

THE EFFECTS OF A READING PROGRAM USING
PHONOLOGICAL AWARENESS-RAISING AND PHONICS INSTRUCTION
ON THE ENGLISH READING ABILITY OF SEVENTH GRADE STRUGGLING READERS
IN BANGKOK METROPOLITAN ADMINISTRATION SCHOOLS

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A Thesis Submitted in Partial Fulfillment of the Requirements
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ผลของโปรแกรมการอ่านด้วยการเพิ่มการระลึกรู้ระบบเสียงและการสอนเสียงแบบโฟนิกส์
ที่มีต่อความสามารถในการอ่านภาษาอังกฤษ
ของนักเรียนมัธยมศึกษาปีที่ 1 ในโรงเรียนสังกัดกรุงเทพมหานครที่มีปัญหาทางการอ่าน

นางสาวกมลวรรณ สุขมาก

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาครุศาสตรมหาบัณฑิต
สาขาวิชาการสอนภาษาอังกฤษเป็นภาษาต่างประเทศ ภาควิชาหลักสูตรและการสอน

คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

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กมลวรรณ สุขมาก : ผลของโปรแกรมการอ่านด้วยการเพิ่มการระลึกรู้ระบบเสียงและการสอนเสียงแบบโฟนิกส์ที่มีต่อความสามารถในการอ่านภาษาอังกฤษของนักเรียนมัธยมศึกษาปีที่ 1 ในโรงเรียนสังกัดกรุงเทพมหานครที่มีปัญหาทางการอ่าน

(THE EFFECTS OF A READING PROGRAM USING PHONOLOGICAL AWARENESS-RAISING AND PHONICS INSTRUCTION ON THE ENGLISH READING ABILITY OF SEVENTH GRADE STRUGGLING READERS IN BANGKOK METROPOLITAN ADMINISTRATION SCHOOLS)

อ.ที่ปรึกษาวิทยานิพนธ์หลัก : อ.ดร.ปราณภา โหมคหิรัญ, 168 หน้า.

งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาผลของโปรแกรมการอ่านด้วยการเพิ่มการระลึกรู้ระบบเสียงและการสอนเสียงแบบโฟนิกส์เพื่อเพิ่มความสามารถทางการอ่านออกเสียงภาษาอังกฤษอย่างถูกต้องและคล่องแคล่วของนักเรียนระดับชั้นมัธยมศึกษา ปีที่ 1 ของโรงเรียนในสังกัดกรุงเทพมหานครที่มีปัญหาทางการอ่าน กลุ่มตัวอย่างคือนักเรียนชั้นมัธยมศึกษาปีที่ 1 โรงเรียนในสำนักงานเขตหนองแขม สังกัดกรุงเทพมหานคร จำนวน 20 คน ที่มีคะแนนจากแบบทดสอบการอ่านออกเสียงต่ำกว่าร้อยละ 70 ในระดับ pre-primer เครื่องมือที่ใช้ในการวิจัย คือแบบทดสอบการอ่านออกเสียง และแบบจัดบันทึกการเรียนรู้ และ วิเคราะห์ข้อมูลโดยใช้สถิติการบรรยายและการวิเคราะห์เนื้อหา

ผลการวิจัยพบว่า 1) คะแนนเฉลี่ยหลังการเข้าชั้นเรียน โปรแกรมการอ่านสูงกว่าคะแนนก่อนการเข้าชั้นเรียน โปรแกรมการอ่านอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 2) จากแบบจัดบันทึกการเรียนรู้ นักเรียนมีเจตคติที่ดีต่อโปรแกรมการอ่านด้วยการเพิ่มการระลึกรู้ระบบเสียงและการสอนเสียงแบบโฟนิกส์

ภาควิชา.....หลักสูตรและการสอน.....ลายมือชื่อนิติศ.....

สาขาวิชา.....การสอนภาษาอังกฤษเป็นภาษาต่างประเทศ.....ลายมือชื่ออ.ที่ปรึกษาวิทยานิพนธ์หลัก.....

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KAMONWAN SOOKMAG : THE EFFECTS OF A READING PROGRAM USING PHONOLOGICAL AWARENESS-RAISING AND PHONICS INSTRUCTION ON THE ENGLISH READING ABILITY OF SEVENTH GRADE STRUGGLING READERS IN BANGKOK METROPOLITAN ADMINISTRATION SCHOOLS.

ADVISOR : PRANNAPHA MODEHIRAN, Ph.D., 168 pp.

The objectives of this research were to investigate the effects of a reading program using phonological awareness-raising and phonics instruction to enhance English reading accuracy and fluency. The participants were 20 seventh grade struggling readers studying at a public school of Bangkok Metropolitan Administration, Thailand and achieved the scores below 70% on graded word lists at pre-primer. The instruments were an Informal Reading Inventory tests (IRI test), and learning logs. The data were analyzed using qualitative and quantitative statistics.

The findings of the study revealed that: (1) the reading program was shown to be effective in improving the students' reading ability as the average scores on the post-test of the IRI test were significantly higher than the pre-test at the .05 level of significance; and (2) struggling readers collectively developed a positive opinion towards the reading program, as they perceived that the phonological awareness-raising and phonics instruction had brought benefits that enhanced their reading ability.

Department :Curriculum and Instruction..... Student's Signature.....

Field of Study :Teaching English as a Foreign Language... Advisor's Signature.....

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CHAPTER I

INTRODUCTION

Background of the Study

Nowadays, reading has become a medium for learning rather than a skill to learn (Chall, 1983; Robb, 2002). Reading is counted by many to be the most crucial skill to be mastered in education (National Institute of Child Health and Human Development [NICHD], 2000; Snow, Burns, & Griffin, 1998). When students progress through school, reading becomes increasingly important in many subjects. Information from their reading becomes a primary source of knowledge (Smagorinsky, 2001). It is well accepted that the more children read the better they can acquire knowledge.

Although reading is important, it is also the area of academics in which children confront the difficulties (Meese, 2001; Shapiro, 1996). Chall, Jacobs, & Baldwin (1991) stated that students may have limitation of development in word reading skills. Additionally, The National Reading Panel Report (2000) identified that the phonological deficits cause the problem of speech sounds which correlate to decoding problem. Another complication of reading, it is when students encounter unfamiliar words in their basic reading skills such as decoding, word recognition, and spelling from kindergarten through grade 3, and have not been fully developed (Kamil, 2003).

When students meet word reading and word recognition difficulties, they will also show their weak reading comprehension. Word reading skills refer to making letter–sound correspondences, reading words as a whole, and reading words fluently.

Whenever they are not able to decode the written word, they cannot translate prints in to words. Then they have problem answering questions after the passage. These students, then, give up reading. The lack of word reading skill makes the desire to read and comprehend the materials presented to them decline.

Word reading and word recognition is, therefore, phonological processes recognized as critical to reading (National Reading Panel [NRP], 2000; Torgesen, 1999). Being unable to read the words automatically, struggling readers need to develop their knowledge of the alphabetic principal and phonological awareness (Boulineau, Fore, Hagan-Burke, & Burke, 2004). The strong phonological awareness and phonics (letter-sound correspondence) skills must become automatized (Laberge & Samuels, 1974) to enhance decoding skills and learn how to read accurately and fluently. Teaching them to be the decoders and to access word recognition strategies can improve reading outcomes for struggling readers (Scammacca et al, 2007; Wexler, Edmonds, & Vaughn, 2007). If children understand that words can be divided into individual sound units and those units of sounds can be blended into words, then they are able to use letter-sound (phonics) knowledge to read and build words. As a consequence of this relationship, phonological awareness and phonics are the strong predictors of later reading success. Thus, the importance of phonological awareness and phonics to reading acquisition cannot be overlooked. Giving good and adequate experiences of phonological awareness and phonics to students result in the ability to read.

Many studies put the hard attempt to solve students' reading difficulties especially in middle and high school students-grade 4 to12- which continues to read for learn, and documented as a secondary literacy in No Child Left Behind Act

[NCLB] (U.S. Department of Education, 2009). Miller (2009) reported that about 3% of students have difficulty with basic skills, such as sounding out words. His recommendation was that these students receive high-quality instruction in letter-sound correspondence (phonics) with intensive supplemental instruction to catch them up to grade level. Besides, the scientists from Carnegie Mellon University (2008) explored the good evidence after taking remediation of phonological awareness and found that the struggling readers not only were developed word reading of single word but also their ways of comprehending the sentences were changed. Furthermore, Robert et al. (2008) remarked that a continued focus on phonics is still appropriate and necessary for older struggling readers with more serious reading difficulties.

Like the problem of children in the USA, Thai students also rise to the challenge of reading difficulties. There is a study by Sriprasidh (2009) that conducted the effects of letter-sound correspondence and phonological awareness as the role of English clinic. She summarized that the problems in learning English of Thai students were caused by word reading difficulties due to wrong decoding and encoding, lack of reading fluency and accuracy and new words attack-poor. Then students fail to comprehend reading texts. The results revealed that Thai students need the knowledge of manipulating with the letters and sounds so that they can read the words.

From the studies concerning the reading difficulty mentioned above, it can be seen that in order to overcome the reading difficulties, a child needs phonological awareness. Phonological awareness is the knowledge and conscious understanding of the sound structure of language, ranging from the identification and manipulation of words, syllables, onsets, and rimes, to rhyming and spelling. Becoming aware of phonemes is an important factor in the progress of decoding written word. Decoding

skills are fundamental to successful reading (National Reading Panel, 2000). This perspective assumes that when students become proficient in decoding skills, comprehension of text will follow automatically. Therefore, the knowledge of sound-spelling relationships to be able to read words can help improve their reading accuracy and fluency.

Accordingly, the current study will design a reading program using phonological awareness and phonics instruction to improve seventh grade struggling students' reading aloud accuracy and fluency. Plenty of manipulating sounds and letter activities are provided in order to develop reading accuracy and fluency. The study will also investigate struggling readers' opinion after taking the program.

Research Questions

1. To what extent does reading program using phonological awareness-raising and phonics instruction affect struggling readers' English reading accuracy and fluency?
2. To what extent can the reading program result in the positive opinions among struggling readers?

Research Objectives

1. To investigate the reading program's effectiveness in enhancing struggling readers' English reading aloud accuracy and fluency.
2. To explore seventh grade struggling readers' opinions toward the reading program using phonological awareness-raising and phonics instruction.

Scope of the Study

1. Population and sample

The population of this study was seventh grade struggling readers of Bangkok Metropolitan Administration schools, Bangkok, Thailand.

The twenty seventh grade students' classes of 2012 at a public school in Nongkhaem district, Bangkok were samples of the current study. They were selected from administering the diagnostic test called the Informal Reading Inventory test that contains 2 parts: ten graded word lists (see Appendix A) and ten graded reading passages (see Appendix B) to measure the level of reading aloud accuracy and fluency. Those who were determined at *frustration level* (below 70%) of pre-primer level on graded word lists became struggling readers of the study.

The school is the one in the public school of Bangkok Metropolitan Administration with approximately 2,600 students. The researcher selected the school purposively because of the convenience that the researcher is teaching there. There are six classes of seventh grade students at the school. A class of 20 students was chosen to be the participants in this study. The class was required to take the reading program as an intervention class to improve their English reading aloud accuracy and fluency. After the announcement of the program description that aims to improve how to read words, there were 35 volunteers who were interested in the program. Teacher assigned them to read the graded word lists to diagnose the level of reading aloud accuracy and fluency. Twenty nine of volunteers were determined at *frustration level* of pre-primer level on graded word lists became struggling readers. Other six of them achieved scores over 70% of pre-primer level, therefore, they could not take the program. Due to the program also required the participants who could attend the class

after school and on Saturday. The researcher, then, provided the letters authorized on behalf of the school director to ask for those 29 parents' permission. Ultimately, there were 20 struggling readers were allowed to take the reading program.

2. Variables

The variables in this study include:

2.1 Independent variable is reading program using phonological awareness-raising and phonics instruction

2.2 Dependent variables are:

- a. Students' reading aloud accuracy and fluency.
- b. Students' opinions toward the reading program using phonological awareness-raising and phonics instruction.

Definition of Terms

1. Reading program using phonological awareness-raising and phonics instruction refers to the reading program used to enhance English reading aloud accuracy and fluency for seventh grade struggling readers. The instructions consists of 5 steps which are 1) reviewing the previous sounds (previous lesson), 2) introducing new sound-spelling relationship, 3) blending and word building exercises, 4) reading connected text, 5) reading-writing connection for each lesson. There are two mains components of the reading program which are phonological awareness-raising and phonics instruction.

Phonological awareness-raising refers to methods used to increase students' understanding oral language that is made up of words, syllables, rhymes, and sounds

(phonemes). Students are trained to blend, segment, delete, and substitute individual sounds within words, syllables, onsets and rimes.

Phonics instruction refers to the ways to teach readers how to apply the relationship between the individual sounds (phonemes) of oral language and letter sounds (grapheme) of written language so that they are able to read words.

2. Struggling readers refer to the seventh grade students at a public school of Bangkok Metropolitan Administration in Nongkhaem district, Bangkok who were determined at *frustration level* by the Informal Reading Inventory (IRI) test on graded word list (achieved scores below 70%).

3. Reading ability refers to ability to read aloud accurately and fluently.

Reading aloud accuracy refers to accurately decode and sound out the words with phonological representation of each word. It is assessed as the number of student errors. The levels of students' reading aloud accuracy on graded word lists are graded using Stauffer et al.'s (1978) criteria which is 70 – 89% on a given list indicates *instructional level* that is the child has sufficient sight vocabulary at this level to read successfully with teacher support. For reading aloud accuracy on graded reading passages are graded using Johnson et al and Barr et al.'s (2002) criteria which is the strong performance of reading aloud accuracy at 95% or better indicates *instructional level* that struggling readers are able to read a given passage on that level.

Reading aloud fluency refers to read words accurately and instantly without stopping to analyze words and decode letter-by-letter. It is measured in words read correct per minute (WPM) on graded reading passages. The levels of students' reading aloud fluency are graded using Hasbrouck and Tindall (2006) and Bloodgood

and Kucan's (2005) criteria that the rate of 45-85 words correct per minute indicates *first grade level*.

CHAPTER II

LITERATURE REVIEW

In this part of the study, the researcher explores the theoretical frameworks on the reading program using phonological awareness-raising and phonics instruction on the English reading aloud accuracy and fluency for the seventh grade struggling readers in Bangkok Metropolitan Administration schools. In order to provide background for this study, the following concepts are addressed:

1. Reading accuracy and fluency in secondary struggling students
2. Phonological awareness
3. Phonics instruction
4. Reading instruction for secondary struggling readers
5. Developing reading program for secondary struggling readers
6. Related studies

1. Reading Accuracy and Fluency in Secondary Struggling Students

1.1 The role of accuracy and fluency in the reading ability

Since many secondary students still struggle with decoding and reading difficulties at the word-level, therefore, other higher levels of reading abilities are not competence. Lacking of the ability to decode the letters causes the words recognition abilities (Boon & Spencer, 2013). Thus, being aware of foundational skills-decoding and recognizing words at the word-level still needs to be taught among them in order to decode and read words accurately.

Accuracy of decoding is, therefore, essential. Students who accurately decode words are able to improve their automatic reading words. When students are able to

read words automatically and accurately, then their word recognition skills become effective. Not only can they recognize words, they also need to understand the words they read. The bridge coordinating decoding, word recognition and understanding words together is fluency (Murray et al., 2012; Rasinski, 2004; Yovanoff et al., 2005).

Children with high fluency rates tend to read more and remember more of what they read because they don't have to spend too much time on decoding words, they can devote their entire concentrates on the meaning. Also, they can make mental connections throughout the text, as well as apply those connections to their personal backgrounds and experiences to comprehend text. Therefore, if one is able to quickly and accurately read through the words on the page, one's decoding skills are automatic. Then word recognition skills become effective. This means that the reader should be able to comprehend the text. Contrary, if one is very slow readers or less fluent and only focuses their time and attention on figuring out the words, it is then one's concentration will be drawn away from understanding text, eventually, one's comprehension falls behind the achievement (National Reading Panel, 2000).

Overview, accuracy and fluency reading are the critical foundation on which all other reading skills are generated.

1.2 Challenges of accuracy and fluency reading in secondary students

As mentioned before that secondary students are still unable to decode words accurately and this continues the difficulties in word reading, word recognition, fluency, and comprehension (Murray, Munger, and Clonan, 2012). This can identify that secondary struggling readers often have challenges in all areas of readings (Archer & Gleason, 2003). When decoding is inaccurate, they cannot read

automatically, develop their word recognitions, build upon the fluency, and construct meaning. Inaccurate decoding and slow word recognition are likely to be the main causes of the later reading skills (Cain & Oakhill, 2011; Hulme & Snowling, 2011; Shankweiler et al., 1999). This means that they are challenged with the basic skills of reading, and these remain while they are encountering with the other higher levels of reading without the treatments to withhold the obstacles.

The difficulties of the basics skills; word decoding and word recognition can be discontinued. Word recognition develops from practicing decoding skills (Ashby&Rayner, 2012; Gunn et al., 2000; Samuels, 1988; Yamashita, 2013). The secondary students who struggle with decoding skills need to understand the sounds of spoken language (phonological awareness) and relationship between the sounds of spoken language and the letters (phonics) in the written language so that they can use these relationships to recognize words accurately and automatically (Archer & Gleason, 2003; Ehri, 1995, 1998; Palumbo & Willcutt, 2006; Scammacca et al., 2007). Due to the understanding of the sounds of spoken language is the first deficit in reading (Snowling, 2008), therefore, phonological awareness is need to be trained. After that, the phonics instruction is implied to help struggling readers to manipulate the sounds with the letters representing their sounds so that they are able to read word accurately.

2. Phonological Awareness

Phonological awareness is the ability to discriminate and manipulate the sound structure of language (Ehri, Nunes, Willows, et al., 2001). It is an individual's ability to analyze spoken language into smaller component sound units (Bertelson and de

Gelder, 1991). It is the umbrella term that includes not only sound awareness but also an awareness of the words, rhymes, syllables, and sounds in language together with the ability to blend individual sounds into meaningful spoken words (Donoghue, 2009). It is also the ability to detect, manipulate, or analyze the auditory aspects of spoken language independent of meaning (Shanahan and Lonigan, 2010). Phonological awareness does not involve written language or spellings and focuses on auditory and oral abilities such as rhyming, alliteration, breaking apart syllables, identifying the initial sounds in words, blending phonemes together, and orally segmenting words into their speech sounds (Ball & Blachman, 1991; Stanovich, Cunningham, & Cramer, 1984). Phonological awareness, then, is a broader term referring to an awareness of all of the sound structure of speech (Armbruster, Lehr & Osborn, 2001; National Reading panel, 2000; Yopp & Yopp, 2000): word awareness, syllable awareness, rhyming awareness, awareness of alliteration, phonemic awareness, awareness of phoneme features (how the mouth, tongue, vocal cords, and teeth are used to produce each phoneme)

2.1 The Role of Phonological Awareness in Reading Ability

Phonological awareness skills influence reading development. The inference is that the structure of spoken language provides a foundation for understanding the structure of written language (Wagner and Torgesen, 1987). In order to learn to read and spell words, children must understand that spoken words are composed of phonemes that can be manipulated and these phonemes corresponds to letters in written words (Yopp, 1992). This relation between spoken and written language is supported by a large amount of research that suggests phonological awareness is a

reliable predictor of reading competence (e.g., Adams, 1990; Hatcher 1994; Hatcher et al., 2006b; National Research Council, 1998; Stanovich, 1985; Wagner, 1988).

