Alshahid Mohamed Abdelrohman Primary School in Menuofia Governorate were chosen to take parts in the study. The study used a two-group design (experimental and control). An EFL oral reading fluency checklist and an EFL oral reading fluency pre-post exams were

used in the study. The Pre exam was given to two groups of fourth year students. Students in the experimental group were given phonological awareness tactics (rhyming, alliteration, blending, and segmentation) to improve their EFL oral reading fluency. The traditional strategy was employed in the control group. The post-test was then given to the students. The study's findings demonstrated that employing some phonological awareness strategies increased the experimental group's EFL oral reading fluency (reading simple sentences and answering basic questions) much more than the control group. As a result, it is possible to conclude that phonological awareness tactics were successful in enhancing EFL oral reading fluency in fourth-year primary school students.

According to the previous studies, phonological awareness instruction (PA) has been shown to have an effect on English reading ability among primary school EFL students at the syllable, rhyme, and phoneme levels by using different skills and tasks. Furthermore, there was a significant positive correlation between English phonological awareness and reading performance. Previous research has suggested that the importance of phonological awareness for early reading ability to the phoneme awareness levels of the learners with more specific tasks on phoneme identification and phoneme deletion and samples from different grades to identify EFL learners with reading difficulties and conduct English phonological awareness training studies to help them improve their reading skills.

2.6.2 Previous study on phonological awareness instruction in Thai EFL context

English is commonly used as an international language. It has been taught in Thailand's schools for many years. Thai students spend a large amount of time in English language lessons; nonetheless, they do not acquire a suitable level of proficiency in certain language skills and are unable to pronounce some English sentences. Phonological awareness has been used widely in many countries as well as in Thailand. Some researchers are interested in using phonological awareness training in the lesson in order to improve English language and Thai language as well.

Thajakan and Sucaromana (2014) investigated whether Thai grade one students' English phonemic awareness could be improved by a multimedia CALL program while learning the English language using the whole word approach. It also

investigated Thai grade one students' perspectives on enhancing phonemic awareness with a multimedia CALL program while learning English using the whole word approach. The study included 50 Thai first graders who were divided into three groups based on their English proficiency scores: good, fair, and poor. Each group of students was separated into experimental and control groups. The experimental group and the control group consisted of 25 students each. Then, three individuals were chosen at random from each good, fair, and poor group to participate in a semi-structured interview. To collect quantitative data from the experimental and control groups, three phonemic awareness tests were performed. The descriptive statistics (Mean and SD) and t-test were used to examine these tests. A semi-structured interview was also performed to acquire qualitative data, which was then evaluated using content analysis. The study's findings demonstrated that, at the .001 level, students in the experimental group achieved significantly higher gains in English phonemic awareness than those of the control group. Furthermore, the qualitative results revealed that students who received the multimedia CALL program had good attitudes toward improving phonemic awareness using this supportive tool while learning the English language using the whole word approach.

Yampratoom, Aroonyadech, Ruangdaraganon, Roongpraiwan, and Kositprapa (2017) investigated emergent literacy skills in Thai preschoolers, including phonological awareness when given an initial phoneme-matching task and letter knowledge when given a letter-naming task, and identified significant factors related to those skills. In this study, the participants were 412 typically developing students in their final kindergarten year. Initial phoneme-matching and letter-naming tasks were used to assess their early reading skills. Self-report questionnaires were used to collect determinant variables such as parents' education and teachers' perceptions. The initial phoneme-matching task had a mean score of 4.5. (45 percent of a total of 10 scores). The letter-naming task had a mean score of 30.2 (68.6 percent of a total of 44 scores) without a picture showing the target letter name, which climbed to 38.8 (88.2 percent of a total of 44 scores) when showing a picture representing the target letter name. The education and household income of the participants were found to be related to initial phoneme-matching and letter-naming ability. Letter-naming skill was also contributed to home reading activities as well as gender.

Munthuli et al. (2019) explored the study discussing the reasoning and preliminary stages of building a screening tool for Thai children who were likely to experience Learning Disabilities (LD), "Noo-Khor-Arn" 'May I read?', by integrating languages, mathematics, and memory criteria. Rapid naming, decoding, morphological awareness, phonological awareness, mathematics, and memory were the six main examinations. The five subtests of phonological awareness consisted of Initial phoneme deletion, Phoneme identification, Phoneme discrimination, Phoneme substitution, and Rhyme detection. A total of ten Thai normally developed (ND) and five LD children (mean age 8.20 0.68 SD) were given complete exams. In ND, their tests performance revealed a much higher mean. After small data adjustments, phonological awareness came up third, after decoding and morphological awareness, for distinguishing LD from the ND group, and it was demonstrated as a potential predictor (together with the use of ASR) for assessing LD in this sample.

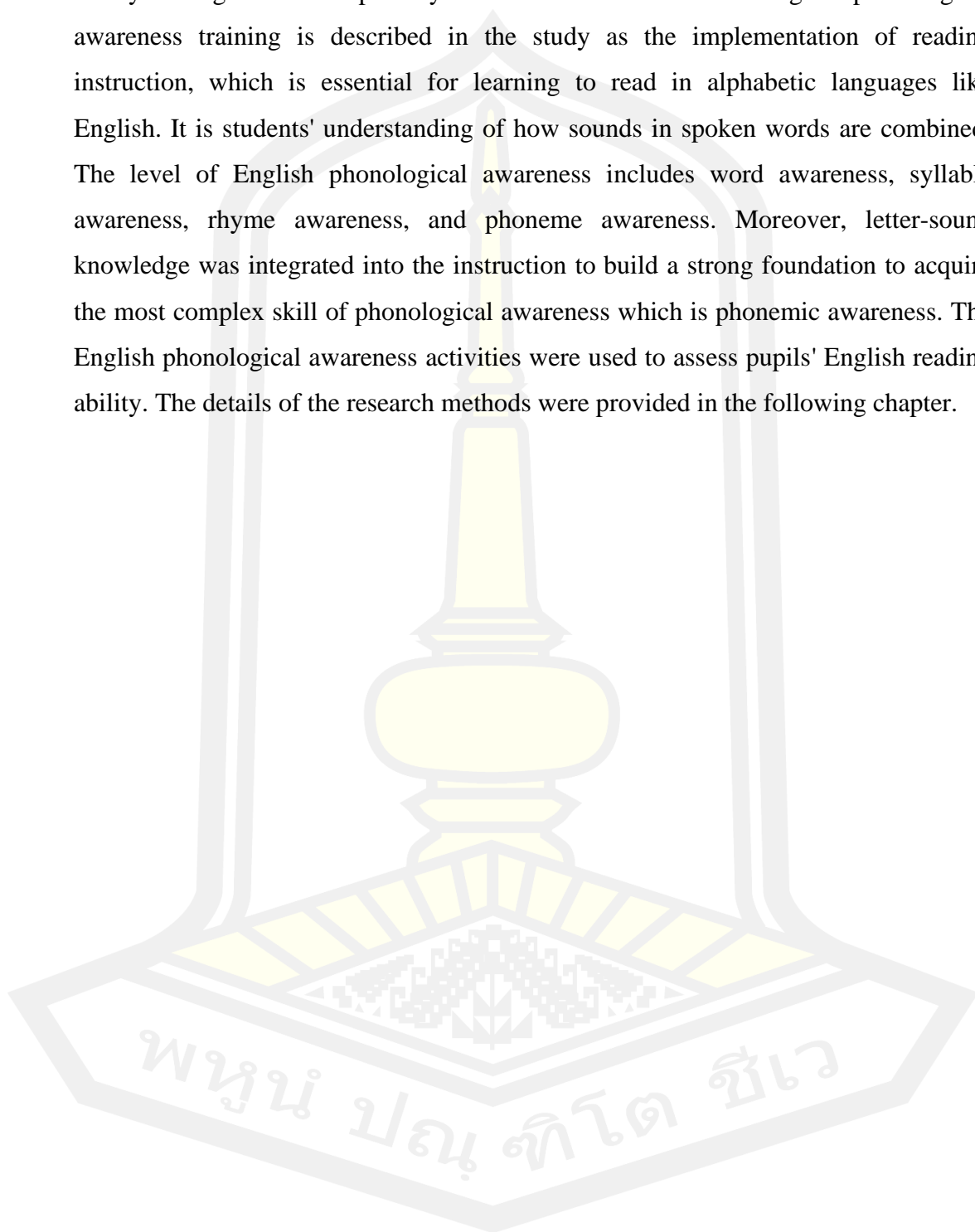
Vibulpatanavong and Evans (2019) studied phonological development, reading development, and the link between phonological awareness and reading aptitude in Thai language. Three hundred and ten pupils from four schools in Bangkok, Thailand, from Grades 1 to 3, were tested on phonological awareness, letter knowledge, and reading ability. Throughout the lower elementary school years, phonological awareness and reading ability in Thai language were consistently improved. Even when age, gender, parental education, and letter knowledge were taken into consideration, phonological awareness could essentially predict reading ability in lower students. However, different phonological tests showed varying degrees of predictive significance.