Phonological awareness is critical to the acquisition of early decoding skills. A lack of this awareness may obstruct an individual's ability to acquire accurate and fluent word reading skills, and as such, is a primary source of difficulty for children with reading disabilities (Torgesen, Wagner, & Rashotte, 1994). Many children would experience difficulty learning the phonetic skills in written language without first understanding the phonological units that comprise spoken language. They will not be able to use sound knowledge effectively because they will not have the underlying ability "listen inside a word" and "play with the sounds" they hear (Fitzpatrick, 1997).

Summary, children will make use ability to look inside words for syllables, rhymes, and individual sounds when they attempt to decode or spell unfamiliar words. They use familiar sound chunks from known words, not just individual sounds as one strategy to read. These abilities based on their phonological awareness. Students have to segment, blend, and manipulate syllables, onset and rime, and sounds.

2.2 Phonological Awareness Stages

Eldredge (2005) stated that phonological awareness develop in stages. Children first become aware of larger units of sound, the words. Next, children become aware of syllables and rhymes within words, and last of all, phonemes.

The first level, then, is word awareness. Children have to understand what a word is. They must be able to differentiate words from syllables, and eventually they must be able to hear phonemes in both words and syllables.

Secondly, syllabic awareness, children have to understand a syllable is a part of a word containing one vowel sound and syllables can be isolated without distorting

speech, while phonemes cannot. For multisyllabic words, they must understand that the natural speech will break them into individual syllable when we speak.

Thirdly, phonemes awareness or phonemic awareness, children must understand that words are comprised of individual sounds sequences called phonemes. They must segment or isolate the separate phonemes in words without reference letters.

2.3 Developing Phonological Awareness

Since phonological awareness plays an important role in the development of reading as mentioned in the beginning, they can be developed through songs, games, drama, poem, and story. In order to develop phonological awareness through classroom activities, Fox (1996) mentioned the concepts as following;

Word Awareness

Children are aware that spoken language messages are put together by stringing one word after another. They need to be prepared to seek for meaningful word-length segments in print that match the meaningful word-length segments they identify in speech. Sample ways to develop word awareness is 1) pointing as they read such as in the storybooks, poem, and story to help them match the spoken words and written words, and discover the word-length segments in spoken language that represented by the word-length segments in written language, 2) drawing attention to interesting words such as bubbles and clouds to reveal one word at a time.

Rhyme Awareness

Rhyme awareness is between awareness of words and awareness of individual sounds. Children who detect rhyme have enough phonological awareness to connect speech with print at a level that is smaller than whole words but larger than single

sounds. Rhyme awareness primes children to look for the letters in written words that represent the rhyme in spoken words. This, in turn, paves the way for the use of rhyme to identify unfamiliar words by analogy. Additionally, the concept of rhyme gives the way to spell words that rhyme and into ways to use rhyming language. The activities to increase rhyme awareness such as 1) hands up for rhyme 2) picture-rhyme matching, and 3) inventing rhyme.

Sound Awareness (phoneme awareness)

Sound awareness is essential to reading and writing because alphabetic writing is a code for individual speech sounds, not for whole words or rhymes. If readers are to strategically use alphabetic writing code, they must understand that 1) sounds are embroidered together to form the words of language, 2) words can be separated into sounds, and 3) the letters in written words correspond to the sounds in spoken words.

There are two major abilities in the children who have awareness of sound (Fox, 1996). First, they are able to segment a word into sounds such as the word “lamp” into four sounds- /l/, /a/, /m/, and /p/. Second, they blend individual sounds together to form meaningful words. For instance, the sounds /l/, /a/, /m/, and /p/ would be blend into “lamp”. Those two major abilities can be demonstrated from these following tasks (Eldridge, 2005):

1. Phoneme blending (identifying words when pronounced in isolated phonemes)
2. Phoneme association (matching phonemes with words beginning with those phonemes)
3. Phoneme segmentation (isolating phonemes-initial sound, ending sound, middle sound)

4. Segmenting words (isolating all of phonemes in words)
5. Phonemes counting (counting the phonemes in words)
6. Phoneme deletion
7. Phoneme addition
8. Phoneme substitution

It makes sense, then, that the combination of helping children learn to separate words into sounds and to blend sounds into words has a highly beneficial effect. Children who are taught to separate words into sounds and to blend sounds into words are better reading words (Torgesen, Morgan, & Davis, 1992). Phonological awareness at the sounds level is, therefore, a link to both decoding and reading.

Although phonological awareness is necessary to the development of skilled decoding, it is not sufficient for acquiring the ability to read words (NRP, 2000). Children would find it is difficult to figure out how the letter works if they did not understand the connections between the sounds of spoken language and the letter combinations used to present those sounds (Donoghue, 2009). This fundamental understanding results from sound awareness, which allows children to benefit fully from phonics instruction (Snow, Burn, & Griffin, 1998). Learning to separate and blend sounds is not effectual without letter-sound knowledge. Teach phonemes awareness along with letter sounds and letter names since when phonics and phonemes awareness are taught together they reinforce one another (Ehri et al., 2001; Juel & Minden- Cupp, 2000; National reading Panel, 2000). Therefore, phonics instruction is also required in order to help students learn about the systematic relationship between letters and sounds. Students with the understanding of sound

awareness are able to develop adequate decoding abilities and therefore can acquire reading accuracy and fluency.

3. Phonics Instruction

3.1 Traditional Phonics Approaches

There are two major approaches to phonics instruction which are analytic phonics that start with whole words and synthetic phonics which begin with letter sounds (Donoghue, 2009).

Analytic approaches “begin with a word that a child already knows and breaks this word down into its component parts” (Stahl et al., 2006). In this regard, the learners might be given a word (e.g. *bad*), and the teacher then say a list of words (e.g. *bet, bed, dad, hat, jog, hot*) and ask the students to examine and find out the words with common component vowel (e.g. *dad* and *hat*) or the initial consonant (e.g. *bed* and *bet*). It appears that this instruction might be followed by having students read a series of words and complete a task by discovering the shared sound. Therefore, this approach is also called the ‘discovery method’ (Blevins, 1998) or ‘implicit approach’ (Gunning, 1996). During the process of the lessons of this approach, it is accepted that a considerable amount of time seems to be involved.

Synthetic phonics approaches “begin with teaching students individual letters or groups of letters and then showing students how to blend these letters together to form words” (Stahl et al., 2006). The lesson of such approaches may start with the instructor writing a letter (e.g. ‘a’) on the board and then teaching the sound (e.g. /a/) of the letter. Then, a number of example words (e.g. *ham, bat, fat, bag, sad*) containing such a letter might be illustrated, and finally, the students might read a

story including a high percentage of words with a specific sound (e.g. /a/). In this way, students are taught with letter-sound correspondences first, and then practice reading the example words or passages, and consequently, this approach is also called the 'explicit approach' (Gunning, 1996).

The synthetic approach tends to give certain aspects of letter-sound relationships, thereby resulting in complete phonics knowledge (National Reading Panel, 2000). However, Stahl (2002) criticizes that the synthetic approach usually includes practice in rarely structured stories, which are usually practice for pattern decoding, instead of practice for true comprehension. As a result, Gunning (1996) recommends a combination of the analytic and synthetic approaches because novice readers need to have the target sound emphasized by hearing it isolated (synthetic approach), and they need to hear it in the context of a real word (analytic approach).

3.2 Contemporary Phonics Approaches

There are three contemporary approaches, namely, spelling-based approaches, analogy-based approaches and embedded phonics approaches (Stahl et al., 2006)

Spelling-based approaches comprise word study, making words and meta-phonics instruction. In word study, students examine words or word patterns and categorize them according to their common orthographic features. Such a lesson often begins with the words which confused the learners. For example, when the students spells 'rane' for 'rain' or 'kit' for 'kite', the word study instruction may begin with long 'a' or 'i' word patterns (ibid.). Another approach is making words, involving students in manipulating letters to make words. Through this, they learn how small changes, such as changing just one letter or moving the letter around, result in completely new words (Cunningham, 2008). The other is meta-phonics, in which

“reading and spelling are taught simultaneously through social interaction and group problem solving” (Stahl et al., 2006). In this way, phonemic awareness tasks might be used widely in the lessons of this approach, involving students in practicing blending, segmenting and manipulating phonemes with their classmates.

In analogy-based approaches to phonics instruction, students are involved in using the spelling-sound pattern of one word, such as *beak*, as a basis for working out the spelling-sound correspondence of a new word, such as *peak/weak/speak* or *bean/bead/beat* (Goswami and Mead, 1992). Also, Cunningham (2008) claims that when readers come to unfamiliar words, they are likely to do a fast search through their cognitive word stores for similar words with the same letters in the same places, and they then use these analogs to come up with a possible pronunciation. It appears that such approaches might well facilitate learners to decode unknown words.

The other division of contemporary phonics approaches is the embedded phonics approach. In such an approach, “phonics instruction occurs in the context of authentic reading and writing experiences” (Stahl et al., 2006). That is, children are taught letter-sound relationships along with context clues during the reading of connected text.

To confirm that decoding and word reading gains when phonics and phonological awareness are taught together because they reinforce one another (Ehri et al., 2001; Juel & Minden-Cupp, 2000; National reading Panel, 2000), many previous studies can be explored as follows.

Hatcher, Hulme, and Snowling (2004) found that when young children at risk of reading delay received the additional training in phoneme awareness and linking

phonemes with letters, they were able to master the alphabetic principle and learn to read effectively.

Shapiro and Solity (2008) explored that the training within a broad reading programme using phonological and phonics integrating is significantly impacted on reading performance for normally developing readers and those with poor phonological awareness, greatly decreasing the happening of reading difficulties.

Ryder, Tunmer, and Greaney (2008) encountered that after children with early reading difficulties in a whole language instructional environment received the intervention program comprised phonemic awareness and alphabetic coding skills, they significantly outperformed the control group on measures of phonemic awareness, pseudoword decoding, context free word recognition, and reading comprehension. Additionally, two-year follow-up data indicated that the positive effects of the intervention program were not only maintained but had generalized to word recognition accuracy in connected text.

McGeown, Johnston, and Medford (2012) suggested that children will draw upon different cognitive skills when reading if they are taught to use different word recognition strategies. For the eclectic approach group which included sight-word learning, guessing from context and analytic phonics, pre-test letter knowledge, vocabulary and rhyming skills predicted later reading ability, whereas for the synthetic phonics approach group, letter knowledge, phonemic awareness and memory span predicted later reading skill.

The previous research clearly supported the effects of phonological awareness and phonics instruction on teaching English decoding and reading words. It was found that phonological awareness and phonics instruction were vastly effective in young

and older students. Additionally, they were beneficial for normal classes and intervention classes of struggling readers. In this study, reading program using phonological awareness and phonics instruction would help the seventh grade struggling readers in Bangkok Metropolitan Administration schools to improve their reading aloud accuracy and fluency. In order to design the reading program for the older struggling readers, components of reading instruction are very important.

4. Reading Instruction for Secondary Struggling Students

4.1 Building accuracy with word study instruction

Normally, for younger readers, five elements of reading proposed by National Reading Panel (NRP, 2000) which are 1) phonemic awareness, 2) phonics, 3) Fluency, 4) Vocabulary, and 5) comprehension are able to contribute to the reading process, but for secondary and high school readers differ from those. They can be organized into five elements which are 1) word study, 2) fluency, 3) vocabulary, 4) comprehension, and 5) motivation. Absents from younger list are phonemic awareness which is a part of phonological awareness, and phonics. Generally, the secondary students are beneficial from phonological awareness and phonics to read words. Unfortunately, many secondary students still have the reading word difficulties. Inasmuch, the focusing on phonemic awareness and phonics are stilled needed in the word study area to develop their readings (Boardman et al., 2008; Edmonds et al., 2009; Robert et al., 2008; Scammacca et al., 2007; Vaughn et al., 2012; Wexler et al., 2010). To describe the word study is following.

Word study instruction focuses on word-level reading to help students read words more effectively and efficiently (Glover& Vaughn, 2010: Scammacca et al.,

2007). It focuses on word analysis and word recognition accompany with recognizing and manipulating letters and sounds. Students have opportunities to investigate the patterns in words because they are employed strategies to break words into smaller meaningful parts that help them decode and understand words (Boardman et al., 2008).

Recommended instructional practices by Boardman et al. (2008) are also provided as follows.

Teach students to identify and break words into syllable types.

Teach students when and how to read multisyllabic words by blending the parts together.

Teach students to recognize irregular words that do not follow predictable patterns.

Teach students the meanings of common prefixes, suffixes, inflectional endings, and roots. Instruction should include ways in which words relate to each other (e.g., trans: transfer, translate, transform, transition).

Teach students how to break words into word parts and to combine word parts to create words based on their roots, bases, or other features.

Teach students how and when to use structural analysis to decode unknown words.

4.2 Building fluency with repeated reading strategies

4.2.1 The three basic skills required for building fluency

Reading fluency is the ability to decode and comprehend text at the same time (NICHD, 2000; Samuels, 2006). Students with reading disabilities read slowly and with effort, laboring over new or unfamiliar words. They tend to spend

less time reading (Osborn et al., 2003) and thus have less developed sight word repertoires, read less fluently, and understand less of what they read (Roberts et al., 2008). Fluency practices may be most effective when combined with instruction on word-level reading skills and comprehension instruction (Edmond et al., 2009; McCulley Katz & Vaughn, 2013). The idea is that improved fluency releases cognitive resources while comprehension strategy instruction provides the secondary struggling readers with guidance on the use of these newly available resources (Willingham, 2006).

Accordingly, to build fluency reading, requires the three basic skills. They are accuracy, automaticity, and prosody (Samuels, 2006).

Accuracy of decoding refers to the ability to correctly generate a phonological representation of each word refers to either because it is part of the reader's sight-word vocabulary or by use of a more effortful decoding strategy such as sounding out the word.

Automaticity of word recognition refers to the ability to quickly recognize words, with little cognitive effort or attention.

Prosody of oral text reading refers to the ability to read with proper phrasing and expression.

When decoding is automatic, attentional resources are available for comprehension. Thus, the foundation skills build upon one another. Accurate decoding is a requirement for building automaticity, automaticity is a requirement for building prosody – as the automatic decoding of words frees up attentional resources required for prosody - and prosody in turn aids comprehension. (Marcie Penner-Wilger, 2008). Many beginning and struggling readers struggle at the point of

decoding each word, and their difficulty with reading fluency impact their accuracy and automaticity or speed, and prosody. Phonological awareness and phonics mentioned before could support their decoding strategy. For ability to quickly recognize words with proper phrasing and expression, many studies found that repeated reading strategies, which typically consists of the repetition of words or passage, can enhance the reading speed of struggling readers (Hawkins et al., 2011; Martin-Chang and Levy, 2005; Oddo et al., 2010). Repeated reading has its effect largely because it provides students with opportunities to improve their sight word vocabulary (Roberts et al., 2008).

4.2.2 Strategies of repeated reading in building fluency

Repeated reading is a strategy to build student reading fluency that gives the student lots of reading practice to enhance reading speed and accuracy. It provides struggling readers to read a passage orally several times, with guidance and feedback from a fluent reader (Armbruster, 2010). The benefit from repeated reading in building fluency can be described as follows.

Sarah Dowhower (as cited in Rasinski, 2003) states that repeated reading is able to 1) help good and poor readers recall facts from their reading. It also aids good readers in focusing on and remembering higher level, important information, 2) be an excellent study strategy, equal to or better than other more complex and cumbersome strategies, such as note taking, outlining, summarizing, or recalling information, 3) help students remember important information, such as main ideas and important vocabulary, 4) results in improved story comprehension and leads to more sophisticated questioning and insights when a text is presented as a “ repeated read-

aloud.” , 5) promotes faster reading with greater word recognition accuracy, 6) help strugglers break out of word-by-word reading to read with more meaningful phrasing.

Armbruster (2010) suggested five methods to practice repeated reading which are student-adult reading, choral Reading, tape-assisted reading, partner reading, and reader’s theater.

Student-adult reading, the student reads one-on-one with an adult. The adult (or older student) reads the text first, providing the student with a fluent model. Then, the student reads the same passage to the adult with the adult providing assistance and encouragement. The student rereads the passage until the reading is quite fluent. This should take approximately 3-4 readings.

Choral reading, or unison reading, students read aloud the same text together as a group under the direction of a leader (can be a fluent reader or a teacher). The leader as a fluent reader starts to read the text. Next round, encourage others to join reading as they are able about 3-5 times to recognize words. After that, they should read the text without the leader.

Tape-assisted reading, students follow along in their texts, and point to each word as they hear on the audiotape several times at the beginning. After that, the student tries to read aloud along with the audiotape. The student read over and over until the student is able to read the book fluently, without the support of the tape. The book selected should be at the student's instructional level, or slightly more difficult. The tape should not have sound effects or music.

Partner reading, the partners receive feedback from each other, engage in repeated and monitored oral reading without the teacher. The more fluent reader pairs with the less one and take turn to each other. The stronger one provides a model of

fluent reading. Next, the less fluent tried to read the same text with the assist from the stringer one until he or she can read it independently. Also, the same level of reading can be paired after receiving the guidance from the teacher.

Reader's theatre, student practices fluency reading over and over on the script of each character before the performance to their friends.

After struggling readers know how to read, the practices of accuracy and speed on words are need. The repeated reading can provide the opportunity to read and reread till they recognize words and read with the appropriate speed. Previous studies that explored the beneficial of the intervention that placed students to decode using phonics and fluency practices using repeated reading are given as follows.

Feazell (2004) investigated the use of a research-based practice intervention to combine fluency training with phonics instruction and practice of other decoding/encoding skills. Students were given those instructions along with reading practice from grade-level literature. Passages were read three times, and students also practiced with audiotapes at home. The results of accuracy and speed appeared to be promising.

Roberts et al. (2008) claimed that inter-relating among decoding, reading accuracy, and fluency influence and enhance one another. Children were taught how to read the target words at the beginning, and then they repeated those words again in the passage. They may have benefit if the passages contain many familiar words and embedded target words.

Hudson et al. (2011) stated that decoding automaticity of poor readers gained after implementing the intervention consisted of phonemic awareness training, letter sound practice, and fluency practice in repeated word families.

Jones, Yssel, and Grant (2012) found from their research-based practice that students whose word knowledge is limited, phonemic awareness and phonics instruction included fluency practices with repeated reading in connected text is effective. Combining targeted word attack and vocabulary with fluency practice in connected text could make students read accuracy and fluency.

In summation, building reading fluency in secondary struggling readers, teachers not only build their speed or automaticity, but also need to build their accuracy and prosody. The effects from phonological blending and letter sound knowledge to decoding were completely mediated decoding fluency, single-word reading fluency, and reading comprehension on the text reading fluency. Repeated reading can provide the opportunity to read and reread until they meet the criteria of accuracy and fluency.

4.3 Building Meaningful reading with Multi-component Instructions

As mentioned before, secondary students struggle all areas of reading, hereby, the multi-component of reading instruction should be integrated. Recently, many researchers explored that reading interventions that integrated multiple skills involved (1) word study, (2) fluency, (3) comprehension, and (4) vocabulary could provide the effective practices for secondary struggling readers (Boardman et al., 2008; Kim et al.,2010; Marchand-Martella et al., 2013; Pyle &Vaughn, 2012; Roberts et al., 2008 ; Scammacca et al., 2007; Vaughn et al., 2012).

Although word study instruction can solve the difficulties in word reading of secondary students, just ability of recognition and pronunciation a word is not

sufficient for them to meet the curriculum demand that needs them read for learn. They are not able to learn if they do not know the meaning of words they are reading. It is, therefore, necessary to build the word reading accuracy and fluency skills while expanding vocabulary and comprehension strategies. Identically, Moats (2008) suggested the effective instruction in reading for secondary struggling readers should strengthen phonological skills, and reading fluency integrated with vocabulary and comprehension strategies.

Normally, there are two components in vocabulary instruction which are decoding and meaning (Eanes, 1997). Students start to learn new vocabularies while word study focuses on sounding out and recognizing words. Then, the first component, decoding, is occurred. For the second component, meaning, the current study integrated the strategies to help students consider unfamiliar words and recognize the meanings. Due to students seem to understand what they are reading when they know the meanings of the words and have strategies to explore the meanings. Therefore, two dimensions instructional practice of vocabulary strategies for struggling students: 1) teach specific words and 2) teach word-learning suggested by Boardman et al. (2008) are discussed.

Strategies for specific words mean to give and guide practice the important and useful words. First of all, balance teaching of words which are separated into three tires: tier 1, words that students are likely to know, tier 2, frequency words, and tier 3, rarely words in content area. Second, provide various tasks to develop the understanding for each word such as giving definition and example, discussing word, create semantic map. Third, provide multiple meanings include how and when each

meaning is used. Fourth, engage actively tasks such as drawing pictures, playing games, and creating definitions.

Word-learning strategies let students identify the meaning of new and unfamiliar words together with systematic practice. Students will 1) engage in a variety of level text to apply word leaning strategies, 2) use and discuss about words they are reading, 3) relate and use words in other occurrences, 4) develop word consciousness via activities such as playing game, talking about words, and using words in playful way (e.g. idioms), 5) use known words clue new word, and 6) break words into parts and use context clues, root words, prefixes, suffixes, and word families to identify their meaning.

Furthermore, struggling readers need to concept the text they are reading. Understandings each word may not sufficient to gain meaning from text. They need comprehension strategies to derive the main idea. Instructional practices of comprehension strategies suggested by Boardman et al. (2008) are 1) linking the existing knowledge that supports the new knowledge, 2) using graphic organizers to derive the important ideas before, during and after reading, 3) teaching comprehension monitoring strategies to help students keep going on their understanding such as taking note, asking question, and re-reading unknown words, 4) providing summarization skills samples and practices both in short and long paragraph, and 5) teaching students to ask and answer questions before, during, and after reading.

Thereupon, the current study not only focuses on word study so that they can decode and read words accurately, but also focuses on the ability to decode and read fluently and understand the words. To develop the reading program to enhance

reading aloud accuracy and fluency for struggling readers, the researcher also pay attention on stages of reading development, reading model for struggling readers , assessment for oral reading accuracy and fluency.

5. Develop Reading Program for Secondary Struggling Readers

5.1 Stages of Reading Development

In Chall's stages of reading development (1983) reading development falls into six stages — from Stage 0 (prereading) to Stage 5 (the most mature, skilled level of reading in which readers construct and reconstruct knowledge from their own reading). Generally, Stages 1 and 2 (typically acquired in grades 1, 2, and 3) can be characterized as the time of "learning to read" — the time when simple, familiar texts can be read and the alphabetic principle is acquired (i.e., readers are able to decode words they do not immediately identify, and they become fluent, especially when reading texts that use language already within their experience and ability); Stages 3 to 5 can be characterized, roughly, as the "reading to learn" stages — when texts become more varied, complex, and challenging linguistically and cognitively. Beginning at Stage 3 (grades 4-8), students use reading as a tool for learning, as texts begin to contain new words and ideas beyond their own language and their knowledge of the world. Words and concepts in such material are beyond the everyday experience of children. In order to read, understand, and learn from these more demanding texts, the readers must be fluent in recognizing words, and their vocabulary and knowledge need to expand, as does their ability to think critically and broadly. If children are unable to make the transition from Stage 2 to 3, their academic success is usually severely challenged.

Using this developmental stage model of reading, this current study focused a research study on the critical transition from Stage 2 to Stage 3 — from "learning to read" to "reading to learn."

5.2 Reading Model for Struggling Readers

Block & Pressley (2002); Gustafson et al. (2011) and Pressley et al. (2001) recommended that a balanced approach that combines bottom-up and top-down learning experiences has been demonstrated to significantly increase struggling readers' decoding and comprehension abilities. Block (2003) illustrated those two models as follow.

5.2.1 Bottom Up Model

This model emphasizes reading is seen as the process of decoding through a sequence of subskills. Reading is taught by first identifying the necessary subskill sequence focusing on mastery of the phonic elements of word decoding without the context. Students will be taught all the sounds of the letters in the alphabets and compound words before they would be asked to read passage. Reducing the discrepancy between what they can do and what they should be able to do by teaching them content that they do know is the best way to moving up higher level of literacy development.

5.2.2 Top Down Model or Meaning Emphasis Model

Reading is seen as a process of predicting meaning based on previous knowledge and experience, and then verifying and correcting predictions. Reading is taught by providing meaningful text and emphasizing the relationship between the prior experience and information on the printed words. The development is seen when children are able to derive correct meaning from print, not from correct decoding and

oral reading. Students learn more about facts, process, concepts and principles. They learn to use spelling pattern cues, sentence pattern cues, and meaning cues to obtain meaning. Teachers help students add new process and method of questioning to their literacy proficiency. Teachers have to ensure that all struggling readers receive all the decoding and comprehension strategies they need for literacy proficiency.

5.3 Assessment for Oral Reading Accuracy and Fluency

Both the National Reading Panel (NICHD, 2000) and the National Research Council (Snow, Burns, & Griffin, 1998) recommend that teachers assess fluency regularly (NICHD, 2000). Fluency assessments need to cover the three foundation skills or indicators to provide a valid measure of fluency: accuracy of decoding, automaticity/rate of word recognition, and prosody of oral text reading.

Accuracy is assessed as the number of student errors.

Automaticity or rate is assessed as the words correct per minute (WPM).

Prosody is assessed based on a four-point rubric. Teachers can use the NAEP four-point rubric or another rubric of their own choosing.

Lipson (1997) suggested the way to assess students' word recognition and word analysis skill by doing so as children read aloud. The running record is often used for classroom. Eldredge (2005) guided a running record and an informal reading inventory (IRI) for noticing how children apply word recognition abilities. Morris (2008) described how to master a diagnostic battery that includes three informal tests: word recognition in isolation, contextual reading, and spelling. This current study will administer students with IRI that will note individual oral reading errors as the student reads. After that, errors are analyzed and percentage scores are computed for word recognition performance on the grade word lists and the oral reading passage.

Informal Reading Inventories (IRIs)

An informal reading inventory (IRI) is designed to place students in the accurate materials and instructions and to determine realistically their strong and weak abilities of word recognition and comprehension level (Lipson, 1997).

Nowadays, there are many kinds of IRIs. Teacher can select from the commercial one or create by themselves to administer students in order to place them in appropriate levels and materials. There are four levels of word recognition performance (Lipson, 1997).

1. Independent level: Students are able to read fluently without coaching and make very few word recognition or comprehension mistakes.
2. Instructional level: Students' word recognition and comprehension abilities are sufficient because they take not too many errors.
3. Frustration level: Students make many errors. They are slow and often stop during reading. They cannot read without coaching.

Components of an IRI

IRI is a combination of graded word lists, graded reading passages, comprehension questions, and a summary/ analysis sheet (Lipson, 1997).

Graded word lists are for assessing word recognition—ability to recognize words immediately on lists that are graded in difficulty, including, ability to decode and inform on the nature of his or her word recognition errors (Morris, 2008). This result is used to determine the level at which the children had better begin the graded passages. Normally, there are ten and twenty words and includes different types of

words. They can be created from word frequency list or new instant word list (Lipson, 1997).

Graded reading passages are for assessing contextual reading. They are used to assess reading ability (Morris, 2008) and examine the oral reading accuracy in context (Lipson, 1997). Most IRIs has two or three passages at each grade level. Each 100-250 words in length a passage are examined and then preceded to more challenging passages until the student become frustrated, at which point the testing is stopped. The highest passage level that the student can read without becoming frustrated is designed the “instructional level”.

As noted above, to develop reading program to enhance reading accuracy and fluency for struggling readers, the teachers need to realize stages of reading development, especially, the steps of learning to read and reading to learn. These steps would be applied in both top down and bottom up model. It means that the process of decoding through a sequence of sub-skills is blended together with process of predicting meaning based on previous knowledge and experience, and then verifying and correcting predictions. For the assessment, they need to cover the three foundation skills or indicators to provide a valid measure of fluency: accuracy of decoding, automaticity/rate of word recognition, and prosody of oral text reading. An informal reading inventory (IRI) is used to assess accuracy of decoding, automaticity/rate of word recognition.

6. Related studies

At present, phonological awareness and phonics instruction is used to improve students' reading ability in many classroom contexts. There are many research studies

related to the use of phonological awareness and phonics instruction in teaching reading for young students. For secondary struggling students who had inadequate skills of basic reading, they still need phonological awareness and phonics instruction integrate with other skills to read text and concept the meaning, there are some studies that integrated with other skills.

Denton et al.(2006) evaluated the effects of an intensive reading intervention, 27 students with severe reading difficulties and disabilities, 14 of whom had demonstrated an inadequate of letter sound knowledge and phonological awareness (blending sounds), received a 16-week intervention package involving decoding and fluency skills. The decoding intervention was provided for 2 hours per day for 8 weeks and was based on the *Phono-Graphix* program (students were taught to blend, segment, and manipulate sounds, and to recognize and apply in reading and spelling). The fluency intervention followed the decoding intervention and involved 1 hour of daily instruction for 8 weeks based on the *Read Naturally* program (students were provided fluency-building with repeated reading). The 16-week intervention resulted in significant improvement in reading decoding, fluency, and comprehension. Although individual responses to the intervention were variable, 12 of the 27 students showed a significant response to these interventions.

Hudson et al. (2011) investigated that decoding automaticity of poor readers gained after implementing the intervention consisted of phonemic awareness training, letter sound practice, and fluency practice in repeated word families. There were two small group students, were 20–28 min long, took place 2–4 days per week. The first group ($n=27$) practiced each page until they reached 98 percent accuracy. The second one ($n = 29$) practiced until they reached rate (30–90 wpm) and accuracy criteria.

The result identified significantly that the second group which provided both accuracy and fluency practices could develop decoding automaticity.

Kim et al. (2010) compared the effects of mixed-methods reading program called “READ 180” to “district afterschool program” whether print exposure among 294 children in the experimental condition explained variance in posttest reading scores of word reading, reading comprehension, vocabulary, and oral reading fluency after taking the program over 23 weeks (4 days per week). Students in “READ 180” were provided three 20-min literacy activities, including (1) individualized computer-assisted reading instruction with videos, leveled text, and word study activities, (2) independent and modeled reading practice with leveled books, and (3) teacher-directed reading lessons tailored to the reading level of children in small groups. Children in the district after-school program engaged in a 60-min program in which teachers were able to select from 16 different enrichment activities that were designed to improve student attendance. There was no significant difference between children in READ 180 and the district afterschool program on norm-referenced measures of word reading efficiency, reading comprehension, and vocabulary. Although READ 180 had a positive impact on oral reading fluency and attendance, these effects were restricted to children in Grade 4. Print exposure, as measured by the number of words children read on the READ 180 computer lessons, explained 4% of the variance in vocabulary and 2% of the variance in word reading efficiency after all pretest reading scores were partialled out.

Pyle & Vaughn (2012) conducted on Response to Intervention (RtI) which is a multitiered framework for delivering interventions to students. For students who continued to demonstrate minimal responsiveness in word reading, they need an

intensive reading instruction called Tier 2. This experiment, Tier 2 was organized into three phases: phase I largely emphasized word study and fluency; Phase II emphasized vocabulary and comprehension; and Phase III focused on the application of reading strategies with expository text, and each had a different instructional skill emphasis. Tier 2 consisted of a 50-minute period of additional, daily reading instruction taught by a trained teacher hired by the researcher staff. Sixth graders in the treatment condition were in groups of 10 to 15, and seventh and eighth graders in the treatment condition were in either small-group ($n = 5$) reading instruction or large-group ($n = 10$) instruction. Students who received the Tier 2 treatment outperformed students in the comparison condition on several measures, including word attack, spelling, passage comprehension, phonemic decoding efficiency, and the state accountability comprehension test. Although gains were small (median $d = +.16$), treatment students improved reading outcomes on several standard score measures, this outcome is noteworthy.

Summary

From the literature review, phonological awareness and phonics instruction seems to play a significant role in fostering learners' reading ability. A fairly large body of literature exists about the impact of phonological awareness and phonics instruction, particularly their decoding and reading words. For secondary students who still struggle on word reading difficulties, they need word study instruction which still focus on phonological awareness and phonics and these must be integrated with other skills, fluency, vocabulary, and comprehension, so that they can read words and understand what they are reading. Therefore, the theoretical framework for

reading instruction focuses on the integrating of phonological awareness and phonics by enclosing vocabulary and comprehension strategies to help students construct meaning of text, and merging targeted word attack, paired with fluency practice with repeated reading strategies to help them read accurately with appropriate rate. The next chapter will illustrate the research methodology of this study.

CHAPTER III

RESEARCH METHODOLOGY

This study is an experimental research study which aims to investigate effects

of reading program on English reading aloud accuracy and fluency of seventh grade struggling readers in Bangkok Metropolitan Administration Schools and opinions of the struggling readers toward the reading program. The objectives of this study are:

1. To investigate the reading program's effectiveness in enhancing struggling readers' English reading aloud accuracy and fluency.
2. To explore seventh grade struggling readers' opinions toward the reading program using phonological awareness-raising and phonics instruction.

Research Design

The design of this research was divided into two major phases. Phase one was the development of reading program using phonological awareness-raising and phonics instruction. Phase two dealt with the implementation of reading program using phonological awareness-raising and phonics instruction. Phase two was the experiment phase using one group quasi-experimental design.

Figure 3.1: Design of the study

O Pretest	X Treatment	O Posttest
Informal reading inventory (IRI)	Reading program using phonological awareness-raising and phonics instruction	Informal reading inventory (IRI)

and Students' learning logs

Population

The population of this study was seventh grade struggling readers of Bangkok Metropolitan Administration schools, Bangkok, Thailand.

Sample

The twenty seventh grade students' classes of 2012 at a public school in Nongkhaem district, Bangkok, Thailand were samples of the current study. They were selected from administering the diagnostic test called the Informal Reading Inventory test that contains 2 parts: ten graded word lists (see Appendix A) and ten graded reading passages (see Appendix B) to measure the level of reading aloud accuracy and fluency. Those who were determined at *frustration level* of pre-primer level on graded word lists became struggling readers of the study.

The school is the one in the public school of Bangkok Metropolitan Administration with approximately 2,600 students. The researcher selected the school purposively because of the convenience that the researcher is teaching there. There are six classes of seventh grade students at the school. A class of 20 students was chosen to be the participants in this study. The class was required to take the reading program as an intervention class to improve their English reading aloud accuracy and fluency. After the announcement of the program description that aims to improve how to read words, there were 35 volunteers who were interested in the program. Teacher assigned them to read the graded word lists to diagnose the level of reading aloud accuracy and fluency. Twenty nine of volunteers were determined at *frustration level* (achieved scores below 70%) of pre-primer level on graded word lists became

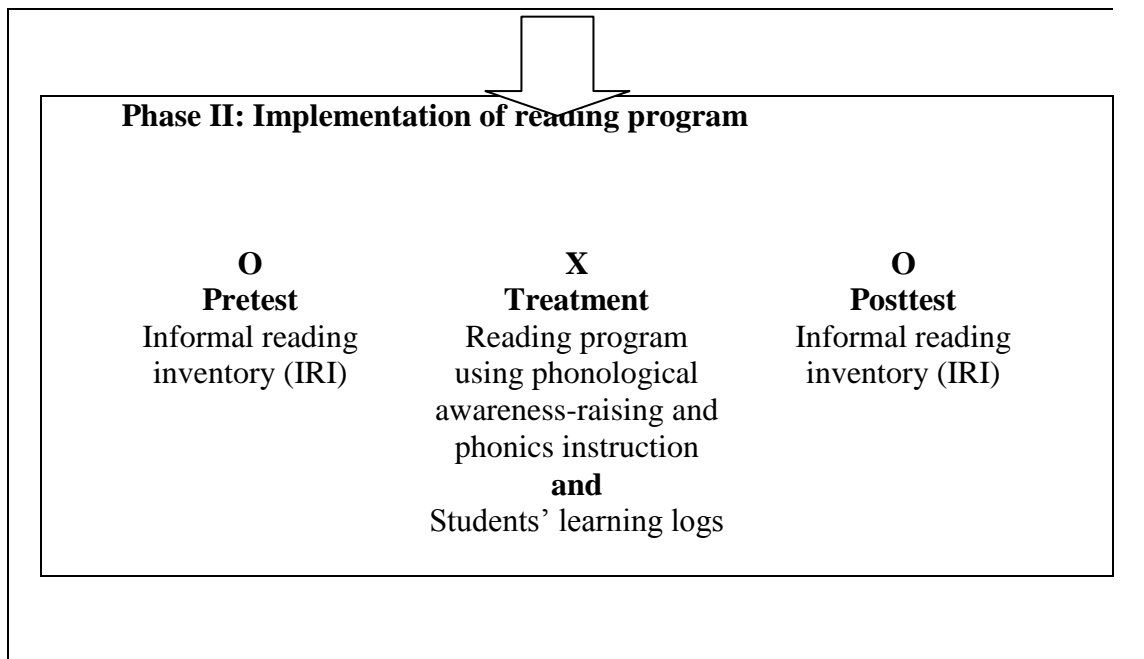
struggling readers. Other six of them achieved scores over 70% of pre-primer level, therefore, they could not take the program. Due to the program also required the participants who could attend the class after school and on Saturday. The researcher, then, provided the letters authorized on behalf of the school director to ask for those 29 parents' permission. Ultimately, there were 20 struggling readers were allowed to take the reading program.

Research Procedures

As mentioned earlier, this research was divided into two major phases. The details of each phase are presented in Figure 3.2.

Figure 3.2: Research Procedure

Research Procedure
<p style="text-align: center;">Phase I: the development of reading program using phonological awareness-raising and Instruments</p> <p>Stage 1.1: Explore the basic concepts and related documents.</p> <p>Stage 1.2: Construct the model of reading instructions.</p> <p>Stage 1.3: Verify and revise the instructions and instruments.</p> <p>Stage 1.4: Conduct the pilot study.</p> <p>Stage 1.5: Redesign the instructions.</p>



Phase I: the development of reading program using phonological awareness-raising

The development process of reading program using phonological awareness-raising and phonics instruction composed of five stages: 1) explore the basic concepts and related documents; 2) construct the instructions; 3) verify and revise the instruction; 4) conduct the pilot study; 5) redesign the instruction.

Stage 1.1: Explore the basic concept and related documents .The theories and the basic concepts related to the present study were explored. The studied topics were reading accuracy and fluency in secondary struggling students, phonological awareness, phonics instruction, reading instruction for secondary struggling readers, developing reading program for secondary struggling readers, and related researches.

Stage 1.2: Construct the instruction

To construct the instruction, four main procedural steps were conducted. First, reading instruction for secondary struggling readers. Second, the

instructional framework for reading program using phonological awareness-raising and phonics instructions. Third, the long range plan was developed. Finally, the lesson plans were created.

1.2.1 Reading instruction for secondary struggling readers

Before helping struggling readers, Morris (2008) said that a teacher must understand how reading skill develops because learning to read is a developmental process. The first 3 stages provided by Chall (1983); decoding, fluency and read to learn can describe how reading develops. For secondary students who struggle at the word level, they lack of decoding skills. Then they cannot perform a higher skill until the lower skills have become automatized (Bryan & Harter, 1899; Laberge & Samuels, 1974). Therefore they still need the lower skills of decoding and word recognition. The instruction that focuses on the decoding skills and word recognition is called the word study proposed by Scammaca et al., (2007) and Torgeson et al., (2007) is likely to solve the difficulties in reading words. It would fulfill phonological awareness and phonics that were not inadequate when they were primary grade. But, secondary students need more than the abilities of word decoding and reading accuracy, they need the advanced reading ability to construct meaning what they read. Only decoding skills are not enough to achieve in reading. They need the strong and sufficient skills of automatic decoding to improve their reading fluency which is the bridge to reading comprehension. Normally, to help students achieve in reading, the 5 components of reading instructions; phonemic awareness, phonics, fluency, vocabulary, and comprehension reported by National Reading Panel (2000); are effective. Thereby, secondary struggling readers must be trained the missing skills; decoding and reading words accuracy by using phonological awareness-raising and

phonics instruction with the fluency practices using repeated reading strategies and integrate vocabulary and comprehension strategies together. Consequently, the study's theoretical framework will be based on the principles proposed by Chall (1983), NRP (2000), and Scammacca et al. (2007) and Torgesen et al. (2007) which are discussed in the literature review.