According to the evidence presented above, phonological awareness has a significant effect on reading ability at several levels of students, including preschool and elementary school, and also effect to the link of Thai language to English language reading. However, less attention is focused on teaching phonological awareness in improving English word reading in Thai primary school students.

2.7 Summary of this chapter

In summary, the objective of this study was to see if children who receive phonological awareness instruction do better in terms of word reading skills. The

researcher believed that by using English phonological awareness, English reading ability among Thai EFL primary students can be increased. English phonological awareness training is described in the study as the implementation of reading instruction, which is essential for learning to read in alphabetic languages like English. It is students' understanding of how sounds in spoken words are combined. The level of English phonological awareness includes word awareness, syllable awareness, rhyme awareness, and phoneme awareness. Moreover, letter-sound knowledge was integrated into the instruction to build a strong foundation to acquire the most complex skill of phonological awareness which is phonemic awareness. The English phonological awareness activities were used to assess pupils' English reading ability. The details of the research methods were provided in the following chapter.



CHAPTER III

RESEARCH METHODS

This study aimed to enhance the English word reading ability of Thai primary students through phonological awareness training. This chapter describes the participants and setting, research instruments, data collection procedure, data analysis, and ethical considerations of the study.

3.1 Participants and Setting

The participants were 12 second grade students with reading difficulties who study in a primary school located in a rural area in the northeast of Thailand. The participants were aged between 8 – 9 years old and were selected using a purposive sampling technique. The participants received 55 - 60 minutes in each section of English instruction, for an average of five hours per week. All participants speak Thai and Esan as their mother language. Thai was used as the medium of teaching in this study, with English as a school subject. The students had been studying English at a primary school for the past two years and were considered to be at a beginner's level. Most were underprivileged students who come from low-income families, and their parents are either farmers or factory workers.

The setting in the present study was a small-type school in the northeastern part of Thailand. The school consists of 56 students with 8 classes and only 6 teachers. As such, the teachers have a heavy workload and must take care of more than one class at one period of teaching. Among the 6 teachers, there is only one English teacher. The English teacher does not have specific training in language teaching and assigns students to complete activities such as drawings, handwriting practice, translating a sentence, and writing in a notebook. As a result, the students suffer difficulties in English language learning and they cannot reach learning standards, nor do they meet any standard indicators according to the national curriculum, which states that second-grade students should be able to spell, read, and write simple sentences.

The aim of this study was to determine whether phonological awareness training can help students to read English words in order to improve their English skills in reading fluency and comprehension.

3.2 Research Instruments

To answer the research questions, two instruments were used to investigate the development of English word reading ability: word reading tests and a semi-structured interview.

3.2.1 Word reading test

In order to investigate the effects of English phonological awareness training on English reading ability among Thai EFL primary students, word reading tests were used to examine the progression of the students' English word reading ability. The test was administered before and after the implementation of the phonological awareness instruction. The pretest and the posttest were presented as a list of thirty words. The participants were asked to read these words one by one. After the researcher said "begin", they needed to read aloud from the list of words within 30 minutes. The students received 1 mark if they could sound out the word correctly and did not hesitate for more than 10 seconds on each item.

The target words were common English words chosen from English textbooks for Thai primary students. These textbooks included several English commercial books for Thai EFL grade 2 students selected by the Ministry of Education of Thailand for elementary students to address the Basic Education Core Curriculum B.E. 2008. A hundred words were listed that frequently appear in these books and then these words were piloted with a different group of participants with a similar background of English proficiency.

Sixty words that were rated as unknown vocabulary from the pilot study were evaluated for their validity and reliability. The content validity was also evaluated by three English education experts, who were primary school teachers with more than five years of experience teaching English. To analyze the congruency of the test's contents, the Index of Item-Objective-Congruence (IOC) was used to measure the consistency of each item. The expert opinion rating scale is shown below:

1 Means Incongruent.

0 Means Questionable.

+1 Means Congruent

$$IOC = \frac{\sum R}{N}$$

IOC means the index of congruence

R means the total score obtained from the experts

N means a number of experts

The tests were evaluated by three experts. Items with an IOC score of greater than 0.5 were retained, while those with a score of less than 0.5 were discarded. The tests were then revised based on the comments of the experts.

3.2.2 Semi-structured interview

Semi-structured interviews were used to collect the students' opinions toward phonological awareness training in improving their English word reading ability. Some participants were randomly selected for interviews every week in order to assess their attitude toward the instruction in real-time. During the interview, the students were asked about the activities they like and which activities were the most helpful (see Appendix B).

3.3 Word selection

Only unknown words were used in the current study. The vocabulary was selected from Smile book grade 2, Extra and friends grade 2, Say hello grade 2, and Let's go grade 2 (see Table 1). The specific process used to choose the words is described below:

1. The teacher studied the objectives of the main English language course E12101 and then synthesized the goals to select the vocabulary.
2. Then, the words were selected from the units that shared the same topics. The teachers chose 109 new words that students had never learned before.
3. After all 109 words were piloted and 60 words were selected to create the word reading test. The 60 words were divided according to syllable structures: monosyllabic, disyllabic, and trisyllabic.
4. The validity of the 60 unknown words was analyzed by three experts and 30 words then selected for the tests. The same words were used in the pretest and posttest, but the words were presented in different positions (Appendix A).

5. The teacher designed the tests and lesson plans based on 6 weeks of phonological awareness instruction.

Table 1: The vocabulary selected from Smile book grade 2, Extra and friends grade 2, Say hello grade 2, and Let's go grade 2

Syllable structures	Vocabulary	After pilot study	Word reading test
Monosyllabic	can, ask, key, tree, sing, play, game, mug, broom, box, jump, race, milk, egg, park, bird, teeth, face, art, sing, book, sit, red, blue, goat, name, queen, clock, van, chair, fish, green, hen, cake, cap, sock, black, rice, food, cheese, sheep, goose, fat, bike	ask, sing, mug, broom, box, jump, race, milk, park, teeth, sing, book, goat, queen, clock, chair, green, cap, sock, black, rice, cheese, sheep, goose, bike	ask, box, cap, sock, teeth, green, rice, race, sing, broom, book, park
Disyllabic	candy, pencil, notebook, noodle, picture, ruler, market, color, teacher, farmer, doctor, pancake, cookie, sandwich, yellow, number, sofa, police, dinner, sugar, balloon, apple, letter, orange, monkey, tiger, English, window, brother, sister, happy, chicken, carrot, body, purple, pizza, picnic, bedroom, morning,	candy, noodle, picture, market, color, teacher, farmer, doctor, pancake, cookie, sandwich, number, sofa, police, dinner, sugar, balloon, letter, monkey, English, window, brother, sister, happy, chicken, carrot, purple, picnic, bedroom, morning,	candy, color, farmer, letter, happy, bedroom, chicken, sister, dinner, menu, candle

Syllable structures	Vocabulary	After pilot study	Word reading test
	Sunday, water, bottle, menu, candle, party	water, bottle, menu, candle, party	
Trisyllabic	calendar, camera, remember, sharpener, umbrella, coconut, bicycle, banana, computer, popular, family, September	calendar, camera, remember, sharpener, umbrella, coconut, bicycle, banana, computer, popular, family, September	camera, banana, September, family, sharpener, umbrella, popular

Table 1 shows how the target words for the instruction were selected. The researcher selected 109 new words from English commercial textbooks for grade 2 students. The selected words were divided as follows: 45 monosyllabic words, 42 disyllabic words and 12 trisyllabic words. These 109 words were piloted with other students at a nearby school whose reading ability was at the same level as the participants. After the pilot test, 25 monosyllabic words, 35 disyllabic words, and 12 trisyllabic words were used to analyze for ensuring the validity by three experts. Finally, 12 monosyllabic words, 11 disyllabic words, and 7 trisyllabic words were used in the word reading test.