Figure 3.3: Component of reading instructions proposed by 4 studies; Scammacca et al., and Torgesen et al. (2007), NRP (2000), and Chall (1983).

comprehension	comprehension	Stage 3: reading to learn
vocabulary	vocabulary	
fluency	fluency	Stage 2: fluency accuracy → speed → expression
word study	phonics	Stage 1: decoding
	phonemic awareness/ phonological awareness	
The first 4 components of reading instruction for struggling readers (Scammacca et al., 2007; Torgesen et al., 2007)	5 components of reading instruction (NRP, 2000)	The first 3 stages of reading development (Chall, 1983)

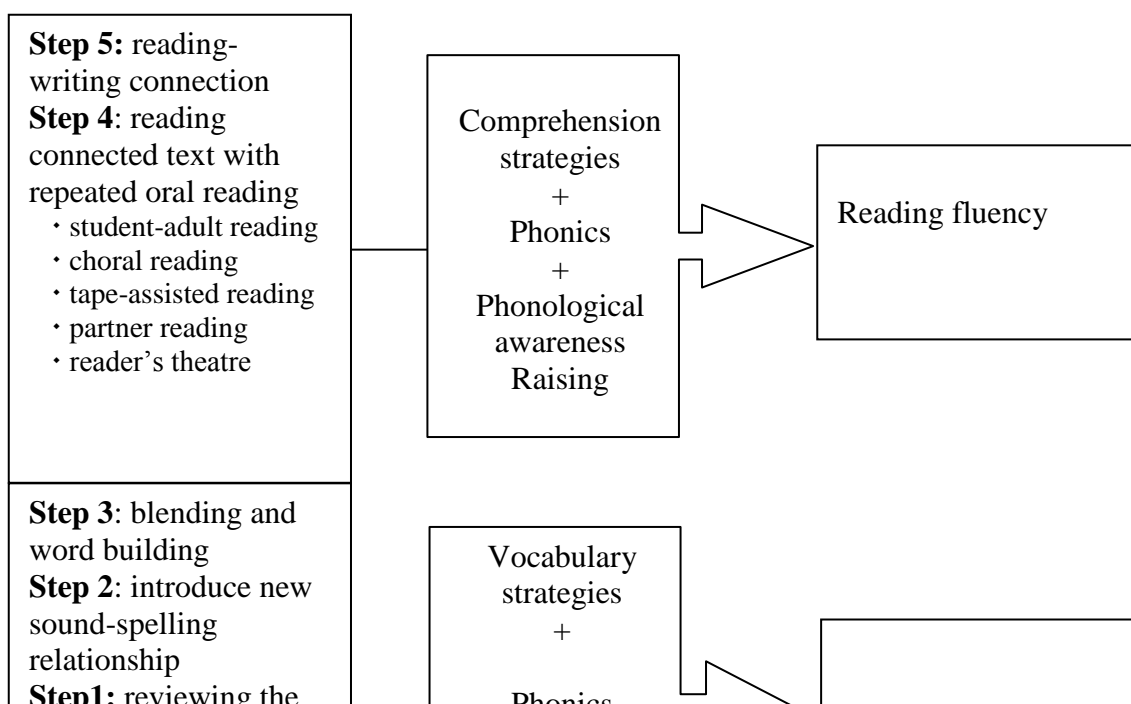
1.2.2 Instructional framework

To construct the instructional framework for reading program using phonological awareness-raising and phonics instruction, the information from the first step was compiled and developed into an instructional framework. Then the instruction and its components were specified. The proposed instructional framework

of reading program using phonological awareness-raising and phonics instructions to enhance English reading aloud accuracy and fluency of seventh grade struggling readers was modified based on Blevin (2006).

Blevin (2006) proposed the five steps of teaching phonics which are 1) repeated reading and warm-up, 2) explicit instruction of sound-spelling relationship, 3) blending and word building exercises, 4) reading connected text, and 5) dictation and writing. Throughout these five steps provide phonological awareness and phonics skills to decode and read targeted words in isolation and connected texts to develop read aloud accuracy. The repeated reading strategies also provided opportunities of repetition to meet the criteria of reading aloud fluency. But the emphasizing of vocabularies and comprehension strategies are not available. The current study, whereupon, is implemented the vocabularies and comprehension strategies together with accuracy and fluency practices.

Figure 3.4: Instructional framework of the current study: the reading program using phonological awareness-raising and phonics instruction to enhance reading accuracy and fluency.



To describe that five-step instruction adapted from “Phonics from A to Z” proposed by Blevin (2006) integrated with vocabularies and comprehension strategies are following.

As the researcher integrated the vocabulary strategies to the first 3 steps, this means that at the beginning, struggling readers learn the new vocabularies in both 2 dimensions; decoding and meaning of words. They learn how to read with phonological awareness-raising and phonics instruction. Then they recognize meaning of the words with vocabulary strategies. See how to implement phonological awareness-raising and phonics instruction integrate with vocabulary strategies as follows.

Step 1: reviewing the previous lesson. Both phonological awareness (words, syllables, onset-rhymes, and sounds) and phonics (letter-sound correspondence) were applied. Begin the lesson by having children reread passage containing previously taught sound-spelling relationships. Then teacher provided phonemic awareness exercise such as oral blending to review the previous sound-spelling before acquiring the new sound-spelling.

Step 2: introducing new sound-spelling relationship. Phonemic awareness (sounds) and phonics (letter-sound correspondence) were integrated. The activities were oral, using sounds, rather than letter names at the beginning and provided an

engaging way for struggling readers to discriminate the sounds that make up words. Have students sense how the sounds feel to produce, how they sound, using repetition often, and how the articulators look as they are moving to create the sounds (i.e. “Is your tongue moving or still? Can you see your teeth or your lips? Is your tongue tip up or down?”) The main purpose is enhancing phonemic awareness with oral segmentation in order to prepare struggling readers for spelling and phonics. After that, they will be acquired the names of the letters and sounds.

Step 3: blending and word building exercises. Struggling readers made use their phonics understanding to practice blending and creating new words. The lesson focused on blending sounds (phonemes) into words, and syllables into words. The activities and games were provided for experiencing struggling readers to aware of the number and order of sounds that occur in words. So that, they could blend the words based on the sound-spelling relationships previously taught. Vocabulary strategies such as sorting pictures with the beginning letters, matching pictures with words help them recognize meanings during blending.

After students are able to decode and recognize the meanings of the words, they need the opportunities to read more accurately and fluently in the connected text which contains the words previously taught. Also they need the strategies to concept what they are reading. Therefore, the repeated reading strategies were provided for fluency practices and comprehension strategies were provided to help them construct meaning in the connected texts. See how phonological awareness-raising, phonics instruction, and comprehension strategies were integrated in step 4 and 5 as follows.

Step 4: reading connected text. Reading connected parts provide the opportunity for struggling readers to learn to listen and then read such as rhyme

patterns, initial sounds, and ending sounds to make distinction before beginning to read aloud by themselves. Those providing focus on various feature of phonological awareness (aware of words, syllables, rhymes, and sounds) and phonics (letters-sounds correspondence) throughout the repeated oral reading tasks such as student-adult reading, choral reading, tape-assisted reading, partner reading, and reader's theatre.

Step 5: reading-writing connection. As students attempt to write, they develop phonological awareness and phonics –that is, what sounds they are able to segment from their speech and how they can represent these sounds with the letters they know. Teacher can promote the development of phonological awareness during writing, for example, 1) remind students to think of how many syllables are in the word and writing a sound for each syllable, 2) encourage struggling readers to use rhyme to help spell a word (e.g., find the word “*pan*” on the board. If that is how to spell “*pan*”, how would you spell “*fan*”?), 3) help students use matching and isolating sounds to help spell a word (e.g., “*rat*” starts with the same sound as “*ran*”. What sound does “*rat*” start with?), 4) support word awareness with re-creating the sentence from a cutting strip of paper by using sentences from the connected text.

1.2.3. The long range plan (see Appendix D)

The program was set into 2 units within 15 lessons: Unit 1-short vowels and consonant blends (8 lessons), Unit 2- long vowels (7 lessons). The steps of designing the units and the lessons were as follows.

(1) Establish teaching goals and objectives

(2) Make decision what sequences, contents, and scopes for each goal and objective.

The sequences of instructions were operated follow Blevin's (2006) suggestion:

- a) Start with short-vowel sounds spellings and CVC (consonant-vowel-consonant) words before long-vowel sounds. Due to short vowel sounds are easier than long vowel sounds for struggling readers.
- b) Combine consonants and short vowels to support the word generating as early as possible in decodable and connected texts. These provide the opportunities of applying phonological awareness and phonics knowledge to spell words.
- c) Go first with higher-fluency sound spelling relationships which the most words can be generated. For example, letter *t* is more often in words than letter *x*. The most frequent spellings of the 44 sounds of English is shown in appendix which are the sounds and spellings covered in most basal reading programs. The frequency are calculated based on the number of times each sounds spelling appeared in 17,000 used words by Hanna et al. (1996)
- d) Boost from easy to more difficult sound-spellings. For example, teach consonant sounds before digraph, and then cluster consonants. Also, begin the lesson of short vowel sounds before long vowel sounds.

The scopes of phonemic awareness skills

Due to without phonemic awareness, phonics skills cannot work. Struggling readers need to aware of sounds of spoken language at first. So, the program provided phonemic awareness skills suggested by Eldredge (2005) are as follows.

Skill 1 Phoneme blending (identifying words when pronounced in isolated in phonemes e.g., What is the word /m/ /a/ /n/?)

Skill 2 Phoneme association (matching phonemes with words beginning with those phonemes e.g., which word begins wit /p/?)

Skill 3 Phonemes segmentation (isolating phonemes e.g., what is the beginning sound of the word *box*?)

Skill 4 Segmenting words (isolating all of the phonemes in words e.g., What are the sounds in the word *fish*?)

Skill 5 Phonemes manipulation (adding/ substituting and deleting) or rhyming.

Adding: e.g., Add /p/ in front of the word *lace*, and what word do you get?

Substation: e.g., Say the word quack, but substitute /a/ with /i/.

Deleting: e.g., Say the word mask, without the /m/.

The scopes of phonics knowledge suggested by Chapman & King (2009)

Students had to make use of those 5 phonemic awareness skills with phonics knowledge suggested by Chapman & King (2009) as follows.

- a) Distinguish the sounds of the letters and understand that when the sounds are combined, the words can be formed.
- b) Distinguish between the consonants and the vowels.
- c) Use the clusters (e.g., bl, cl, and sw) at the initial and final sounds.

- d) Use the sounds of consonant digraphs (e.g., ch, sh, and th) including consonant digraphs with silent letters (e.g., kn/n/, ck/k/, and gh/f/)
 - e) Recognize long vowel sounds (eg., -ay, -ea, and -oa)
 - f) Apply the rules for the final e
 - g) Apply phonograms (e.g., -an, -eat and -un)
 - h) Recognize vowel Diphthong (e.g., -oy, -oi, and -ow)
- (3) Organize teaching materials.

Connected reading were adopted and adapted from www.starfall.com.

Games and activities were adopted and adapted from many websites and guided books of teaching phonics.

- (4) Select the suitable teaching strategies.
- (5) Develop or collect supporting materials.

1.2.4. Lesson plans (see Appendix E)

The lesson plans for this present study were set up with five-step procedure adapted from “Phonics from A to Z” (Blevin, 2006) as mentioned before. To develop the lesson plans, the researcher studied from various sources such as textbooks, websites, and teacher’s manual. Each lesson of the program consisted of 3 major stages: *before reading*, *during reading*, and *after reading*. Showing how those phonological awareness and phonics steps fit in the reading program and how vocabularies and comprehension strategies were integrated as follows.

At the ‘*before reading*’ stage, at the beginning, phonological awareness-raising is provided for students to take the opportunity to hear and say the phonemes taught with practice on introducing sentences and new words consequently. Activities such as rhymes, songs, stories, and games will be used to support and help

students to aware of words and sounds until they are able to distinguish words from syllables, and eventually they must be able to hear phonemes in both words and syllables. After that, phonemic awareness tasks such as blending, segmenting, deleting, and substituting are introduced together with associating letters with the phonemes they represent (phonics). When they are able to demonstrate the ability to those tasks, they are able to manipulate sounds in words, read words accurately and latterly recognize words. At the '*during reading*' stage, students will be supported to make use of previous skills to blend the word(s) in sentence(s) and connected text(s) and continually reread for fluency. The monitoring reading for meaning to check whether they understand what they have read and make connection what they already know are also included with vocabulary and comprehension strategies such as using picture clues, guided questions, graphic organizers. At the '*after reading*' stage, various techniques can be used from paired work, small groups using props such as sequencing cards, storyboards, puppets or drama to review and summarize what they have read.

Stage 1.3: Verify the effectiveness of the instruction

Three lesson plans were evaluated by three experts in the field of pedagogy, activities, materials, time allocation, and evaluation. The lesson plans were verified using the evaluation form to ensure its content and construct validity. In the evaluation form comprised 20 items which were presented in Index of Item Objective Congruence: IOC (-1 = disagree or not appropriate, 0 = not sure, 1 = agree or appropriate). The experts were asked to rate the quality of the lesson plans 1 to 3 according the degree to which they agreed with the statements. The items with IOC

index higher than 0.5 were acceptable. Those scoring lower than 0.5 were modified.

The validation of lesson plans is shown in the table 3.1.

Table 3.1

The validation of lesson plans evaluated by three experts

	Lesson Plan 1	Lesson Plan 2	Lesson Plan 3
1.Terminal Objective			
Objective 1	1	1	1
2.Enabling Objectives			
Objective 1	1	1	0.67
Objective 2	1	1	0.67
Objective 3	1	1	1
Objective 4	0.67	0.67	0.67
Objective 5	0.67	0.67	0.67
3. Teaching procedures			
3.1 Step 1: warm-up/ review	1	1	1
3.2 Step 2: introduce sounds-spelling	1	1	1
3.3 Step 3: blend words	1	1	1
3.4 Step 4: reading connected text	1	1	
3.5 Step 5: reading-writing connection	0.67	0.67	1

4. Activities			
4.1 Well-matched with the objectives.	0.67	0.67	0.67
4.2 Represent a progression from simple to more complex.	1	1	0.33
4.3 Promote learners' reading accuracy.	0.33	0.33	0.33
4.4 Promote learners' reading fluency.	0.33	0.33	0.33
4.5 Motivate and challenge learners to participate in.	0.67	0.67	0.33
5. Materials and worksheets			
5.1 Well-matched with the activities and the objectives.	0.67	0.67	0.67
5.2 The content difficulty and language level are appropriate for the struggling readers.	0	0	-0.33
6. Time allocation			
6.1 Time allocation is appropriate	0	-0.33	-0.33
7. Evaluation			
7.1 Evaluation is appropriate.	0.33	0.33	0.33
Grand Mean Score	0.7	0.68	0.57

Note: Note: Lesson plan 1= Pat and Nat, Lesson plan 2 = Ben the Hen, Lesson plan 3= The Big Hit.

According to the Table 3.1, the Grand Mean Score were 0.70, 0.68, and 0.57 which indicated that overall of lesson plans were acceptable. However, the three experts provided some additional comments for revising the lesson plans.

Expert A suggested that the teacher should choose the words based on the content that the students are learning in the normal class. Moreover, it should be two hours because there are so many activities.

Expert B suggested that step five of teaching, reading-writing connection, is not enough. Writing tasks should be added more, while some steps needed to omit the repeated activities, otherwise, one hour and a half is impossible. The content and language level are too easy for the seventh grade readers. They may get bored. The words should be more difficult than these. The observation sheet for read aloud accuracy should be different in the position of words because the readers may recall from many times of repeating not reading by using letter-sound correspondences.

Expert C suggested that it should be more than one hour and a half because there are too many skills to be acquired and taught especially for struggling reader. Some activities are not necessary. Some activities should have been given more time. To clarify what to be reviewed in the lesson plans. The comments from the experts were summed up in Table 3.2

Table 3.2

Experts' Comments and Suggestions on Lesson Plans

Lesson	Comments
Pat and Nat	-The content is too easy for the seventh grade students. -Enabling objectives number three and four are not clear. They were same meaning. -Some words in the small connected text do not rhyme. Some words were not mentioned before but there are in the text.

	<p>-The sentences should be more meaningful.</p> <p>-The worksheet direction is not clear.</p> <p>-The small text in the observation sheet should be different from the one they read during the class. Teacher may switch the words order to show if they can make use what they have learnt not remember the rhyme.</p>
Ben	-The activities seem to be interesting. Still, the teacher should choose the
the	words based on the content that the students are learning.
Hen	-The amount of struggling readers shouldn't be more than 10-15.
	-It should be two hours.
The	-The second enabling objective is not necessary because almost the
Big	words have the same amount of phonemes.
Hit	-The consonant blend eg. /gr/ should be learnt later. It's another skill.
	-Step 3 would take more than 20 minutes. And step 4 would take more than 30 minutes. Step 5 would take more than 10 minutes.
	-Compound words were not in the objectives. They should be in another lesson.

In conclusion, although the overall results of the lesson plans showed that the lesson plan contained good characteristics, they were revised in terms of objectives, evaluation, and activities according to the experts' suggestion and prepared for the pilot study.

Stage 1.4: Conduct a Pilot Study

After the revision of the lesson plans, a pilot study was carried out the main study was undertaken. The purpose of the pilot study was to confirm that the

preliminary version of the lesson plans, diagnose test, learning logs, and materials are applicable to the present study. Moreover, the pilot study also aimed to identify the part of the instruction that needed to be revised before it was conducted in the main study.

Consequently, three lesson plans were piloted with 10 struggling readers who were studying in a school of Bangkok Metropolitan Administration, Nonngkhaem district in July 2012 academic year. As previously stated, the lesson plans were good representative of how to utilize both phonological awareness-raising and phonics instruction to enhance reading accuracy and fluency. The struggling readers chose for the pilot study shared similar characteristics in terms of their ages, their educational backgrounds and reading problem level.

Stage 1.5: Redesign the Instruction

In redesigning the instruction, two significant steps were conducted. First, revision of the instruction was carried out. Second, the development of an evaluation was conducted.

1.5.1. Revised the instruction

The lesson plans were reviewed based on the information obtained from the pilot study. The major problems found in the pilot study were time allocation and too many activities for one hour and a half.

The result from the pilot study indicated that fluency practices in the fourth step and reading writing connection in the fifth step were limited with time. There were more than one games or activities for each step. It was found that the students could not practice all in time. So, some activities could be omitted due to the time constrain. Another problem came after omitting the games and activities was

fluency practice seems too less. Meyer and Felton (1999) suggested that the general consensus regarding the amount of re-readings necessary to affect fluency is 3–4 times. Furthermore, the teacher could not provide the read aloud test after the end of each class because they need to finish their worksheets and learning logs. They took time. The struggling readers need to come early to have a test before starting the new lesson next time.

Phase II: the implementation of reading program using phonological awareness-raising and phonics instruction.

The experiment consisted of three stages; 1) conduct the main study 2) evaluate the effectiveness of reading program using phonological awareness-raising and phonics instruction and 3) elicit students opinions.

Stage 2.1: Pretest (Diagnose)

Diagnose readers' level of reading accuracy and fluency problem (Pretest). Before the implementation of the reading program using phonological awareness raising and phonics instruction to enhance English reading accuracy and fluency of seventh grade struggling readers, all of them were pre-tested to diagnose their level of reading accuracy and fluency problem with informal reading inventory (IRI) test which have 2 parts ; graded word lists and graded reading passages. Normally, the struggling readers were determined at *frustration level* of pre-primer level in graded word list. Therefore, they could not read any graded reading passages at all.

Step 2.2: During the experiment

The implementation and evaluation of the reading program using phonological awareness-raising and phonics instruction to enhance English reading accuracy and fluency of seventh grade struggling readers lasted for 6 weeks with fifteen lesson

plans. Each lesson plan took two hours every day after school (3.30 – 5.30 P.M.) and every Saturday (9.00-11.00 A.M.). The steps in conducting the experiment are described as follows.

From lesson plan 1 to 15, the students participated in the reading program using phonological awareness-raising and phonics instruction to enhance English reading accuracy and fluency. They were engaged in five steps of the reading program using phonological awareness-raising and phonics instruction to enhance English reading accuracy and fluency, namely, reviewing the previous sounds, introducing sounds-spelling, blending words, reading connected text, and reading-writing connection. They were assigned to write the learning logs after ending each lesson.

Elicit students' opinions from students' opinion logs (See Appendix H)

Every struggling reader had to write their opinions toward the reading program in learning log. The data obtained from learning logs were transcribed and analyzed qualitatively in order to explore students' opinions toward reading program using phonological awareness-raising and phonics instruction.

Stage 2.3: Posttest

By the end of the program, the IRI test was administered to the students. The data obtained from IRI test was statically analyzed by the criteria of Stauffer et al. (1978) for reading aloud accuracy on graded word lists and criteria of Johnson et al; Barr et al. (2002) for reading aloud accuracy on graded passages. For reading aloud fluency on graded passages were analyzed by the average oral rates reported by Hasbrouck and Tindall (2006) and Bloodgood and Kucan (2005). The content of the post-test was the same as it was in the pretest. Also the same raters evaluated reading aloud performance.

Stage 2.4: Evaluate the effectiveness of reading program using phonological awareness-raising and phonics instruction, the data gathered from the pre and post of IRI tests were statistically analyzed using a mean and a sample paired t-test, while the students' opinions toward the reading program obtained from the students' learning logs were analyzed using content analysis.

Research Instruments

The instruments used in this present study were 1) Informal Reading Inventory (IRI) Test, 2) students' learning logs. The IRI test was used to investigate the students' reading aloud accuracy and fluency before and after the instruction, while students' learning logs were used to seek the students' opinions towards the reading program.

Informal Reading Inventory (IRI) Test

IRI test was administered to determine struggling readers' level of reading accuracy, and fluency before and after the instruction. There were 2 parts; graded word lists and graded reading passages. Part 1, the graded word lists test, it was adopted from Diagnosis and Correction of Reading Problems (Morris, 2008) contained ten 20-word lists (see Appendix B) ranging in difficulty from pre-primer (early first grade) to eighth grade. These lists were developed by randomly sampling the grade-level lists from Basic Reading Vocabularies (Harris&Jacobson, 1982) selected from the words in the Harris-Jacobson corpus. For instance, 20 pre-primer level, words were chose from every 8th word from the 175 words in the Harris-Jacob pre-primer-level corpus. And so on. They were for assessing word recognition—ability to recognize words immediately on lists that were graded in difficulty, including, ability to decode and inform on the nature of his or her word recognition errors. This result was used to determine the level at which the children had better begin the

graded passages. There were twenty words and included different types of words. Part 2, graded reading passages (Jennings, 1996) were for assessing contextual reading. They were used to examine the oral reading accuracy and fluency in context. Each passage was examined and then preceded to more challenging passages until the student became frustrated (achieved scores below 90%), at which point the testing was stopped. The highest passage level that the student could read without becoming frustrated was designed the “instructional level”.

Before implementing the instruction, pretest (IRI test) was distributed to the students in the 2012 academic year and determined what their reading accuracy and fluency level. The graded word lists were read first to see what level they could read the graded reading passages. For example, if student A was frustrated at the fourth graded word list level, that one would be able to start reading the third graded reading passage. The participants who would take this program were the one determined as *frustration level* (below 70%) at pre-primer level. The table 3.3 was the performance criteria of reading accuracy (Morris, 2008). See Appendix L how to score the student’s reading aloud accuracy on graded word lists and see Appendix M how to score the students’ reading aloud fluency.

Table 3.3

The performance criteria of reading accuracy

Level	Reading accuracy Graded word lists (%)	Reading accuracy in graded reading passages (%)
Independent	90-100	98-100
Instructional	70-89	95-97
Frustration	Below 70	Below 90

According to oral reading fluency in the graded passages, the performance criteria were in the table 3.4. Teacher had to record to compare to the result after taking the program to see the improvement in the summary sheet (see Appendix C).

Table 3.4

Average reading rate ranges (Grade 1-8)

Grade	Oral rates (wpm)
First	45-85
Second	80-120
Third	95-135
Fourth	110-150
Fifth	125-155
Sixth	135-160
Seventh	145-160
Eighth	145-160

Students' learning logs (See Appendix H)

Students' leaning logs were open-ended questions in Thai. There are 5 guided questions to elicit students' feeling, difficulties and opinion toward the reading program and activities. Students were assigned to write students' logs after each lesson. The results of the learning logs were analyzed using content analysis and the data were used to confirm with the data from IRI tests.

Verify and revise the effectiveness of students' learning logs

Validity of the students' learning log for eliciting students' opinions were validated by three experts in English language teaching and suggested on the students' log. After the students' learning logs had been validated, some items were revised according to the experts' suggestion. The questions were translated into Thai language to be more understandable and precise, get insightful information, and reduce language barriers. Struggling readers were also informed that the questions to be asked had no right or wrong answers. The experts' validation of the students' learning logs were illustrated in Table 3.5

Table 3.5

The experts' validation of students' learning logs

Item	Expert	Expert	Expert	IOC
	A	B	C	
1. What activities do you like or dislike in this lesson? And why?	1	1	1	1
2. What do you want your teacher to include in or exclude from the lesson? And why?	1	1	1	1
3. Do you find how to read "Pat and Nat" easy after finishing the lesson? If yes, how is easy? If not, what are the difficulties?	1	0	1	0.67
4. What are questions you have after finishing the lesson?	1	0	1	0.67
Overall				0.83

In Table 3.5, the results from the students' learning logs for eliciting students' opinions toward reading program using phonological awareness-raising and phonics instruction indicated that the overall score of all items was 0.83. It was implied that

the students' learning log was acceptable. However, there were additional comments given by the experts as follows:

Expert A suggested that the first question should be provided the checklist of the learning activities in the learning log so that students could recall those activities. As a result, the researchers adjusted the questions in order to help them easily identify the activity and write the reason.

Expert B recommended that the question number two was better put "include in" and "excluded from" in two different questions so that the answers would become more specific. As a result, the researcher added the 2 leading answers for the questions number 2 to specify the answers. Additionally, Expert B also suggested that the question number three should be changed for more specific answers. For example, "Do you find reading *The Big Hit* easy after finishing the lesson? Why or Why not?" Therefore, the researcher adjusted the question number 2 as the expert guided. Furthermore, Expert B noted that question number four needed a lot of thinking and usually struggling readers would skip answering this because it would make them think again. It should be adjusted to "Which part of the lesson was clear and which part was a bit vague?"

Expert C suggested that the language used were ungrammatical. Therefore, the researcher adjusted the language used.

Validity and Reliability of the students' learning logs

The content validity of students' learning log was evaluated by three experts in language instruction. The experts were asked to give comments on each item. After

the consultation with the experts, all 4 items were adjusted. The comments mostly centered on the language of some items which were unclear. The items were improved to make the questions more understandable and easier to answer. The items were modified as follows:

Item 1: What activities do you like or dislike in this lesson? And why?



What activities do you like or dislike in this lesson? (.....) And why?

Item 2: What do you want your teacher to include in or exclude from the lesson? And why?



What do you want your teacher to include in or exclude from the lesson? And why?

I would like to include the activity of..... in
because.....

I would like to exclude the activity offrom
because.....

Item 3: Do you find how to read “Pat and Nat” is easy after finishing the lesson?
If yes, how is easy? If not, what are difficulties?



Do you find reading “Pat and Nat” easy after finishing the lesson? If yes, how is it easy? If not, what are difficulties?

Item 4: What are questions you have after finishing the lesson?



Which part of the lesson was clear and which part was a bit vague after finishing the lesson? (Review, Introduce sound-spelling, Blend words, Read aloud the connected text, Read and Write connection)

After the revision, the students’ learning logs were piloted for the 10 struggling readers studying at a school of Bangkok Metropolitan Administration, Nongkhaem district. The result obtained from the pilot study showed that most of struggling readers left item 2 and 4. Then teacher had friendly asked one by one for the reasons. The reasons why they left item 2 was the lessons were clear therefore nothing needed to be changed. The reasons why they left item 4 were nothing was questionable and they were able catch the class. Additionally, they said that writing nothing referred that the lessons pleased them. So the researcher revised the instruction of the learning logs in order to remind struggling readers not to leave the answers blank.

In conclusion, two main research instruments were used in the current study, namely, informal reading inventory (IRI) test and students’ learning log.

Data collection

The data collection for this study was conducted in August to September, which was the middle of the first semester of 2012 academic year for school in Thailand.

The whole experimental study of reading program using phonological awareness and phonics instruction to enhance English reading aloud accuracy and fluency of seventh grade struggling readers lasted for 6 weeks. Each lesson lasted for 2 hours.

The data collection method that was used to assess English reading aloud accuracy and fluency was single group, posttest- only- quasi- experimental design. The students' reading aloud accuracy and fluency in this study was assessed by an Informal Reading Inventory test. The pre and post-test were both audio-recorded for accurate grading.

Data analysis

Research objective 1 was to investigate effects of the reading program on English reading aloud accuracy and fluency. To respond to this objective, the pre and post IRI test mean scores were compared. To analyze the data, a paired sample t-test was statistically conducted to determine the differences between the pre and post scores.

Research objective 2 was to explore opinions of the struggling readers toward the reading program. To understand further insight about the students' opinions towards the reading program, the data obtained from the students' learning logs were analyzed using content analysis.

Table 3.6

Summary of Data Analysis

Instruments	Objectives	Time of Distribution	Statistic
Informal Reading Inventory (IRI) Test	To study the effects of the reading program on English reading aloud accuracy and fluency of the struggling readers	Before and after implementing the reading program	-Percentage -Mean -Paired sample t-test
student's learning log	To elicit struggling reader's opinion toward the reading program	The end of each lesson	Content analysis

Summary

This study aims to examine whether the reading program using phonological awareness-raising and phonics instruction improves the seventh grade struggling readers on their English reading aloud accuracy and fluency. The main experimental study was conducted with the 20 seventh grade struggling readers from a school in Nongkhaem district, Bangkok Metropolitan Administration who were determined by Informal Reading Inventory Test at *frustration level* of pre-primer on graded word lists. The study lasted for 6 weeks since August to September 2012. The study compared the struggling readers' reading aloud accuracy and fluency test mean scores before and after receiving the reading program by using a paired simple t-test.

Furthermore, the study explored the struggling readers' opinion toward the reading program using phonological awareness-raising and phonics instruction through the students' learning log. The data collected from the logs were analyzed by content analysis.

CHAPTER IV

FINDINGS

This chapter reports both quantitative and qualitative results based on two research Objectives. The first objective was to investigate the reading program's effectiveness in enhancing struggling readers' English reading aloud accuracy and fluency. And the second objective was to explore seventh grade struggling readers'

opinions toward the reading program using phonological awareness-raising and phonics instruction.

Result of Research Question 1

To what extent does reading program using phonological awareness-raising and phonics instruction affect struggling readers' English reading aloud accuracy and fluency?

In order to answer this research question, the researcher compared seventh grade struggling readers' English reading aloud accuracy and fluency before and after receiving reading program using phonological awareness-raising and phonics instruction. The research instruments used to measure the participants' English reading aloud accuracy and fluency was the IRI test which was the same form both pretest and posttest. The test consisted of two parts; ten graded word lists (Morris, 2008) and ten graded reading passages (Jennings, 1996) (see appendix A and B). First of all, students were assigned to read the graded word lists to see what level they could read the graded reading passages. For example, if student A was frustrated at fourth level of word list, he or she started at third grade of reading passage. Then their reading aloud accuracy and fluency were recorded.

The results obtained from graded word lists as diagnosis test and pretest revealed that all the struggling readers in the current study were determined at *frustration level* of pre-primer level for the accuracy scores; therefore, they could not enter any further test, the test of reading fluency to check their reading aloud fluency. So, the pretest scores of reading aloud fluency was zero. The comparison of the participants' pretest and posttest mean scores on graded word lists are presented in table 4.1. Total score computed from graded word lists at the level of pre-primer

contained 20 words. For the comparison of the participants' pretest and posttest mean scores on graded reading passages are presented in table 4.2. Total score computed from graded reading passages at the level of pre-primer contained 62 words.

Table 4.1: Comparison of the pretest and posttest mean scores of reading aloud accuracy on graded word lists at the pre-primer level (total words = 20)

	n	Min	Max	\bar{X}	S.D.	Mean Difference	t	sig
Pretest	20	0	8	4.15	2.85	7.25	-5.65	.00*
Posttest	20	8	17	11.40	4.75			

*p < .05

It can be seen from table 4.1 that after attending the reading program, all twenty struggling readers can improve reading aloud accuracy significantly. That is the struggling readers' posttest mean score was higher than their pretest mean score. The mean score of the pretest was 4.15 with the lowest score of 0 and the highest score of 8, while the mean score of the posttest was 11.40 with the lowest score of 8 and the highest score of 17. The mean difference was 7.25 and the t value was -5.65. The result revealed that there was a significant difference between the pretest and posttest mean scores of the students at the significant level of .05.

Table 4.2: Comparison of the pretest and posttest mean scores of reading aloud fluency (wpm) on graded reading passages at the pre-primer level (total words = 62)

	n	Min	Max	\bar{X}	S.D.	Mean Difference	t	sig
Pretest	20	0	0	0	0	19	-3.17	.005*

Posttest	20	0	51.66	14.51	20.48
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*p < .05

For the reading aloud fluency, it can be seen from table 4.2 that the mean score of the pretest, the lowest score, and the highest score are 0 while the mean score of the posttest was 14.51 with the lowest score of 0 and the highest score of 51.66. The mean difference was 19 and the t value was -3.17. The result revealed that there was a significant difference between the pretest and posttest mean scores of the students at the significant level of .05.

It can be seen in table 4.1 and table 4.2 that their performances of reading aloud accuracy and fluency were significantly improved. The individual score and level of all twenty struggling readers before and after taking 15 lessons of the reading program can be summarized in table 4.3.

Table 4.3 Individual scores of English reading aloud accuracy and fluency on graded word lists and graded reading passages before and after taking the reading program.

No.	Stu.	Pretest		Posttest								
		Graded word lists	Graded Reading passages	Graded word list				Graded reading passages				
		Pre-primer (score %)	Pre-primer	Pre-primer (score %)	Primer (score %)	First (score %)	Second (score %)	Pre-primer	Primer	First	Second	Third
1	A	Frustration (0)	Accuracy: N/A Fluency : N/A	Frustration (35)	*Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
2	B	Frustration (0)	Accuracy: N/A Fluency : N/A	Frustration (25)	*Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
3	C	Frustration (0)	Accuracy: N/A Fluency : N/A	Frustration (30)	*Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
4	D	Frustration (0)	Accuracy: N/A Fluency : N/A	Frustration (30)	*Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
5	E	Frustration (5)	Accuracy: N/A Fluency : N/A	Frustration (20)	*Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
6	F	Frustration (10)	Accuracy: N/A Fluency : N/A	Frustration (25)	*Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
7	G	Frustration (20)	Accuracy: N/A Fluency : N/A	Frustration (35)	*Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
8	H	Frustration (30)	Accuracy: N/A Fluency : N/A	Frustration (50)	*Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
9	I	Frustration (30)	Accuracy: N/A Fluency : N/A	Frustration (55)	*Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
10	J	Frustration (30)	Accuracy: N/A Fluency : N/A	Instructional (75)	Frustration (55)	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
11	K	Frustration (35)	Accuracy: N/A Fluency : N/A	Frustration (65)	Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
12	L	Frustration (40)	Accuracy: N/A Fluency : N/A	Frustration (55)	Stop	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
13	M	Frustration (40)	Accuracy: N/A Fluency : N/A	Instructional (80)	Frustration (55)	*Stop	*Stop	Accuracy: 95 Fluency : 37.95	Accuracy: 92 Fluency : 34.90	Accuracy: 86 Fluency : 30.94	**Stop	**Stop
14	N	Frustration (50)	Accuracy: N/A Fluency : N/A	Instructional (80)	Frustration (55)	*Stop	*Stop	Accuracy: 92 Fluency : 51.66	Accuracy: 93 Fluency : 44.44	Accuracy: 84 Fluency : 30.15	**Stop	**Stop
15	O	Frustration (50)	Accuracy: N/A Fluency : N/A	Instructional (75)	Instructional (80)	Frustration (65)	*Stop	-	Accuracy: 95 Fluency : 35.29	Accuracy: 90 Fluency : 32.13	Accuracy: 89 Fluency : 35.50	**Stop
16	P	Frustration (50)	Accuracy: N/A Fluency : N/A	Instructional (85)	Instructional (85)	Frustration (60)	*Stop	-	Accuracy: 96 Fluency : 48.00	Accuracy: 95 Fluency : 65.33	Accuracy: 90 Fluency : 56.8	Accuracy: 77 Fluency : 43.50
17	Q	Frustration (55)	Accuracy: N/A Fluency : N/A	Instructional (80)	Instructional (70)	Frustration (35)	*Stop	Accuracy: 97 Fluency : 39.15	Accuracy: 94 Fluency : 35.29	Accuracy: 90 Fluency : 32.13	Accuracy: 89 Fluency : 35.50	**Stop
18	R	Frustration (55)	Accuracy: N/A Fluency : N/A	Instructional (85)	Instructional (80)	Frustration (30)	*Stop	-	Accuracy: 95 Fluency : 37.20	Accuracy: 91 Fluency : 36.70	Accuracy: 89 Fluency : 35.50	**Stop
19	S	Frustration (55)	Accuracy: N/A Fluency : N/A	Instructional (70)	Frustration (40)	*Stop	*Stop	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A	Accuracy: N/A Fluency : N/A
20	T	Frustration (60)	Accuracy: N/A Fluency : N/A	Instructional (85)	Instructional (80)	Frustration (60)	*Stop	-	Accuracy: 97 Fluency : 48.78	Accuracy: 95 Fluency : 63.91	Accuracy: 89 Fluency : 47.33	**Stop

*Stop when score of students' reading aloud accuracy on the previous level achieved below 70%

**Stop when score of students' reading aloud accuracy on the previous level achieved below 90%

In table 4.3, the individual score of each struggling reader's performance on graded word lists before and after receiving the reading program were interpreted. The levels of students' performance were graded using Stauffer et al.'s (1978) criteria as follows.

- Below 70% on a given list indicates *frustration level*. The child does not have sufficient sight vocabulary at this level to read successfully.
- 70 – 89% on a given list indicates *instructional level*. The child has sufficient sight vocabulary at this level to read successfully with teacher support.
- 90% or above on a given list indicates *independent level*. The child has sufficient sight vocabulary at this level to read independently, that is, without teacher support.