3.4 Phonological awareness training

The instructional training was based on Lane (2007) and Jones et al. (2012). The training started with the study of letter-sound knowledge in the first week. Then, the phonological awareness training was taught from the basic level to the complex level, with one skill being taught per day. Pauses were also included during the training to review what the students had learned and to summarize. The participants in this study were trained to understand what each English alphabet's name and sound represents. They were then taught how to tap syllables inside a word and that one English word can contain many syllables. Phoneme identity (initial and final) and rhyming skills were also taught. Several pictures were included in the learning activities to maintain the participants' interest and attention, and no text was used. The majority of the

teaching used in this study was auditory training to increase participants' awareness of the sound structures found in English words.

Practice time was included at each stage and clear learning outcomes were provided for each learning activity. There were no paper-and-pencil exercises as the program was activity-based. Participants were prompted to tap syllables on body regions to gain syllable awareness, and words with a varied numbers of syllables were provided orally (e.g., three for pineapple).

In this study, the treatment was given for six weeks over the second semester of academic year 2021. The timeline of the current study is shown in Table 2.

Table 2: The timeline of the current study

week	Time	Unit	Training	Activities
1	55 mins	Orientation+ Pretest		
	55 mins	Colors	Letter-sound knowledge	- Letter name knowledge - Upper case - Lower case
	55 mins			- Letter sound knowledge - /a/-/z/ - Vowel sound
	55 mins			- Recognizing the Letter in Text (upper/lower, name/sound) - Word search - Identifying the letter in charts of classmates' names
	55 mins			- Predicting a word in a sentence by using its first letter
2	55 mins			Word
	55 mins	Syllable	Count the number of syllables in multi-syllable words.	
	55 mins	Onset-rime	Identify or produce spoken	

week	Time	Unit	Training	Activities
				rhyming words.
	55 mins		Onset-rime	Identify or produce spoken rhyming words.
	55 mins		Phoneme	Identify beginning consonant sounds and identify words that begin with the same consonant sound
3	55 mins	food	Pause point 1	Review word, syllable, onset-rime, and phoneme
	55 mins		Phoneme	Blend two syllable spoken words
	55 mins		Onset-rime	Segment onset and rime in words
	55 mins		Phoneme	Add initial phonemes to words to make new words
	55 mins		Phoneme	Delete phonemes in words to make new words
4	55 mins		Pause point 2	Review last week activities
	55 mins		Phoneme	Identify final sound in words
	55 mins		Phoneme	Substitute phonemes in words to make new words
	55 mins		Phoneme	Blend phonemes in words
	55 mins	Phoneme	Identify beginning and final consonant sounds, blend and segment CVC words	
5	55 mins	school	Pause point	Review last week activities
	55 mins		Word	Blend two-syllable words
	55 mins		Syllable	Count the number of syllables in multi-syllable words
	55 mins		Onset-rime	Identify or produce rhyming words and identify words begin with the same consonant sounds

week	Time	Unit	Training	Activities
	55 mins		Onset-rime	Blend onset and rime to make words and segment onset and rime in words
6	55 mins		Phoneme	Identify initial and final consonants sound
	55 mins		phoneme	Segment words into phonemes and blend phonemes in words
	55 mins		Pause point	Review all activities
	55 mins			
	55 mins	Posttest		

The teaching started with letter-sound knowledge. Students learned letter-name and letter sound through activities, such as word search and identifying letter in words of name. To increase their word awareness, the students were given an audio soundtrack that was taken directly from the textbooks. The participants were asked to count and clap the number of words in each sentence to break down the sentences. Students then had to combine words from the audio tracks into a sentence in the word blending task. Two major tasks were used to train the students for syllable awareness. In the syllable segmentation task, students were taught that words were made up of syllables (for example, pencil is pen-cil), then pictures and sounds were shown and instructed so that the participants could syllabify those words. In the syllable blending task, the participants were taught how to blend using the following example: The teacher pronounced the words as syllables, and the students blended them together to form words. When the teacher said "sum-mer", the students combined the syllables and said "summer". Then, students were shown pictures and sounds of different words, and they were requested to form words out of their syllables as pronounced by the teacher. Students were taught to become aware of the onset-rime using two tasks. The first task was related to recognizing onset and the onset in the run?" the students responded, "The onset is r"). Then, students had to identify rime (for example, "Which sound is the rime in the run?" "The rime is un"). Task 2 was related to blending onsets and rimes: for example, they were told "If you mix the onset c and the

rime an, you'll get can." In order to increase their phoneme awareness, these two tasks were used in the present study to teach the students about phoneme segmentation and blending. They were taught how to segment words into phonemes (for example, "If teacher say cat, students should say /c/, /a/, /t/") and to mix phonemes into words (e.g., "If the teacher says the word slowly, you say that word quickly. If the teacher says Rrrr aaaa tttt, students say "rat").

3.5 Data collection procedure

The data was collected for six weeks during a regular class. On the first day, the word reading exam was completed, then the phonological awareness training began. After the completion of the training, the word reading posttest was given to all participants. Participants were also asked to participate in interviews throughout the training. Participants were given instructions and a few illustrations of the activities in their native Thai language before the tests.

The pretest was used to determine the level of English word reading ability among the participants. Following the treatment, the posttest was administered to determine the effectiveness of the phonological awareness instruction in improving the participants' English reading ability. The pretest and the pretest were the same test, except that words in these two tests were scrambled to prevent students from memorizing the words. The results of the pre-test and the post-test were used to analyze to determine the effect of the English phonological awareness training on the participants' word reading ability. The semi-structured interviews were used to determine the features of the phonological awareness straining that the participants thought helped them improve word reading ability. Thirty interview sessions were conducted over six weeks period. The data collection procedure is illustrated in Figure 2.