In table 4.3, before receiving the reading program, all twenty struggling readers were provided graded word lists to read. Twenty of them, Student A to T, were indicated at *frustration level* of pre-primer level with below 70% of reading aloud accuracy: Student A 0%, Student B 0%, Student C 0%, Student D 0%, Student E 5%, Student F 10%, Student G 20%, Student H 30%, Student I 30%, Student J 30%, Student K 35%, Student L 40%, and Student M 40%, Student N 50%, Student O 50%, Student P 50%, Student Q 55%, Student R 55%, Student S 55%, and Student T 60% consequently.

After receiving the reading program, all twenty struggling readers were developed their accuracy on graded word lists. Even though seven of them were frustrated at pre-primer level, they earned more scores. And thirteen of them were predicated at the higher level. To explain in detail is following.

Eleven students were determined at *frustration level* of pre-primer level. Students A to I, K and L were still *frustrated* at pre-primer level, but they gained more scores. Students A to D were developed obviously up from zero to 35%, 25%, 30%, 30%, and

20% consequently. Student E was developed up from 5% to 20%, Student F was developed up from 10% to 25% and Student G developed up from 20% to 35% Student H developed up from 30% to 50%, Student I developed up from 30% to 55% consequently.

Four students were determined at *instructional level* of pre-primer level. Student J, M, N, and S, were developed from *frustration level* to be identified at *instructional level* of pre-primer level. They were grown from 30%, 40%, 50%, and 55% up to 75%, 80%, 80%, and 70% consequently.

Five of them were determined at *instructional level* of primer level, Student O, P, Q, R and T, who were signified at the highest level accuracy scores on graded word lists were progressed from *frustration level* of pre-primer level with the scores of 50%, 50%, 55%, 55% and 60% to *instructional level* of primer level with the scores of 80%, 85%, 70%, 80% and 80% consequently.

From the findings in individual scores of English reading aloud accuracy on graded word lists before and after receiving reading program in table 4.3, it can be concluded that all twenty struggling readers were significantly improved their English reading aloud accuracy. The scores of pretest and posttest were noticeably different. In other words, it can be summarized that a reading program using phonological awareness-raising and phonics instruction affected seventh grade struggling readers' English reading aloud accuracy. From now onwards, investigating reading aloud fluency on graded reading passages are following.

Table 4.3 also demonstrates the results of struggling readers' performance on graded passages both before and after applying the reading program. Since all twenty struggling readers in this current study were determined at *frustration level* of pre-primer level in the reading tasks of graded word list; therefore, they could not enter any further

test, the test of reading fluency to check their reading aloud fluency. So, the pretest scores of reading aloud fluency was zero (not available).

After applying the reading program, results in table 4.3 shows that seven struggling readers, Student M, N, O, P, Q, R, and T, could enter reading aloud fluency test as a posttest which required students read on graded reading passages. To begin the reading aloud passage for each struggling reader, teacher judged from the posttest scores on graded word lists used the criteria of students' reading aloud accuracy proposed by Stauffer et al. (1978). Students will start to read the graded reading passages when they were at the highest level that indicated them at *instructional level* with the score of 80%. Therefore, three of them, Student M, N, and Q started to read at the pre-primer level. Four of them, Student O, P, R, and T started to read at primer level.

The findings on graded reading passages performed by students M, N, Q, O, P, and T will be discussed by the criteria. The levels of students' performance of reading aloud accuracy were graded using Johnson et al; Barr et al. (2002). Below 90% on a given passage indicates *frustration level*. The struggling reader's low reading aloud accuracy indicates that he or she is overchallenged by text at this level of difficulty. The strong performance of reading aloud accuracy at 95% or better indicates *instructional level* that struggling readers are able to read a given passage on that level. For the levels of students' performance of reading aloud fluency used the criteria which show expected reading aloud by grade level derived from the average oral rates reported by Hasbrouck and Tindall (2006) and Bloodgood and Kucan (2005). To determine the adequacy of student's grade reading aloud fluency, the ranges are as follows. The rate of 45-85 words correct per minute indicates first grade level. The rate of 80-120 words correct per minute indicates second grade level. The findings in table 4.3 can be described as follows.

The highest oral rate range is the first level. Only student P and T could be determined at the first level. Others were below first level.

Student P's oral rate of 65.33 wpm and Student T's oral rate of 63.91 fall on the first grade range of 45-85 wpm. These findings, together with the fact that Student P and Student T's accuracy scores were signified at *instructional level* of the first level, indicated that Student P and Student T had adequate print –processing skill at the first grade level.

Student N's oral rate of 51.66 wpm falls on the first grade range of 45-85 wpm but the accuracy score does not point at the first level. Student N's accuracy score was signified at *instructional level* of primer. So, Student N could not be indicated that he had adequate print –processing skill at the first grade level.

Regarding to Student M, Q, O, and R, their oral rates were below the first grade range of 45-85 wpm. These findings related with the fact that they could not read the first graded passage. Student M and Q's accuracy scores signified at *instructional level* of pre-primer. Student O and R's accuracy scores signified at *instructional level* of primer. Therefore, they could not be indicated that they had adequate print –processing skill at the first grade level.

In brief, it indicated that the students gained higher scores and levels of accuracy and oral rates range on IRIs test. In other words, students reading accuracy and fluency improved after receiving the reading program using phonological awareness-raising and phonics instruction.

Result of Research Question 2

To what extent can the reading program result in the positive opinions among struggling readers?

To explore seventh grade struggling readers' opinions toward the reading program using phonological awareness-raising and phonics instruction. The research instrument used to answer research question 2 were students' learning logs.

Finding from students' logs

In the students' logs, students were asked about their opinions toward reading program using phonological awareness-raising and phonics instruction whether they like or dislike. The students were asked to write their opinions in the students' logs according to the guided questions by the end of each lesson plan. Therefore, there were fifteen learning logs for each struggling reader.

The keywords that appeared most frequently in the answers were translated into English and presented in 2 main aspects; opinions toward the program and features of the program in the table 4.4.

Table 4.4: Summary of students' opinion toward the reading program

Aspects	Like	Dislike	Suggestions
Reading program	1. Enjoyable with games and	Be asked to	-
using phonological	activities (89.09%)	read one by	
awareness-raising	2. Easy lessons (10.02%)	one(0.90%)	
and phonics			
instruction			

Enhancing reading aloud accuracy and fluency	1. Letter sounds knowledge could help how to read accurately (66.03%) 2. Many times of repeated reading enhance fluency (33.97%)	-	-
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These following are the students' opinions regarding reading program using phonological awareness-raising and phonics instruction. First is to present why it was enjoyable and easy.

“ชอบ เพราะผมเริ่มอ่านได้ บ้าง และสนุกครูเปิดเพลงให้ฟังด้วย” (I like it because I can improve how to read words and enjoy listening music.)

“ชอบ ที่ได้อ่านเรื่อง มีเกมให้ตอบคำถาม” (I like it because the lessons were game alike. I enjoyed asking and answering the questions from games after reading the connected text.)

“ชอบ ครูจะทบทวนตลอด เอากลับไปอ่านที่บ้านด้วย” (I like it because the teacher always let us review the previous lesson before starting the new one and provided reading tasks to practice at home.)

“ง่าย เพราะมีรูปภาพและคำศัพท์” (It was easy because the displaying of new vocabulary with the pictures really help me a lot.)

“ชอบ เพราะมีวิดีโอฝึกออกเสียง และอ่านเรื่องประกอบด้วย” (I like it because the teacher used medias, video clips to display sounds and the stories.)

“เรื่องเข้าใจง่าย สนุก ไม่เครียด” (I like it because the connected texts were easy to understand and enjoyable.)

“ไม่ชอบให้เรียกอ่านทีละคน” (I don't like when teacher asked me to pronounce.)

Second, these following opinions show the features of the reading program, being aware of phonemes, letters-sounds correspondence, and repeated oral reading that could help their reading aloud accuracy and fluency.

“ชอบ เพราะ พอเรารู้ว่าแต่ละตัวอักษรแทนด้วยเสียง ก็สะกดง่าย” (I like that the program acknowledged about letters and their sounds and these make spelling easy.)

“ชอบ ที่มีกิจกรรมทำให้จำเสียงตัวอักษรได้ พอจำได้ก็สะกดได้” (I like that the program provided many activities to aware of sounds and this really could help how to read words.)

“ชอบ การออกเสียงทีละตัว พอชินแล้วก็อ่านออก คล้ายสะกดภาษาไทย” (I got familiar with the way to manipulate letter-sound. It was the same how to read Thai.)

“ชอบ เพราะทำให้รู้ว่าการอ่านคำใหม่ๆต้องเอาเสียงมาผสมกัน” (I like that the program taught me how to read unknown words. I knew that blending sounds together is the way that written text was read.

“ชอบ เพราะเรียนสนุก อ่านซ้ำๆทำให้ผมอ่านออกและได้คล่อง”(I like that the program is fun. Repeated reading developed my reading aloud accuracy and fluency)

“บทเรียนง่าย พอเราเริ่มอ่านออก ก็ทำให้จำศัพท์ง่ายขึ้นแล้วก็แปลเรื่องได้ (The lessons were easy when we know how to read, recognizing meaning was also easy. Then, I could understand the connected text.)

From Table 4.4, the opinions of the struggling readers toward reading program using phonological awareness-raising and phonics instruction were positive. The first aspect, struggling readers with the percentage of 89.09 perceived that the program was enjoyable with games and activities. In addition, some of them with the percentage of 10.02 affirmed that the lessons were easy. Not many struggling readers with the percentage of 0.90 said that asking them read out loud one-by-one made them unhappy. Second aspect is the reason why the reading program could enhance reading aloud accuracy and fluency. Struggling readers with the percentage of 66.03 established that letter sounds knowledge could help them learn how to read accurately. Furthermore, struggling readers with the percentage of 33.97 categorized that opportunities of repeated reading enhance fluency reading.

Summary

This chapter reported the findings in response to two research questions regarding the struggling readers' improvement on reading aloud accuracy and fluency, and the struggling readers' opinions toward the reading program using phonological awareness-raising and phonics instruction.

For the findings of research question 1, the finding revealed that the struggling readers' reading accuracy and fluency improved after receiving reading program using phonological awareness-raising and phonics instruction. The individual scores on graded word lists and graded passages were analyzed to examine struggling readers' reading aloud accuracy and fluency. The finding indicated that struggling readers earned higher posttest scores than pretest score after receiving reading program using phonological awareness-raising and phonics instruction.

For the findings of research question 2, struggling readers' opinions toward reading program using phonological awareness-raising and phonics instruction, the analysis indicated a positive degree of satisfaction toward reading program using phonological awareness-raising and phonics instruction. Finding from the students' learning logs, struggling readers had positive opinions toward reading program using phonological awareness-raising and phonics instruction.

In conclusion, the findings from the current study revealed that reading program using phonological awareness-raising and phonics instruction is effective that can enhance the seventh grade struggling readers' accuracy and fluency and promote positive opinion toward the reading program.

The next chapter will cover a summary of the findings, a discussion of the findings and the recommendations for future research studies.

CHAPTER V

SUMMARY, DISCUSSIONS, AND RECOMMENDATIONS

This chapter divided into five parts. The first part is a summary of the study. The second part provides the finding of the study. The third part includes a discussion of the findings. The fourth part presents the pedagogical implication from the study. Then, the last part presents recommendation for further studies.

Summary of the Study

The objectives of the study were 1) to investigate the reading program's effectiveness in enhancing struggling readers' English reading aloud accuracy and fluency, 2) to explore seventh grade struggling readers' opinions toward the reading program using phonological awareness-raising and phonics instruction.

The research design of this study was a one-group pre-posttest- only design. It compared the reading aloud accuracy and fluency before and after taking reading program using phonological awareness-raising and phonics instruction. The subjects for this study were twenty seventh grade struggling readers, who were studying at a public school in Nongkhaem district, Bangkok Metropolitan Administration in the first semester of the 2012 academic year, selected by purposive sampling.

The research methodology was divided into two phases. Phase one was the development of reading program using phonological awareness-raising and phonics instruction. Phase two dealt with the implementation of reading program using phonological awareness-raising and phonics instruction.

Phase I: the development of reading program using phonological awareness-raising

The development process of reading program using phonological awareness-raising and phonics instruction composed of five stages 1) explore the basic concepts and related documents, 2) construct the instructions, 3) verify and revise the instruction, 4) conduct the pilot study, and 5) redesign the instruction.

Stage one, the theories and the basic concepts related to the present study were explored. The studied topics were reading accuracy and fluency in secondary struggling students, phonological awareness, phonics instruction, reading instruction for secondary struggling readers, developing reading program for secondary struggling readers, and related researches.

Stage two, lesson plans were constructed.

Stage three, verify the effectiveness of the instruction. The instructional instruments were validated by the experts. After that, lesson plans were revised according to the experts' suggestion.

Stage four, a pilot study were carried prior the experiment. Then, the instruments were revised based on the information gained from the pilot study.

Stage five, the instructions were redesigned.

Phase II: the implementation of reading program using phonological awareness-raising and phonics instruction.

The experiment consisted of four stages; 1) administer the Informal Reading Inventory test as a pretest and diagnose, 2) conduct the instruction and students write learning logs, 3) administer the Informal Reading Inventory Test as a posttest, 4) evaluate the effectiveness of the instruction and explore the students' opinion towards the reading program.

Stage one, administer the Informal Reading Inventory test as a pretest and diagnose. The IRI test was administered to the students.

Stage two, conduct the main study, the researcher implemented reading program using phonological awareness-raising and phonics instruction to the class.

Stage three, evaluate the effectiveness of reading program using phonological awareness-raising and phonics instruction. By the end of the program, the IRI test was administered to the students. The data obtained from IRI test was statically analyzed by the criteria of Stauffer et al. (1978) for reading aloud accuracy on graded word lists and criteria of Johnson et al; Barr et al. (2002) for reading aloud accuracy on graded passages. For reading aloud fluency on graded passages were analyzed by the average oral rates reported by Hasbrouck and Tindall (2006) and Bloodgood and Kucan (2005).

Stage four, compare the effectiveness of the instructions and elicit students' opinions towards reading program using phonological awareness-raising and phonics instruction from students' learning logs. The logs were transcribed and analyzed qualitatively.

Findings

The findings of the study were summarized in two main aspects: (1) the effectiveness of reading program using phonological awareness-raising and phonics instruction and (2) the struggling readers' opinions toward reading program using phonological awareness-raising and phonics instruction.

The effectiveness of reading program using phonological awareness-raising and phonics instruction

According to the results derived from the informal reading inventory (IRI) test indicated that the students improved their English reading aloud accuracy and fluency after receiving reading program using phonological awareness-raising and phonics instruction. The scores of students' reading aloud accuracy and fluency gained from the IRI test in reading program using phonological awareness-raising and phonics instruction achieved the criteria of effectiveness at the significant level of 0.05. Struggling

readers' opinions toward reading program using phonological awareness-raising and phonics instruction.

According to the students' learning logs, struggling readers were asked to write their opinions in the students' logs at the end of each lesson plan. Their opinions toward reading program using phonological awareness-raising and phonics instruction from the learning logs indicated that students had positive opinions.

Discussion

The purposes of this study were to 1) investigate the effects of the program and 2) explore the opinions of the struggling readers toward the program. Accordingly, the findings are going to be discussed on four aspects which are 1) reading program using phonological awareness-raising and phonics instruction, 2) the developmental paces of English reading aloud accuracy and fluency, and 3) limitation of English reading aloud accuracy and fluency.

Reading program using phonological awareness-raising and phonics instruction

In this study, the impact of reading program on the improvement of reading aloud accuracy and fluency could be discussed into three features 1) the sufficient and effective tasks for drilling sound awareness and letters-sounds correspondence, 2) the meaningful of reading instruction for struggling readers, and 3) the enjoyable and interesting practice of reading activities.

First of all, a variety of phonological awareness and phonics tasks were employed to meet students' reading accuracy and fluency. The students were engaged to be aware of sounds through the five tasks 1) ability to hear rhymes and alliteration, 2) ability to do oddity tasks, 3) ability to orally blend words, 4) ability to orally segment words (including counting sounds), and 5) ability to do phonemic manipulation tasks until they could make use of the knowledge of letter-sound associations to read words. Based on the students' leaning logs, a student stated that "I got familiar with the activities of manipulating letters-sounds, and then I can read." Another one pointed out that "I learned that words were made from building sounds together. Then I knew how to read unknown words." The findings of this study were consistent with a major principle proposed by Juel & Minden-Cupp (2000); Moats (2004) that students who need word study instruction,

research on effective instruction often emphasizes phonemic awareness, letter-sound associations, and word recognition. To discuss how a variety phonological awareness and phonics instruction enhance students' accuracy and fluency in the five-step instruction is following.

Step 1: reviewing the previous lesson. Rereading passage enable students aware of spoken language which are words, syllables, onset-rhymes, and sounds (phonemes). When they are able to differentiate each sound in a word, phonemes awareness tasks help them blend and segment sounds previously taught to review previous sound-spelling before acquiring the new sound-spelling.

Step 2: introducing new sound-spelling relationship. Phonemic awareness (sounds) and phonics (letter-sound correspondence) were integrated. The activities provided an engaging way for struggling readers to discriminate the sounds that make up words orally. The main purpose is enhancing phonemic awareness with oral segmentation in order to prepare struggling readers for spelling and phonics. After that, they will be acquired the names of the letters and their sounds.

Step 3: blending and word building exercises. Struggling readers made use their phonics understanding in the step 2 to practice blending and creating new words. The lesson focused on blending sounds (phonemes) into words, and syllables into words. The activities and games were provided for experiencing struggling readers to aware of the number and order of sounds that occur in words. So that, they could blend the words based on the sound-spelling relationships previously taught. Students, then, are able to read accurately.

Step 4: reading connected text. Reading connected parts provide the opportunity for struggling readers to learn to listen and then read such as rhyme patterns, initial sounds, and ending sounds to make distinction before beginning to read aloud by

themselves. Those providing focus on various feature of phonological awareness (aware of words, syllables, rhymes, and sounds) and phonics (letters-sounds correspondence) throughout the repeated oral reading tasks such as student-adult reading, choral reading, tape-assisted reading, partner reading, and reader's theatre. While they are reading and rereading, they become more accurately and fluently.

Step 5: reading-writing connection. As students attempt to write, they develop phonological awareness and phonics –that is, students try to think of how many syllables, and sounds are in a word, what sounds they are able to segment from their speech and how they can represent these sounds with the letters they know. Whenever they can write means they can recognize words and also can read what they wrote accurately and fluency.

Secondly, the program provided the meaningful reading instruction for struggling readers. The current study not only focuses on phonological awareness and phonics in the word study so that they can decode and read words accurately, but also focuses on the ability to read fluently and understand the words. Integrating vocabulary and comprehension strategies could help them understand what they are reading. For example, a student cited that “I enjoyed asking and answering the questions from games and after reading the connected text.” Another one mentioned that “The lessons and recognizing meaning were easy when we know how to read. Then, I could understand the connected text that I was reading.” To discuss how vocabulary and comprehension strategies were integrated with other skills is following.

Students started learning new vocabularies from seeing meaning from pictures and hearing the words. After that, they engaged actively tasks such as, sorting pictures, playing games, and sounding out words to recognize meaning and aware of word which is one strategy of phonological awareness. Students, then, were aware of words, their sounds

and meanings. Next, the activities provided the phonemic awareness tasks to hear the sounds in in each word and encourage them practice segmenting and blending the sounds to decode each word. Students, now, could decode and read accurately and know meaning words. They need more experiences to use those words in real context and practice those words for more accuracy and fluency. Then, the program provided repeated reading strategies to enhance reading fluency. After fluency practices, they could concept the context from comprehension strategies such as find main idea, reorder the situations, answer the questions. These mean that the students were provided all five areas of reading instruction which are phonological awareness, phonics, fluency, vocabulary, and comprehension. The findings of this study were consistent with a major principle suggested by Moats (2008) that the effective instruction in reading for secondary struggling readers should strengthen phonological skills, and reading fluency integrated with vocabulary and comprehension strategies.