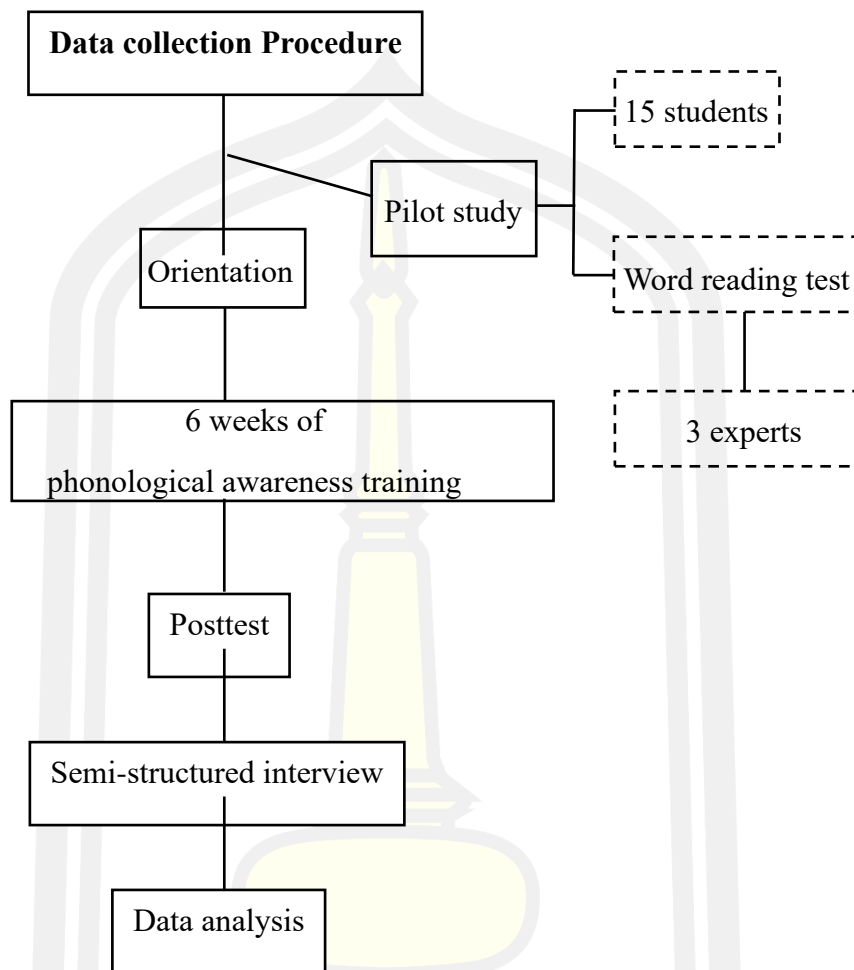


Figure 2: Data collection procedure



3.4 Data analysis

3.4.1 Quantitative data analysis

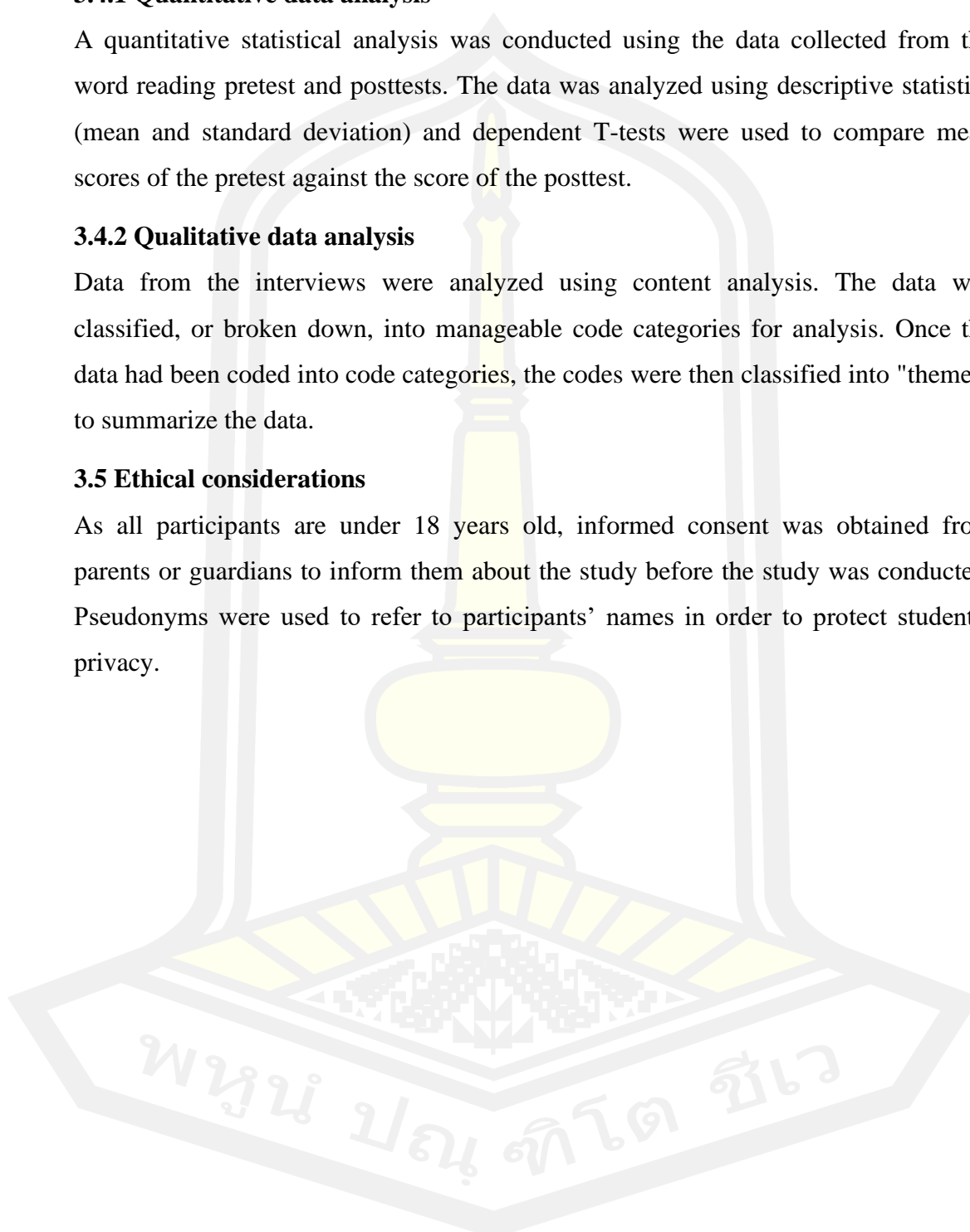
A quantitative statistical analysis was conducted using the data collected from the word reading pretest and posttests. The data was analyzed using descriptive statistics (mean and standard deviation) and dependent T-tests were used to compare mean scores of the pretest against the score of the posttest.

3.4.2 Qualitative data analysis

Data from the interviews were analyzed using content analysis. The data was classified, or broken down, into manageable code categories for analysis. Once the data had been coded into code categories, the codes were then classified into "themes" to summarize the data.

3.5 Ethical considerations

As all participants are under 18 years old, informed consent was obtained from parents or guardians to inform them about the study before the study was conducted. Pseudonyms were used to refer to participants' names in order to protect students' privacy.



CHAPTER IV

RESULTS

The following chapter reports the results of the study. The first section describes the findings on the effect of the phonological awareness instruction on Thai second-grade students' English word reading ability. The second section presents the features of the phonological awareness instruction that improved students' English word reading ability, according to the students.

4.1 The effect of phonological awareness instruction on the students' English word reading ability

Research Question 1: Does phonological awareness instruction affect the English word reading ability of Thai primary students?

This section summarizes the performance of the second-grade students on the tests of English word reading ability.

4.1.1 English word reading ability pretest and posttest scores

Table 3 shows the students' performance on the English word reading pre-test and post-test. The participants scored an average of 4.58 (S.D.=3.423) for the pretest and 6.25 (S.D.=4.003) for the posttest (see Figure 3). The posttest score for English word reading was 6.67% higher than the pretest score.

Table 3: Students' scores on the English word reading pretest and posttest.

Students No.	Pre-test		Post-test		Mean	Difference
	Score	%	Score	%	Score	(%)
1	13	43.33	15	50.00	14	6.67
2	2	6.67	3	10.00	2.5	3.33
3	3	10.00	4	13.33	3.5	3.33
4	1	3.33	2	6.67	1.5	3.33
5	3	10.00	4	13.33	3.5	3.33
6	2	6.67	4	13.33	3	6.67
7	1	3.33	1	3.33	1	0.00
8	5	16.67	8	26.67	6.5	10.00
9	6	20.00	8	26.67	7	6.67

Students No.	Pre-test		Post-test		Mean	Difference
	Score	%	Score	%	Score	(%)
10	7	23.33	9	30.00	8	6.67
11	7	23.33	10	33.33	8.5	10.00
12	5	16.67	7	23.33	6	6.67
Total	$\bar{x} = 4.58$ S.D.=3.423	15.28	$\bar{x} = 6.25$ S.D.=4.003	20.83	5.42	6.67

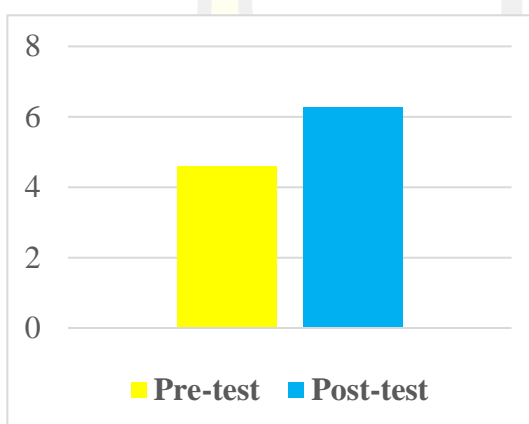


Figure 3: The mean pretest and posttest scores

To investigate the effect of phonological awareness instruction on English word reading ability of Thai primary students the mean scores of the pretest and posttest were compared using a paired t-test. As shown in Table 4, there was a significant difference between the second-grade students' English word reading pretest and posttest mean scores at the .05 level ($t = 6.504$). This indicates the beneficial effect of phonological awareness instruction on the development of English word reading ability among the participants.

Table 4: Comparison of English word reading pretest and posttest mean scores

Test	Pretest		Posttest		t	Sig.
	Mean	S.D.	Mean	S.D.		
Score	5.08	3.423	6.25	4.003	6.504	.000**

** Significant at the 0.05 level ($p < 0.05$)

4.2 The features of the phonological awareness instruction that improved students' English word reading ability

Research question 2: What features of the phonological awareness instruction improve students' English word reading ability?

To address the second research question, the participants were interviewed one by one about their opinion regarding features of phonological awareness instruction that helped them improve their word reading ability. The interview data was recorded, transcribed, and thematically analyzed. This section will discuss the findings that reveal two main themes related to features of the phonological awareness instruction that help improving students' English word reading ability: 1) letter-sound knowledge, and 2) phoneme awareness.

Letter-sound knowledge

Letter-sound knowledge was shown to be one of the primary features that supports students in improving their ability to read English words. Before the training, the students had learned to remember only the letter name. However, during the treatment period, participants were taught to consider both the letter name and letter sound through various activities. In the interviews, six participants believed that letter-sound knowledge assisted them when reading new words.

As Student G said, letter-sound knowledge helped them to know the sound of each letter. *"If I can remember a sound of each letter, I can blend sounds to a word easily."*

As the same as Student L mentioned that *"It helped me a lot when I had to blend the new word because I know what sound each letter is"*

Students F reflected letter-sound knowledge's advantage to his word reading ability that "I sang a song of letter sound to get how the sound of each letter pronounce. Then, I can blend sounds to a word"

According to the excerpts above, participants agreed that letter-sound knowledge improved their English word reading ability as it acts as both a tool and guide for phoneme blending. For example, Students F, G and L have good literacy development and are fast learners who performed well in the hardest part of the treatment, which reflects phoneme blending. That is, when they can remember and sound, it is easier to blend the new word.

On the other hand, Students B, C, and D are slower learners and did not perform well in the harder part of the treatment that assessed onset-rime awareness and phonemic awareness. As such, they cannot perform phoneme blending and, instead, read a new word by saying the letter sound quickly, which reflects letter-sound knowledge.

Student B stated that *"Singing a letter song help me a lot. The song tells that a sounds /a/, b sound /b/, etc. I sing when teacher give me a new word and trying to say it quickly."*

It was the same as Student C and D that read new words by saying letter's sound quickly.

Student C said that *"I did not know how a word pronounce, so I just said each letter's sound quickly. It became a new word"*

Student D mentioned that *"I thought about the sound and say it. In the first time, I said in normal speed, then faster and faster. I turned to a word, but I am not sure that is correct or not."*

Phoneme awareness

Another theme identified from the participants' responses is phoneme awareness. Phoneme awareness activities were used in the treatment, including phoneme isolation and phoneme blending. In the phoneme isolation activity, students were asked to listen and recognize sounds in a word, while in the phoneme blending activity students were required to blend given individual sounds to produce a word.

According to the semi-structured interviews, five participants agreed that phoneme awareness was the most useful for improving English word reading ability. Specifically, they reported that the phoneme blending activities helped them to mix each sound into a word when they encounter a new word that they could not read before. The excerpts support these claims:

Student J gave an interview that *“Phoneme blending activity helped me read the unknown word. I blended the first letter with the second and then the third. It turned to that word.”*

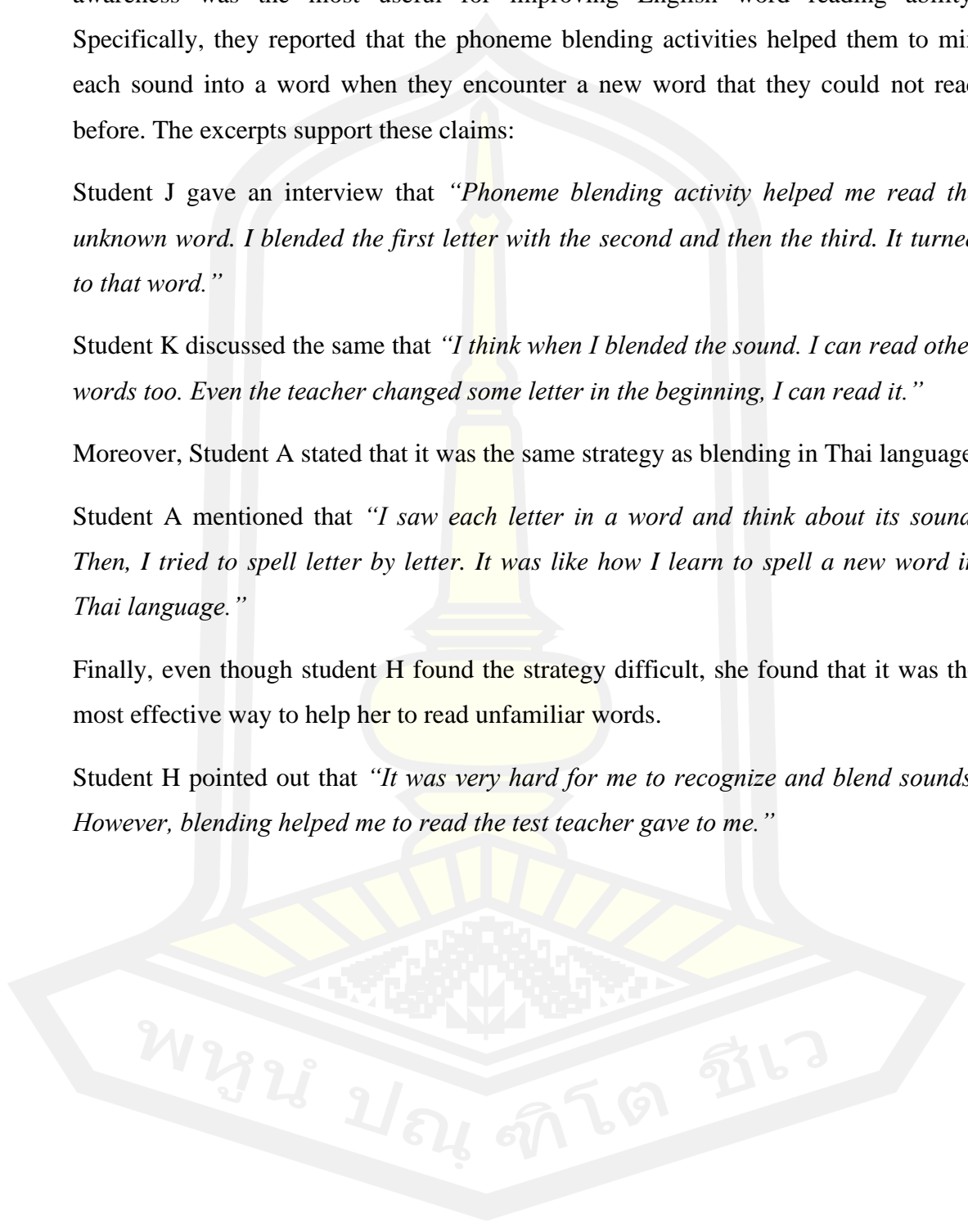
Student K discussed the same that *“I think when I blended the sound. I can read other words too. Even the teacher changed some letter in the beginning, I can read it.”*

Moreover, Student A stated that it was the same strategy as blending in Thai language

Student A mentioned that *“I saw each letter in a word and think about its sound. Then, I tried to spell letter by letter. It was like how I learn to spell a new word in Thai language.”*

Finally, even though student H found the strategy difficult, she found that it was the most effective way to help her to read unfamiliar words.