Thirdly, reading program using phonological awareness-raising and phonics instruction offered enjoyable and interesting practice of reading activities. At the word-level, the enjoyable activities such as chants, games, and video clips were provided to present the new words, display how to pronounce, and recognize meanings and sounds. As mentioned before, struggling readers not only practice reading at the word-level but also in the connected texts. In the connected text, they were required to read and reread the target words previously taught with enjoyable repeated reading activities which are student-adult reading, choral reading, tape-assisted reading, partner reading, and reader's theater the to earn reading aloud fluency. The results of this study confirmed to Kuhn et al. (2006) and Schwanenflugel et al. (2009) that fluent reading requires the opportunity for extensive practice in the reading of connected text. These also affected the positive opinion to the reading program. For example, a student mentioned that "I like that the

program was fun. Repeated reading developed my reading aloud accurately and fluently”. Another one pointed out that “I like that the teacher used medias, for example, video clips to display sounds and the stories.”

In summation, most significantly, struggling readers improved their reading accuracy and fluency due to the fact that reading program provided sufficient and effective phonological awareness-raising and phonics instruction that responded to their learning needs, especially, to fulfill their knowledge of sound awareness and letters-sounds correspondence to acquire how to read words. Furthermore, the reading program provided struggling readers with meaningful instruction by integrating vocabulary and comprehension strategies to help them construct the meaning what they are reading. Also, enjoyable and interesting reading practices in the program could affect the positive opinion toward reading program.

Developmental paces of English reading aloud accuracy and fluency

Research objective 1 studied the effects of reading program using phonological awareness-raising and phonics instruction on the English reading aloud accuracy and fluency.

Based on the results of accuracy scores on graded word lists, all twenty struggling readers gain more score on graded word lists. The results of this study supported that the struggling readers who received reading program achieved significantly more average scores on the English reading aloud accuracy in the post test than the pretest at the significant level of 0.05. It could be inferred that reading program could significantly improve struggling readers’ reading aloud accuracy. The program benefited all students’ basic reading skills in word decoding and word reading. This result related to Scammacca et al. (2007) and Wexler, Edmonds, & Vaughn (2007) that word study intervention could

improve reading outcomes for struggling readers by teaching them to be the decoders and to access word recognition strategies. Also Bryan & Harter (1899) and Laberge & Samuels (1974) explored that developing the word level, the strong phonological awareness and phonics skills must become automatized to enhance decoding skills and learning how to read accurately. The same with Thai classroom context, Ali (2007) found that the groups that were taught through the phonics approach obtained a higher score on reading aloud accurately compared to students who taught by look-and-say the whole words or memorizing word by word (whole language approach).

Furthermore, in the current study the accuracy gaining on graded word lists also affected on accuracy gaining on graded passage. On graded passages, students who achieved higher scores on accuracy could perform faster reading. This identified that the better word decoding and reading also result fluency on the text reading. Previous research which indicated that phonological awareness and phonics instruction facilitated students' reading aloud accurately and fluently includes Hudson et al. (2011) which claimed that after students receiving phonological awareness and phonics instruction, the students improved their accuracy and fluency in reading. Moreover, Duff et al. (2012) found that a phonologically based reading intervention made struggling readers significantly gained a lot over the course. And these gains were maintained over a 6-month no-intervention maintenance period. Also, Ring et al. (2012) found that reading intervention programs which focused on phonological and phonics affected reading aloud accurately and fluently on both word-level and text-level. The word-level training did result in stronger gains in word reading accuracy when reading connected text. In addition, the fluency outcomes of the word-level transferred to fluency gained at the text level. Based on previous research with poor readers, it was expected that phonological

awareness and letter-sound correspondence in the word-level would benefit at the text level training.

Based on table 4.3, at the primer, first, and second level except pre-primer level, struggling readers who perform highest score on graded passage accuracy also perform of the best fluency score. The describing is following.

At the second level, Student P achieved the highest accuracy 90% and fluency was the best at 56.80 wpm. The lowest one read by Student O and Q, the accuracy was 89% and fluency was the lowest at 35.50 wpm.

At the first level, Student P achieved the highest accuracy 95% and fluency was the best at 65.33 wpm. The lowest one read by Student N, the accuracy was 84% and fluency was the lowest at 30.15 wpm.

At primer level, Student T achieved the highest accuracy 97% and fluency was the best at 48.78 wpm. The lowest one read by Student M, the accuracy was 92% and fluency was the lowest at 34.90 wpm.

At the pre-primer level, the findings did not support that readers who perform highest score on accuracy also perform of the best fluency. Student N performed the lowest on accuracy but his fluency was the best at this level. From the interviewing, the researcher found that, students got confused and misunderstand some vowel and letter sounds. That caused the scores not stable at the pre-primer level. When teacher assisted them immediately feedback after finish reading at the pre-primer level, this really would help in the next connected text. They would not struggle with those sounds anymore. Therefore, the researcher found that the immediately feedback is helpful for struggling readers as well.

Based on the current study, the scores gains on word accuracy provide additional support for the effectiveness of repeated readings. Oral reading accuracy at the word level

affected the fluency outcomes. The fluency outcomes in the connected text transfer from word reading accuracy training in the word level. Text reading accuracy scores are synonymous with other research that reported phonological awareness and phonics training resulted in word reading (e.g., Martin-Chang & Levy, 2005). Studies have shown that when students learn new words in sentence formats they are better at learning the meanings and use of those words, whereas isolated word learning resulted in significantly more accurate and faster reading (Ehri&Roberts, 1979). The latter effect was interpreted as a result of decoding training focusing the children's attention on the orthographic structure of the words, forming stronger representations that facilitated reading. A similar interpretation might be applied to the result of the training in this study. The primary unit of instructions in the reading program at the word level treatment in this study was specific orthographic-phonetic concepts, and the design of the training materials required students to distinguish target items based on those specific components. The lack of transfer of word-level training may affect to word reading fluency.

Limitation of English reading aloud accuracy and fluency

It was found that students improved their English reading aloud accuracy and fluency after taking reading program. However, after observing insightfully, some of the students in the sample group did not gain high score in their posttest. This might be due to the fact that struggling readers had limitation of reading accuracy and fluency.

From the findings of reading aloud accuracy on graded word lists, even though 9 out of 20 struggling readers, Student J, M, N, O, P, Q, R, S, and T could go to the *instructional* level of pre-primer and primer level, nobody reached 90% or above to

indicate at independent level. These results claimed that they still needed teacher's support to read word independently. They may need more time to practice.

The results of reading aloud accuracy on graded passages, only 7 from those 9 struggling readers passed the criteria and were allowed to go further to read the text passages. However, no one could reach 98% or above to indicate independent level. These results claimed that they still needed teacher's support to read word independently. They also may need more time to practice.

The reason why some could not improve much or they could improve much but still not enough and still needed support from teacher due to the limitation of time. One-by-one engaging repeated reading and the provision of corrective feedback while they were practicing reading to support the development of accuracy and fluency may be inadequate. Wexler et al. (2008) claimed that struggling readers in grade 6-12 who needed to improve accurate and fluent reading need to have a teacher or more competent partner provide corrections during practicing. In the current study, teacher could not go one-by-one with all 20 students in two hours duration and their peers were the same competence.

Pedagogical Implications

There is not many research indicated the effects of teaching reading by using phonological awareness-raising and phonics instruction to enhance English reading aloud accuracy and fluency in Thai context. However, the findings in the present study showed that it is possible to develop reading program using phonological awareness-raising and phonics instruction to enhance English reading aloud accuracy and fluency which found from the effectiveness of the instruction. Since students' reading aloud accuracy and

fluency was improved. The implication which can be drawn from the research finding of this study as follows:

Based on the research results, the struggling readers reflected that the reading program using phonological awareness-raising and phonics instruction brings a better read aloud accuracy and fluency. Therefore, it is suggested that teachers use reading program using phonological awareness-raising and phonics instruction so that struggling readers are able to read words. Furthermore, the program should be contained in the core course or intervention course of English, especially, in kindergarten level, if possible, so that, they can read words automatically. The struggling readers in this current study are the ones who their needs of reading have never met the goals since they were in kindergarten and primary grade. When they go to secondary grade, they still keep quiet at the back whenever they asked for reading out. They remain do not know basic concept about reading words. That means they may never been acquired an early intervention or their elementary time did not fulfilled with sounds awareness and letter-sound correspondence experiences. Thus far, the reading program using phonological awareness-raising and phonics instruction should be applied since the children are in the kindergarten in order to decrease the amount of struggling readers in the secondary level.

Limitation of the study

Time intervention is the limitation. The sessions of the instruction were set after school. The class could not go after 5 P.M. although the lessons did not end. Also many school activities did not allowed these struggling readers to be absent, so, many classes were cancelled. Even though, it showed the desirable results of reading aloud accuracy and fluency, it will be better to have longer periods of the instruction to see more improvement of the struggling readers.

Recommendations for future research studies

The findings from this study generated three recommendations for further study.

Firstly, it is recommend that the future study should extend to investigate a broader sample of students in order to confirm better understanding of learning the process and the effectiveness of phonological awareness and phonics instruction.

Secondly, as the current study employed reading program using phonological awareness-raising and phonics instruction to investigate the improvement of struggling readers' reading aloud accuracy and fluency, other research studies should be conducted to investigate if reading program using phonological awareness-raising and phonics instruction to investigate the improvement of struggling readers' reading comprehension because the program was integrated vocabulary and comprehension strategies to help them construct meanings.

Finally, as there were twenty struggling readers in the current study and so many tasks in one lesson, so the sample group in the further study should be smaller so that the teacher can support everybody's needs within limited time. Some tasks need many times to practice. Many struggling readers need helps from teacher at a time. Sometimes, one-by-one practice which spends so much time is necessary. Wanzek and Vaughn (2007) indicated that the vast majority of studies yielded positive reading outcomes, particularly when students were instructed in the smallest group sizes.

Overview

The reading program using phonological awareness-raising and phonics instruction developed in this study in order to assist struggling readers to be able to read aloud accurately and fluently. Thus study is significance because it will encourage and support struggling readers to use the understanding of the sound structure of oral language

that language is made up of words, syllables, rhymes, and sounds (phonemes) and understanding of the sound and letter relationships to read effectively in written language. Once they can read accurately and fluently, they will have a confidence to read. They will never keep quiet at the back of English reading class. They may become the independent readers.

The finding of this study may be used by teachers to develop and implement the reading program using phonological awareness-raising and phonics instruction for their intervention class. The features of the reading program such as the meaningfulness of the reading instruction for struggling readers, the sufficient and effective tasks for drilling sound awareness and letters-sounds correspondence, and the enjoyable and interesting practice of reading activities can assist struggling readers to be able to read aloud accurately and fluently. These findings may encourage, inspire, and guide teachers to solve and decrease the word reading difficulties of struggling readers. Furthermore, the developmentally appropriate reading program can be administered to young children at risk for reading problems long before they actually struggle with learning to read.

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APPENDICES

Appendix A Graded Word lists (Preprimer – Eight Level) Adopted from Morris (2008)

Pre-primer		Flash	Untimed
1.	and		
2.	cat		
3.	me		
4.	is		
5.	go		
6.	play		
7.	where		
8.	like		
9.	thing		
10.	old		
11.	your		
12.	up		

13.	said						
14.	big						
15.	for						
16.	by						
17.	dog						
18.	not						
19.	who						
20.	here						
Number correct							
Total Score							
Scoring Guide for graded word lists							
Independent		Instructional		Frustration			
20	19	18	17	16	15	14	13 or less

Primer				Flash	Untimed		
1.	back						
2.	eat						
3.	sun						
4.	bird						
5.	pat						
6.	saw						
7.	feet						
8.	lake						
9.	hid						
10.	cut						
11.	about						
12.	one						
13.	rain						
14.	water						
15.	two						
16.	how						
17.	window						
18.	need						
19.	that's						
20.	mother						
Number correct							
Total Score							
Scoring Guide for graded word lists							
Independent			Instructional			Frustration	
20	19	18	17	16	15	14	13 or less

		Flash	Untimed				
1.	leg						
2.	black						
3.	smile						
4.	hurt						
5.	dark						
6.	white						
7.	couldn't						
8.	seen						
9.	until						
10.	because						
11.	men						
12.	winter						
13.	shout						
14.	glass						
15.	paint						
16.	children						
17.	table						
18.	stand						
19.	head						
20.	drove						
Number correct							
Total Score							
Scoring Guide for graded word lists							
Independent		Instructional		Frustration			
20	19	18	17	16	15	14	13 or less

First Grade

Second Grade

		Flash	Untimed				
1.	able						
2.	break						
3.	pull						
4.	week						
5.	gate						
6.	felt						
7.	north						
8.	rush						
9.	wrote						
10.	perfect						
11.	change						
12.	basket						
13.	shoot						
14.	hospital						
15.	spill						
16.	dug						
17.	crayon						
18.	third						
19.	taken						
20.	prize						
Number correct							
Total Score							
Scoring Guide for graded word lists							
Independent		Instructional		Frustration			
20	19	18	17	16	15	14	13 or less

Third Grade

		Flash	Untimed				
1.	accept						
2.	favor						
3.	seal						
4.	buffalo						
5.	slipper						
6.	receive						
7.	legend						
8.	haircut						
9.	dresser						
10.	icy						
11.	customer						
12.	thread						
13.	plop						
14.	bandage						
15.	further						
16.	moat						
17.	closet						
18.	unroll						
19.	storyteller						
20.	yarn						
Number correct							
Total Score							
Scoring Guide for graded word lists							
Independent		Instructional		Frustration			
20	19	18	17	16	15	14	13 or less

Fourth Grade

		Flash	Untimed				
1.	average						
2.	hamster						
3.	select						
4.	tobacco						
5.	brilliant						
6.	liberty						
7.	prance						
8.	solemn						
9.	disease						
10.	impress						
11.	miracle						
12.	wrestle						
13.	coward						
14.	explode						
15.	opinion						
16.	suffer						
17.	vast						
18.	relationship						
19.	furnace						
20.	clan						
Number correct							
Total Score							
Scoring Guide for graded word lists							
Independent			Instructional				Frustration
20	19	18	17	16	15	14	13 or less

Fifth Grade

		Flash	Untimed				
1.	labor						
2.	cripple						
3.	hasten						
4.	frontier						
5.	riverbed						
6.	settlement						
7.	absent						
8.	dissolve						
9.	plea						
10.	surrender						
11.	organization						
12.	evidence						
13.	width						
14.	rampaging						
15.	horseshoe						
16.	grammar						
17.	assorted						
18.	soybean						
19.	troublesome						
20.	circumstance						
Number correct							
Total Score							
Scoring Guide for graded word lists							
Independent			Instructional				Frustration
20	19	18	17	16	15	14	13 or less

Sixth Grade

		Flash	Untimed	Seventh Grade			
1.	elevate					Flash	Untimed
2.	conservation			1.	civic		
3.	tenderness			2.	shirttail		
4.	barrier			3.	nominated		
5.	adulthood			4.	gruesome		
6.	kennel			5.	disadvantage		
7.	humiliated			6.	architecture		
8.	nonfiction			7.	tonic		
9.	revive			8.	straightforward		
10.	wallet			9.	warrant		
11.	depression			10.	unthinkable		
12.	carvings			11.	ridicule		
13.	similarity			12.	engulf		
14.	unanswered			13.	kindhearted		
15.	fingernail			14.	maturity		
16.	breed			15.	impassable		
17.	marrow			16.	bolster		
18.	starter			17.	copyright		
19.	pedestrian			18.	foliage		
20.	quantity			19.	prune		
Number correct				20.	persecution		
Total Score				Number correct			
				Total Score			
Scoring Guide for graded word lists							
Independent			Instructional				Frustration
20	19	18	17	16	15	14	13 or less
Scoring Guide for graded word lists							
Independent			Instructional				Frustration
20	19	18	17	16	15	14	13 or less

Eighth Grade

		Flash	Untimed				
1.	administration						
2.	federation						
3.	militia						
4.	shambles						
5.	bankrupt						
6.	goldenrod						
7.	perishable						
8.	toddler						
9.	cavernous						
10.	imperative						
11.	notorious						
12.	subconscious						
13.	corps						
14.	laborious						
15.	rivet						
16.	unimaginable						
17.	dizzily						
18.	irritability						
19.	puncture						
20.	wholehearted						
Number correct							
Total Score							
Scoring Guide for graded word lists							
Independent			Instructional				Frustration
20	19	18	17	16	15	14	13 or less

Appendix B

Graded Reading Passage (Pre-primer)

Adopted from Jennings (1996)

Pre-primer Level

62 words

Bill wanted a pet.

He asked his mom for a pet.

She said he had to wait.

One day, Bill saw a little dog.

The dog was crying.

Bill said, "This dog is lost."

Bill took the dog home.

Bill's mom saw the dog.

Bill asked, "May I keep it?"

Bill's mom said he could keep the dog.

Bill had a pet

Graded Reading Passage (Primer Level)

Adopted from Jennings (1996)

Primer level

100 words

Jane and Meg are friends. One day, Meg went to Jane's house to play. They went outside. Jane showed Meg a big tree. Jane said, "I want to make a house next to this tree." Meg said, "I know! Come to my house! My mother just got a new bed! It came in a very big box. Maybe we can have the box for our house!"

Meg and Jane went to Meg's house. They asked Meg's mother if they could have the box. Meg's mother said yes. Jane and Meg took the box to make a house. They had fun.

Graded Reading Passage (First Level)

Adopted from Jennings (1996)

First level

98 words

Jan loves to read books! Most of all, Jan loves books about animals.

She likes books about dogs that help put out fires. She likes books about cats that get stuck in trees.

The best book is about a doctor. This doctor takes care of animals. Jan loves to read about him.

In the book, a tiger at the zoo was hurt. The doctor came to the zoo. He put something on the tiger's leg. Soon the tiger was well again. When Jan grows up, she wants to be a doctor. She will take care of animals, too.

Graded Reading Passage (Second Level)

Adopted from Jennings (1996)

Second Level

140 words

Danny is very happy this morning! This is the first day of camp! Last year, Danny went to day camp! This year, Danny he can spend nights at camp. He is going to stay a whole week, just like his brother!

Last night, Danny packed his clothes. This morning, he dressed and brushed his teeth. Then he went to the kitchen. Danny's dad gave him some eggs and toast. But Danny was too happy to eat!

Danny's dad drove him to camp. The trip seemed like it would take forever! Finally, they came to the camp. There were hundreds of boys and girls all dressed in blue shorts and yellow shirts.

As soon as the car stopped, Danny saw his friend Joe. Joe told him they would be sleeping in the same tent. Danny knew this would be a great week!

Graded Reading Passage (Third Level)

Adopted from Jennings (1996)

Third Level

187 words

Kim lives on island far out in the ocean. You may think that it would be fun to live on an island. But Kim is miserable. Kim hasn't seen her friends in a year. There is no one to play with or talk to. There isn't even school!

Why has Kim's family chosen such a lonely life? Kim's parents study animals that only live in the harbor of this island. But Kim's dad knows how unhappy Kim is. He wants to do something to make her happy.

Kim's dad discovered a new kind of fish. It has bright orange fins and blue

tail. Dad named this unusual fish after Kim. He calls it the Kimfish. It hides in the seaweed. It only comes out in the morning and at dusk.

Kim's dad takes his underwater camera to the harbor every day. He hopes to capture the Kimfish on film. Maybe someday her dad will learn enough about the Kimfish. Then

Kim can go back to her old school. Then she can see all her old friends again. Kim hopes that day will come soon.

Graded Reading Passage (Fourth Level)

Adopted from Jennings (1996)

Fourth Level

179 words

More than anything, Jessie wants to be a champion skater! She can't remember a time she didn't want to skate or a time she didn't want to be the best.