Student H pointed out that *“It was very hard for me to recognize and blend sounds. However, blending helped me to read the test teacher gave to me.”*



CHAPTER V

DISCUSSION AND CONCLUSION

This study investigated the effect of using phonological awareness instruction to improve the English word reading ability of Thai EFL second graders. In addition, it also examined the features of phonological awareness instruction that improve English word reading ability. This chapter summarizes the findings related to the effect of the phonological awareness instruction on students' word reading skills and the features of phonological awareness instruction that enhance English word reading ability in Thai EFL second-grade students. The conclusion of the present study, pedagogical implications, limitations of the study, and recommendations for future study are also discussed in the last section.

5.1 Summary of findings

The current study was conducted at a small-type school in a rural area of Northeastern Thailand. The participants were twelve second-grade students selected by purposive sampling procedure with a beginner English language proficiency level. The instructional strategy for phonological awareness implementation lasted six weeks, including the pre-test and post-test. The instruments used in this present study were an English word reading pre- and post-test, as well as a semi-structured interview with students. Participants first completed the pretest which consisted of thirty words. Then, the participants were taught to read English words through phonological awareness instruction. Following the instruction, the posttest was administered which used the same set of words as the pre-test. The mean scores from the word reading pretest and posttest were then statistically compared. In addition, the students were invited to participate in a semi-structured interview to assess their attitudes regarding the features of the instruction that helped them improve their word reading skills.

The results indicated that posttest scores were statistically higher than pretest scores, indicating the beneficial effect of the phonological awareness instruction. According to the data obtained from semi-structured interviews, letter-sound knowledge and phoneme awareness are the features that help students to read new words.

5.2 Discussion

5.2.1 The Effect of the Phonological Awareness on Students' English Word

Reading Ability

The current results suggest that phonological awareness can help students improve their English word reading abilities. The students' English word reading ability improved significantly after they were taught using phonological awareness instruction, with a mean score of 4.58 for the pretest and 6.25 for the posttest. This demonstrates the benefit of phonological awareness instruction in improving students' word reading ability, particularly at the elementary level. Indeed, this training is likely to improve letter-sound knowledge, word awareness, syllable awareness, onset-rime awareness, and phoneme awareness. The finding is consistent with previous research, which showed that phonological awareness instruction improves students' word reading abilities (Dessemontet & Chambrier, 2015; Fei, 2015; Lin, 2019; Abdel-Maksod et al., 2020).

Students were taught five aspects of phonological awareness over six weeks. The first aspect was letter-sound knowledge. Students learned how to recognize letter names and sounds, as well as how to match letters and build words using magnetic letters. In Thailand, the teaching of letter knowledge primarily focuses on the name therefore students have not been taught the sounds found in English. Even though students could not remember all 44 phonemes and 26 graphemes in the current study, they were able to identify and match letters with sounds, particularly ones that they saw very often. This demonstrates that students have letter knowledge as they had the capacity to recognize and pronounce letters by their sounds and names, as well as the ability to dictate letters (Málková et al., 2016). Letter knowledge is a prerequisite for phoneme awareness, which in turn is a prerequisite for reading competence (Málková et al., 2016). According to Castles & Coltheart (2004), learning letter-sound knowledge while learning to read allows children to control phonemes since they can manipulate orthographic pictures of words. It is a precondition for the development of phoneme awareness when they have letter knowledge and a comprehension of the alphabetic principle. Indeed, letter knowledge and phoneme awareness are crucial

precursor abilities that function in reciprocal alliance to enhance beginning reading in children (Caravolas & Samara, 2015).

One explanation for the improvement of English word reading ability is that students were taught word awareness. Word segmentation and word blending are two activities used in word awareness. Word awareness allows students to break down speech into individual words and to understand how words can be combined to form a sentence. According to the researcher's observation, when a sentence consisted of single words, students segmented words easily and they could tell how many words are in a sentence if they see a print with spaces between words. This indicates that the students have word awareness as they have the ability to separate individual words from the sentence (Phillips et al., 2008). Trehearne et al. (2004) also discussed the importance of word awareness while considering word boundaries in reading and spelling.

Another explanation for the improvement is that the participants were trained in syllable awareness. This included activities that involved segmenting words into syllables and blending syllables into words. Learners were able to distinguish words with modeling and practice. Some students required Thai language modeling to gain a better understanding of the activity. Gillion (2004) suggested that syllable awareness is crucial for learners to understand that words are broken down into syllables, or word parts, after students understand that sentences are composed of words and that words come in several lengths. That is, they learn to recognize the phonemes that form words and to examine speech sounds as syllables.

Another reason why English word reading improved after the implementation might be that students were taught to become aware of the onset-rime using two tasks. One task was related to recognizing onset and. Task 2 was related to blending onsets and rimes. Trehearne et al., (2004) argued that students with a good sense of rhyme and segmenting skills should be able to quickly learn how to segment onset and rime. The use of word analogies in reading and writing is made easier by knowing how to segment and blend words into onsets and rimes.

Phoneme awareness may also have improved the participants' English word reading abilities. Phoneme awareness is the ability to recognize that words are made up of individual phonemes (sounds) and to manipulate these phonemes using segmenting and blending tasks. This is regarded as a late-developing phonological ability. According to Chard and Dickson (1999), phoneme awareness is the most significant and advanced level of phonological awareness. Nevertheless, students found this phase of the instruction difficult. Indeed, the phoneme awareness activities required a variety of skills and therefore the students needed more time to prepare, and some pupils struggled with the tasks. Blending and segmenting distinct sounds inside words is difficult to acquire in phonological awareness and is strongly related to learning to read (Adams et al., 1998). Because phoneme awareness can be developed in a symbiotic relationship with learning to read, some learners may struggle at first.

In conclusion, the results showed a significant improvement in Thai second grade students' performance on reading tests after receiving phonological awareness training. This is likely due to phonological awareness training, which progresses from simple to complicated, and the varied and active nature of the training activities.

5.2.2 The features of the phonological awareness instruction that improve students' English word reading ability

The results from the semi-structured interviews indicate that students believe that letter-sound knowledge and phoneme awareness are the features of phonological awareness that help them reading unknown words. This is consistent with previous research by Dessementet and Chambrier (2015) showing that phonological awareness and letter-sound knowledge at 6–8 years of age could indicate growth in both word and non-word reading. The benefits of phoneme awareness and letter-sound knowledge was demonstrated by Lerner and Lonigan (2016) who investigated patterns of bidirectional relationships between letter knowledge and phonological awareness during preschool. The findings showed that letter knowledge and phonological awareness were found to be bi-directionally connected, with the beginning level of one uniquely predicting an increase in the other. Hulme (2020) also examined the impact of a phonological and reading intervention that promoted letter-sound knowledge and phoneme awareness, and found that these two skills, as well as

word-level reading and spelling skills, significantly increased. Specifically, it was shown that the development in letter-sound knowledge and phoneme awareness at the conclusion of the intervention fully mediated the gains in children's word-level literacy skills after five months (Hulme, 2020).

The findings of the current study indicate that letter knowledge and phoneme awareness are crucial precondition skills that act in tandem to enhance early reading in children. Many studies have identified strong links between letter knowledge and later decoding abilities (Badian, 1998; Roth, Speece, & Cooper 2002; Georgiou & Kirby, 2008). Understanding the alphabetic principle, how particular speech sounds in spoken words are indicated by letters in printed words, requires letter-sound knowledge. Letter knowledge is the precursor and is necessary and sufficient for the development of phoneme awareness. Students with fluent phonemic awareness skills can recognize that words are made up of separate sounds because they have developed the ability to audibly segment and blend sounds in words (Rightmyer, McIntyre, & Petrosko, 2006; Schuele & Boudreau, 2008; Roe & Smith, 2012; Caldwell & Leslie, 2013).

Students also reported that their English word reading ability was improved because the activities in this phonological awareness training were varied and enjoyable. The training included active learning activities during which students were asked to listen to audio, play games, sing, and dance. This is consistent with a previous study from Lane (2007) showing that teachers should plan and integrated fun phonological awareness into classroom activities.

5.3 Conclusion

The purpose of this study was to investigate whether students who received phonological awareness instruction showed improved performance on a word reading test, and to determine what features of phonological awareness instruction help Thai EFL primary students improve their English word-reading ability. The participants were 12 second-grade students from a small-type school in northeastern Thailand. The results demonstrated that phonological awareness instruction improved students' word reading abilities, and students believed that training in letter-sound knowledge and phoneme awareness enhanced their ability to read English words.

Overall, it can be concluded that phonological awareness instruction, which involves activities that facilitate learning to read words, is beneficial for students to improve their word reading abilities especially letter-sound knowledge and phoneme awareness.

5.4 Pedagogical Implications

The positive effects of English phonological awareness instruction on English word reading reported in the current study highlight the importance of improving students' phonological skills in order to help Thai EFL primary students in learning to read in a second language. Some considerations must be taken into account when implementing phonological awareness instruction. First, the instruction must be given in a direct and explicit manner and should proceed from the simplest to the most complex activities: word awareness, syllable awareness, rhyme awareness, and sound (phonemic) awareness. Simple sentences should be taught first to show children how words are combined to form a sentence, and that a sentence is made up of words. Activities emphasizing word awareness, syllable awareness, and onset-rime awareness are also accessible for elementary school students. Starting with these simple activities in young children may contribute to the establishment of their early literacy in English.

Furthermore, letter sound knowledge should be taught to Thai EFL students since it is a crucial aspect for studying phoneme awareness, which is the most complicated phonological awareness activity. For young Thai learners, English instruction typically focuses on the letter name, which is less related to spelling and reading words. Unfortunately, it may be too late to introduce students to letter sound knowledge while they are in higher education. As a result, teachers should begin teaching it to learners as early as kindergarten or the beginning of primary school.

5.5 Limitations of the study

It should be noted that there was a discontinuity of learning during the data collection section due to COVID-19 clusters, including a teacher and a student who were infected. The school was temporarily closed for two weeks as a safety precaution and thus the phonological awareness instruction was stopped during this time. After the return from the school break, the treatment had to restart from the first step. The

instruction was only limited to six weeks and greater improvements may be observed in the instruction was extended. Such training requires a great deal of planning by the teachers. Learning sounds in English is new and challenging for Thai EFL students, especially young pupils. As a result, the phonological awareness tasks should be varied to take into account the different learning styles of the students. Teachers should provide a variety of activities that incorporate pictures, videos, sounds, and allow them to move their bodies in order to acquire and absorb knowledge as effectively as possible. Group work may also be a useful approach to encourage interactions in the classroom.

Finally, the improvement of English word reading in each aspect of phonological awareness was not investigated in the current study. Indeed, this study compared pretest and posttest word reading scores but did not assess the specific components of phonological awareness that may have helped Thai EFL students to read English words.

5.6 Recommendations for future studies

This study examined the effect of phonological awareness instruction on Thai EFL second graders' ability to read English words. The findings suggested that phonological awareness teaching could improve students' word reading abilities. Recommendations for further research based on the findings of this study are described below:

1. The current study compared pretest and posttest scores to assess the effectiveness of a phonological awareness instruction. Therefore, the study did not reveal the improvement of word reading in each aspect of phonological awareness instruction. Further studies should be conducted as a time-series study to determine the aspect of a phonological awareness instruction regarding pedagogical implications explicitly.
2. Longitudinal studies may be beneficial to assess the long-term impacts of phonological awareness training. In addition, the duration of the training may be increased to allow young children to have more time to learn.

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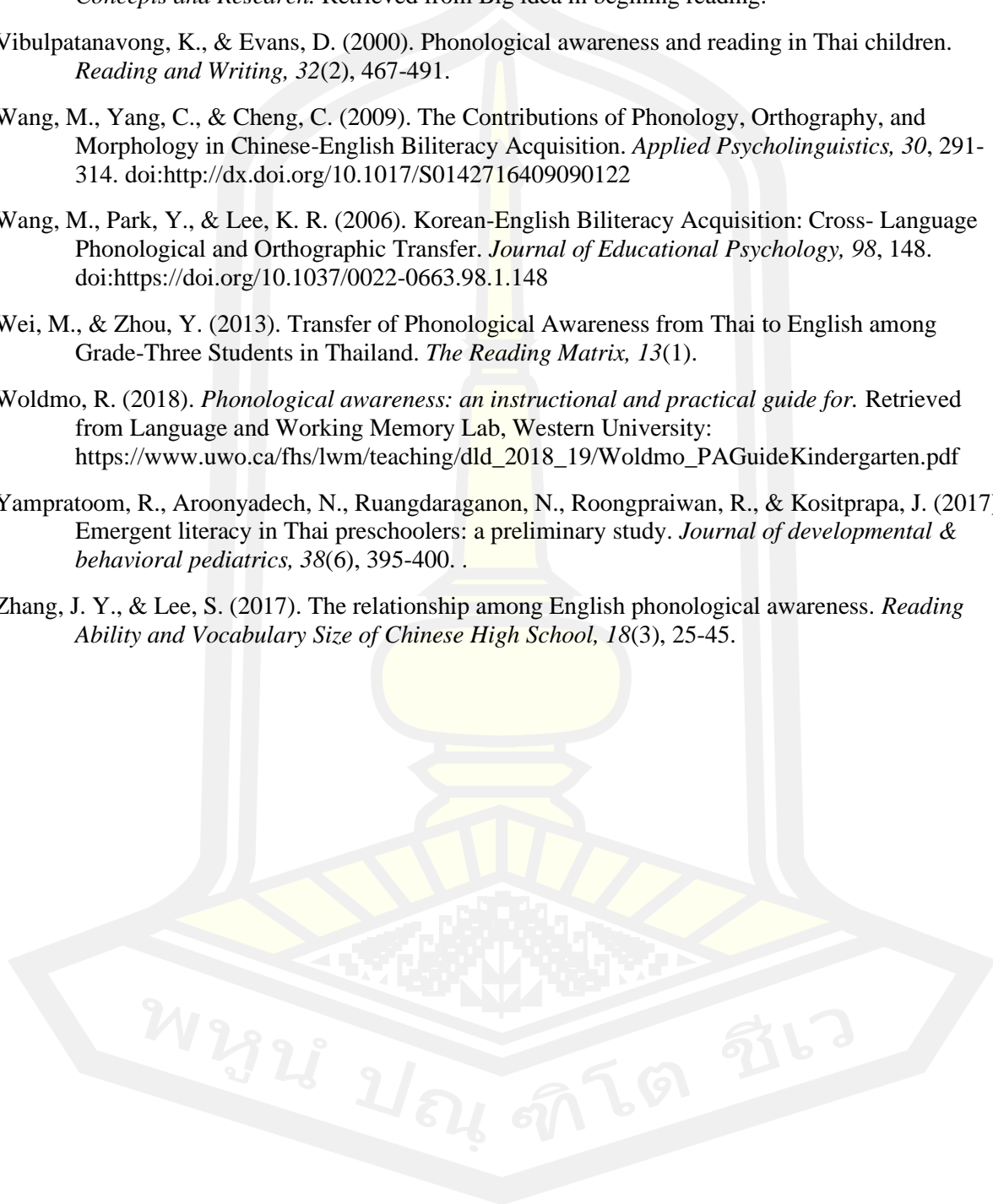
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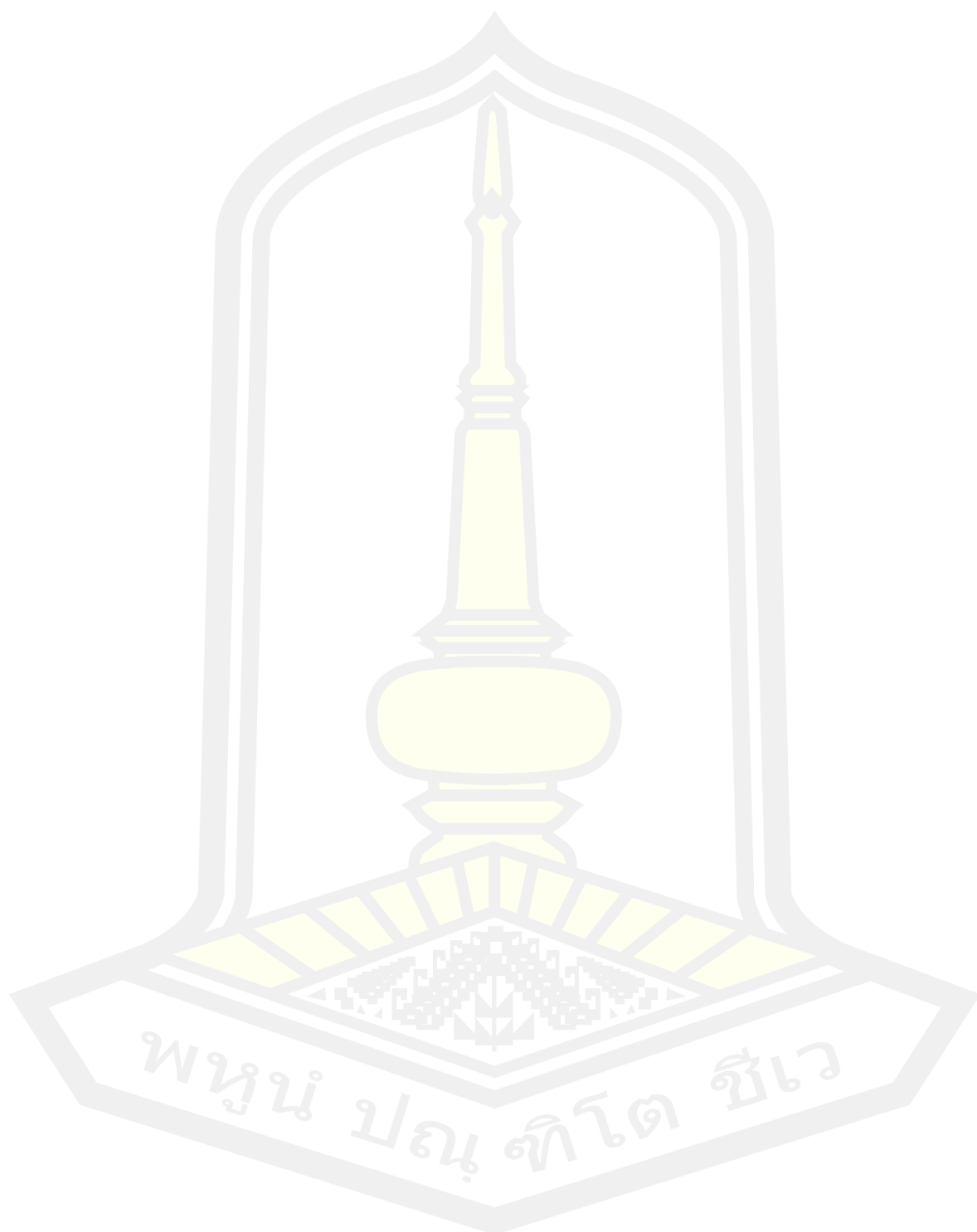
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APPENDICES



Appendix A: English word reading pretest

คำชี้แจง : ให้นักเรียนอ่านออกเสียงคำศัพท์ต่อไปนี้ (30 คำ 30 คะแนน)

ที่	คำศัพท์	Check	ที่	คำศัพท์	Check
1	ask		16	letter	
2	box		17	happy	
3	cap		18	bedroom	
4	sock		19	chicken	
5	teeth		20	sister	
6	green		21	dinner	
7	rice		22	menu	
8	race		23	candle	
9	sing		24	camera	
10	broom		25	banana	
11	book		26	September	
12	park		27	family	
13	candy		28	sharpener	
14	color		29	umbrella	
15	farmer		30	popular	

Appendix B: English word reading posttest

คำชี้แจง : ให้นักเรียนอ่านออกเสียงคำศัพท์ต่อไปนี้ (30 คำ 30 คะแนน)

ที่	คำศัพท์	Check	ที่	คำศัพท์	Check
1	sing		16	happy	
2	teeth		17	letter	
3	race		18	menu	
4	park		19	chicken	
5	box		20	sister	
6	rice		21	sharpener	
7	color		22	bedroom	
8	candy		23	family	
9	ask		24	camera	
10	farmer		25	banana	
11	book		26	September	
12	sock		27	umbrella	
13	cap		28	dinner	
14	green		29	popular	
15	broom		30	candle	

Appendix C: Semi-structured interview

คำชี้แจง: ให้นักเรียนพูดความรู้สึกและความประทับใจหลังจากบทเรียน ดังนี้

- นักเรียนชอบกิจกรรมใดในการเรียนการสอนวันนี้
- กิจกรรมนั้นทำอย่างไร
- นักเรียนทำกิจกรรมนั้นได้ดีหรือไม่
- กิจกรรมนั้นช่วยให้นักเรียนอ่านคำภาษาอังกฤษได้ดีขึ้นอย่างไร



Subject: English 2
Semester: 2

Code: EN12101

Unit: 4
Hour: 2

1. Content:

- How old are you?

2. Learning outcome

F1.1 P.2/2 Pronounce and spell words; accurately read aloud groups of words, sentences, and simple chants by observing the principles of reading.

3. Learning objective

- Students will be able to spell the words in their word sorts and correctly identify the phoneme in the word.

4. Classroom activity

4.1 Warm up

- Teacher has students to listen to conversation from the textbook.
- Teacher tells students that their objective is to increase their phoneme awareness skills in order to become better readers and spellers.
- Teacher reviews some of the key terms pertaining to phonemic awareness, such as blends, or two or three consonant combinations that create a different consonant sound as tree, doll, and frog.
- Teacher informs the students that they will be working with new word sorts and blends from the play.

4.2 Presentation

- Teacher explains to the students that phonemes are the smallest units that make up words. Direct their attention to sounds and blends which are found within the words of this play.
- Teacher has the students try by shouting out some sounds, one at a time. Create a word sort from words found in the play on the board.
- Teacher has the students write them in their notebooks and explains to the students that teacher is going to call out a word from the play.
- Teacher tells the students that when they hear the ring of a bell, they need to pick up the correct phonemes from the word the teacher called out.
- Teacher instructs the students to look through a group of index cards with a phoneme from the word sort written on each one. Have the students write down the phonemes in their notebooks and spell the word.
- Teacher has the students play the spelling bee game.

4.3 Practice

- Teacher has the students get into table teams.

- Teacher tells the students that they will accumulate points for their team, with a point awarded for each correct phoneme, correct spelling of the word, and for providing a word that rhymes with the word.

- Teacher has the students play a few rounds of the game with their groups. Check for student understanding and answer any questions that the students may have.

- Teacher asks students to study their words from the game, reviewing each word twice and asks them to practice finding words that rhyme with each word.

4.4 Production

- Teacher has accelerated the students work together, and give them additional tasks, such as providing well-constructed sentences for each word.

- Teacher gives the students easier words with spelling and rhyming only so that they can focus on basic reading and writing skills.

- Teacher has the students create a word document of their word sort with the word and phoneme.

4.5 Wrap up

- Teacher invites the students to come together for a mock game show of “Pick Up the Phoneme.” As the game show host, ask your students to play the phoneme game. Add bonus words for additional points.

5. Materials

- Whiteboard, dry erase marker, notebooks, cards with phonemes from the story, bell, song

6. Assessment

Conduct a group spelling bee that consists of the words within your students' word banks. The scores that the students receive from the spelling bee will help you assess how well they met the objective of this lesson.

7. Teaching outcome

.....
.....
.....
.....

(Miss Satita Pairor)

(...../...../.....)

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