Jessie began skating instruction when she was three years old. In her first ice show, she played the part of a ladybug. She still remembers her red and black spotted costume. Most of all, Jessie remembers the audience clapping their approval.

Jessie doesn't have lunch time for ice shows anymore. Now she must practice jumps and turns. When Jessie was six, she started skating in contests for ages six to twelve. By the time she was eight, Jessie was the junior state champion. Now that she is thirteen, Jessie competes with adults. She is the state champion in ice skating.

Last week, a sport writer wrote an article about Jessie's performance. It said

she was a “brilliant young athlete.” It said her skating showed “confidence and grace. Jessie thought about the countless falls she had taken to make each jump look perfect. She didn’t feel very graceful or confident!

Next week, Jessie will represent her state in a national meet. This will be the first time she has skated at this level. She hopes all her practice and hard work will pay off. Jessie hopes that her confidence and grace will help her win.

Graded Reading Passage (Fifth Level)

Adopted from Jennings (1996)

Fifth Level

246 words

Sometimes Beth hated towns and cities! They were taking over and the farms and open land were disappearing. Beth wished she could live on a farm, but her dad was a mechanic. He repaired machinery for a mill in town.

Beth’s favorite times were spent with Grandpa on his farm. Beth spent almost all her weekends with Grandpa. On cool evenings, Grandpa would light a fire. Beth loved to read by the fire, just like girls did when this was the frontier.

On Saturday mornings, Grandpa was always up early, ready for his long day of chores. First, the pigs had to be fed, and the chicken coop had to be cleaned. Then the stallion had to be brushed. When Beth was little, Grandpa let her help milk the cows, but now he used milking machines.

In the afternoon, Beth and Grandpa walked the horses. This was Beth’s favorite chore. Grandpa’s favorite place to walk the horses was Bear Mountain. It took

most of the afternoon to ride all the way out to the mountain and back. Grandpa and Beth always packed a lunch to eat on the mountaintop. As they shared their fruit and milk, they talked. Grandpa told her how much he liked to take out over the farms and towns for miles. These trips to the mountain reassured Beth. They made her know that there was still enough land and open spaces. They helped her to not feel so closed in by civilization.

Graded Reading Passage (Sixth Level)

Adopted from Jennings (1996)

Sixth Level

300 words

More than anything, Pam wanted to be a veterinarian. She was great with animals. For the last two years, Pam had volunteered at the zoo. But this summer, she was going to be paid. Pam's biology teacher had recommended that work in a special science program.

Pam was disappointed when she found out she was assigned to the petting zoo. She had hoped for something more exciting, like reptiles. Pam decided to talk to the zoo's vet, Dr. Mack. Maybe she would understand how Pam felt, and Pam could ask her to convince the zookeeper to change her placement.

When Pam arrived at the zoo, Dr. Mack was in the nursery. There had been an emergency, and Dr. Mack had been called to help. The nurse asked Pam to wait for Dr. Mack in the observation room. She was surprised to find that the observation room overlooked a small operating room. There she saw Dr. Mack, working frantically to save a baby orangutan. After several minutes, the tiny ape started to breathe on its own, and Dr. Mack came out to greet Pam, "I thought we were going to lose her! Since we rescued her from a fire, we've been trying to bottle-feed her, but suddenly she stopped breathing. The nurse called me because I specialize in great apes. Now that I'm sure she'll be all right, how can I help you?" "I'm glad she's going to be okay," replied Pam, "I didn't know you were equipped for

surgery.”

“That’s why we need someone like you. We need someone who can handle frightened animals and comfort them while they wait for surgery and while they recover. Now, what was it you wanted to discuss?”

Pam replied, “I think you’ve answered all my questions. When can I start?”

Graded Reading Passage (Seventh Level)

Adopted from Jennings (1996)

Seventh Level

352 words

I knew I shouldn’t drawing algebra class, but I just couldn’t resist. Mr. Galvin had such a comical look as he peered over his bifocals at Jamie’s futile attempt to solve the problem on the board. Maybe I could call this brilliant work of art “Galvin-eyes” or something equally insulting!

I suddenly realized Mr. Galvin was calling my name, “Peter, what is your solution to this problem?” Oh no, Mr. Galvin was walking in my direction! If I got in trouble again, I could be suspended. In desperation, I tried to adjust my book to cover the drawing, but it was too late. “Peter, have you completed the computation for problem number seven?” Even though I hadn’t even started the problem, I replied in my most respectful tone, “Not quite, sir.” When he stopped at the front of the row, it bolstered my confidence. “I’ll have it done in just a couple of minutes.” Why did I always have to open my big mouth, instead of leaving well enough alone? Now he was coming directly toward my desk.

Mr. Galvin, in a tone of total mistrust, suggested, “Why don’t you come to the board and show us how far you’ve gotten, and perhaps your classmates can help you complete the problem?”

Seventh Level (continue)

352 words

As I fumbled for an answer, Mr. Galvin reached my desk. He lifted my book with the expectation of finding a partially solved algebra problem. Instead, he found a drawing of himself, bifocals and all, glaring at Jamie with a quizzical look on his face. At least I hadn’t had time to write the caption!

“Peter!” boomed Mr. Falvin, “just what do you expect to make of yourself with this kind of behavior?”

Without thinking how it might be taken, I replied, “ A cartoonist.”

Wrong answer! The class gave an appreciative round of applause. But Mr. Galvin perceived this as yet another attempt on my part to confront him. Once again, I had tried to undermine his authority with the class.

I had ample opportunity to think of alternative replies while I waited in the assistant principal’s office.

Graded Reading Passage (Eighth Level)

Adopted from Jennings (1996)

Eighth Level

336 words

James had always excelled in science, winning every science fair and making straight A's. But this year, he would be taking Biological Studies, and he knew that meant dissecting animals. He was agonizing over the thought of cutting up a creature that had been alive. He couldn't even envision cutting into a cockroach-and he hated those! James started the summer with an overpowering fear of embarrassing himself. By July, he had work himself into a state of near hysteria.

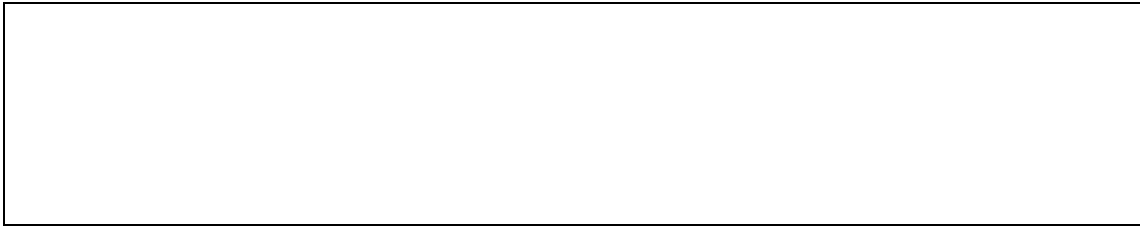
To solve his problem, James bought a dissecting kit to practice. Inside the kit, he found an address to order preserved animals. After some contemplation, James choose an earthworm, a crawfish, a frog, and a snake.

When the animals arrived, James carefully dismantled the corrugated box so he wouldn't damage the contents. When he reached the innermost container, he was shocked beyond words! There must have been a mistake! Not only were these animals not preserved, they weren't even dead! James looked at the order form and discovered his mistake. He had marked the wrong code!

Eighth Level (Continue)

Suddenly, James was the proud owner of four creatures who were very much alive. He had idea what to feed any of these animals, nor any desire to find out. Deciding to dispose of them as quickly as possible, he biked to the nearest pet shop to sell the animals. The manager told him they only bought from licensed dealers. He tried the administrator of the zoo, but she didn't have room for any more animals just now. James was disheartened. He realized he would have to accepted responsibility for the animals himself.

First, James went to library. There he learned that the animals would have to be housed in separate containers. He went back to pet store and bought for small aquariums. By the end of the summer, James had learned an extensive amount of information about his new pets. What had started as a dissection project had turned into a valuable study of live animals.



Appendix C

The Most Frequent Spelling of the 44 Sounds of English
(Hanna et al., 1996 cited in Blevins, 2006)

Sound Common Spelling

1	/b/	b (97%), bb
2	/d/	d (98%), dd, ed
3	/f/	f (78%), ff, ph, lf
4	/g/	g (88%), gg, gh
5	/h/	h (98%), wh
6	/j/	g (66%), j (22%), dg
7	/k/	c (73%), cc, k (13%), ck, lk, q
8	/l/	l (91%), ll
9	/m/	m (97%), mm
10	/n/	n (97%), nn, kn, gn
11	/p/	p (96%), pp
12	/r/	r (97%), rr, wr
13	/s/	s (73%), c (17%), ss
14	/t/	t (97%), tt, ed
15	/v/	v (99.5%), f (of)
16	/w/	w (92%)
17	/y/	y (44%), i (55%)
18	/z/	Z (23%), zz, s (64%)
19	/ch/	ch (55%), t (31%)
20	/sh/	sh (26%), ti (53%), ssi, s, si, sci
21	/zh/	si (49%), s (33%), ss, z
22	/th/	th (100%)
23	/th/	th (100%)

24	/hw/	wh (100%)
25	/ng/	n (41%), ng (59%)
26	/ā/	a (45%), a_e (35%), ai, ay, ea
27	/ē/	e (70%), y, ea, (10%), ee (10%), ie, e_e, ey, i, ei
28	/ī/	i_e (37%), i (37%), igh, y (14%), ie, y-e
29	/ō/	o (73%), o_e (14%), ow, oa, oe
30	/yōō/	u (69%), u_e (22%), ew, ue
31	/a/	a (96%)
32	/e/	e (91%), ea, e_e (15%)
33	/i/	i (66%), y (23%)
34	/o/	o (79%)
35	/u/	u (86%), o, ou
36	/ə/	a (24%), e (13%), i (22%), o (27%), u
37	/â/	a (29%), are (23%), air (21%)
38	/û/	er (40%), ir (13%), ur (26%)
39	/ä/	a (89%)
40	/ô/	o, a, au, aw, ough, augh
41	/oi/	oi (62%), oy (32%)
42	/ou/	ou (56%), ow (29%)
43	/ōō/	oo (38%), u (21%), o, ou, u_e, ew, ue
44	/oo/	oo (31%), u (54%), ou, o (8%), ould

Appendix D
Long range plan

Unit 1: Short vowels					
Lesson	Duration	Language skill	Phonic skill	Phonogram	Word list
1 Pat and Nat	2 hours	Animals	Short-a	-an, -am, -ap, -at	a is pan to and had ran Pat ants jam rat mat can nap sat fat fan on the hat
2 Peg The Hen	2 hours	Colors	Short-e	-eb, -ed, -en, -et -all	a gets is set and go jet the bed green Peg to blue hen pink web falls in purple wet fast into red
3 The Big Hit	2 hours	Sports	Short-i	-ig, -it, -ill, itt, -in	a has man up ball he mitt will bat hit not Zac big hits the give Jill tin
4 Mox's Shop	2 hours	Routine	Short-o Digraph /sh/ /th/	-ob, -op, -ot, -ox	a fox job pot and good mix says Bob has mops shop box helps Mox the drops in Mox's they

Unit 1: Short vowels (continued)					
Lesson	Duration	Language skill	Phonic skill	Phonogram	Word list
5 Gust The Duck	2 hours	Routine	Short-u	-ub, -uck, -ud, -ug, -un	a gets is sub and Gus it suds bug has mud the duck hugs rubs tub fun in runs

Unit 2: Long vowels					
Lesson	Duration	Language skill	Phonic skill	Phonogram	Word list
6 Jake's Tale	2 hours	Animals	Long-a "a-e" digraph /wh/	-ame, -ake, -ave, -afe	a Jake('s) same waves big like tale whale(s) came make the yes game makes they in play this is safe to
7 Pete's Sheep	2 hours	Routine	Long-e "-ee-" Digraph /th/	-eed, -eep, -ee	at not says think can of sees three help one sheep tree last past sleep two Mom Pete('s) the to needs run then
8 Sky Ride	2 hours	Free Time	Long-i, "i-e", digraph /ch/	-ike, -ide, - ite, -ime	a has let's Spike and he Mike Spot bikes hide play they black in rides white chase is says with down kite seek yikes go land slime
9 The Robot And Mole	2 hours	Part of Body	Long-o "o_e"	-one, -ole, -ose, -ope	a he into robot and help is rope are his legs says can hole made thanks cone hose Mr. the falls I Mole this go in nose up of

Unit 2: Long vowels (continued)					
Lesson	Duration	Language skill	Phonic skill	Phonogram	Word list
10 Dune Buggy	2 hours	Preposition	Long-u “u_e”	-one, -ole, -ope	and flip over the back his play they best in ridesturn buddy is rightunder Buggy left rule wheels drive Luke('s)sand dune(s)on spin
11 Soap Boat	2 hours	Travel	Long vowel	-ea, -oat, -oan, -oap, -ai	a floats lost the away grabs my this bird in on top boat is sailing under cries it's says water drops Joan sea whale fish Joe soap what
12 Car Race	2 hours	Free Time	R- Controlled vowel	-ar,	a get let's set and go Mark seven bump go- nine she can't carts number six car have one star Carla he pass the eight hits race three five in ready two four is says wins lead

Unit 2: Long vowels (continued)

Lesson	Duration	Language skill	Phonic skill	Phonogram	Word list
13 My horse Glory	2 hours	Pets	R- Controlled vowel	-or	a foot her on and for horse out animal forgot I plays back found in the called gate is thorn close Glory live to corral got my Tory doctor had name with farm have normal find help now
14 Suffer Girl	2 hours	Free Time Superlatives, big, bigger and biggest	R- Controlled vowel	-ur	a dad it swims all day likes the and fast makes to at Fern meet tube best fun no turn big girl over wants bigger has rock wave biggest her says waves Bird here is way Rock comes curls
15 My Family	2 hours	Family	Y as a Vowel as in "my" and "family"	-y	a family me this act for Mommy Tiny and going my to ask have new trucks baby home says you big I she does brings is silly love Daddy like(s) sister smiles

Appendix E

Sample Lesson Plan (Short Vowel “/ε /ʔ”)

Title : Ben the Hen

Time: 2 hours

Level : Grade 7

Instructor: Miss Kamonwan Sookmag

Lesson Instruction:

This lesson provides practice identifying words with short-vowel “/ε /ʔ” and sound spelling with letter b, r, h, w, t, j, d, n, g, and st.

Terminal objective:

Students will be able to read "Ben the hen" paragraph aloud accurately and fluently.

Enabling objectives

1. Students will be able to sort pictures based on their beginning sounds and ending sounds.
2. Students will be able to match the words or letters with the correct pictures.
3. Students will be able to write then read the words when teacher dictate the sound of each letter.
4. Students will be able to demonstrate their reading fluency by reordering the situations according to “Ben the Hen” paragraph from the given sentences.
5. Students will be able to demonstrate fluency during reading aloud "Ben the hen" paragraph by showing expression and appropriate pausing.

Background knowledge:

1. Alphabets b, r, h, w, t, j, d, n, g, and st.
2. Short vowel sounds represented by the letter “a”
3. Phonemes blending and segmentation
4. Onset and rhyme

Material and equipment:

1. Clip VDO “Letter E song” (Adopted from <http://havefunteaching.com/videos/alphabet-videos/letter-e-video/>)
2. Power point presentation
3. 2 sets of pictures of the vocabularies: *hen, jet, ten, wet, red, web, rest, best*
4. 2 sets of letter cards of e, b, r, h, w, t, j, d, n, st
5. Paragraph “Ben the hen” (Adapted from *Peg the hen*, <http://www.starfall.com/n/short-e/se/load.htm?f>)
6. Sentence strips
7. Worksheets

Evaluation:

1. Teacher observation during the lesson and ongoing assessment to determine whether the student is able to sort pictures based on their beginning sounds and ending sounds, match the words or letters with the correct the pictures, write and read the words when teacher dictate the sound of each letter, and reorder the situations according to “Ben the Hen” paragraph from the given sentences.
2. Observe during reading aloud whether the student is able to read word accurately and fluently with appropriate expression and phrasing.





student read one by one. Notice if they feel capable to read accurately and fluently or not.

4. Help them blend more accurately and fluently for ones who still need more phonemic awareness by using rhyme “an” and “at”. Let them practice with the pictures.





T: (write the letter **a** and point it) /æ /
 T: (write and point **-an**) Everybody repeats after me /æ/ /n/ /æ n/
 T: Can you remember? What is this?
 (present one picture at a time.)

4. Recall the initial letter and blend the word for each picture.

S1 : /p/ /æ n/ /p æ n/
 S2 : /f/ /æ n/ /f æ n/
 S3 : /r/ /æ n/ /r æ n/
 S4 : /c/ /æ n/ /c æ n/









			
p an	f an	r an	c an

S5 : /r/ /æt/ /ræt/
 S6 : /m/ /æt/ /mæt/
 S7 : /r/ /æt/ /ræt/
 S8 : /c/ /æt/ /cæt/

			
r at	h at	m at	c at

each group a copy of the Picture Sort handout. Ask students to cut out the pictures and name each picture. Then ask students to sort the pictures into groups that rhyme with “an” and “at” and glue the sorted pictures onto construction paper.

Sort the pictures as following.

an	at
pan 	hat 
ran 	cat 
fan 	rat 
can 	mat 

6. Present the short passage again to have them read aloud together.

6. Read orally together.

Step 2: Introduce sound-spelling (25 minutes)

1. Present the new sound /ɛ / with the letter e. Have them look at clips VDO and guess what sound of letter e is like.

1. Listen carefully and pronounce the letter “e” sound

T: Everyone, do you know this letter (write e and wait for the answer)? In this VDO you will see the words with letter e as a vowel. After ending this clip, you need to tell me what sound of letter e like?

/ɛ/ /ɛ/ /ɛ/




(Adopted from <http://havefunteaching.com/videos/alphabet-videos/letter-e-video/>)

2. Explain to students that the letter “e” stands for the /ɛ / sound as in the word bed.

T: (point the letter e) Everyone say /ɛ/ /ɛ/ /ɛ/

T: (display the word bed and the picture of it) Repeat after me /b/ /ɛ/ /d/ (point each letter) /b/ /ɛ/ /d/ /b/ /ɛ/ /d/ /b/ /ɛ/ /d/ /bɛd/



bed


Ask a volunteer point to the letter “e” and state the sound that letter “e” stand for /ɛ/.

Then ask that one run finger under each letter and pronounce /b/ /ɛ/ /d/ and blend.

2.A volunteer points the letter “e” and pronouce /ɛ / then runs his/her finger under each letter and pronounce /b/ / ɛ / /d/

/b ɛ d/

3. Model how to segment the words below into sounds. Then have children generate a list of words containing the /ɛ/ sound as following.



ten	jet	hen	wet
-----	-----	-----	-----

3. Listen how to segment the words in to sounds. Then come in front of the class one by one. Point the letter e and pronounce /ɛ/ then runs his/her finger under each letter and pronounce as following.


/t/ /ɛ/ /n/ /tɛn/
 /j/ /ɛ/ /t/ /jɛt/
 /h/ /ɛ/ /n/ /hɛn/
 /w/ /ɛ/ /t/ /wɛt/
 /r/ /ɛ/ /d/ /rɛd/
 /w/ /ɛ/ /b/ /wɛb/
 /r/ /ɛ/ /s/ /t/ /rɛst/
 /b/ /ɛ/ /s/ /t/ /bɛst/

4. by ge...

red	web	rest	best
-----	-----	------	------

T: I'll give you 10 pieces of paper for writing down the missing letter. I'll display one picture at a time. Come to place your answer in front of the class and pronounce each word.


The first card to me



.....eb

4.Try to recall the beginning letter of the presented picture. Then write it on the given paper. Come and place it in the blank. After that, state the sound for each letter.

/w/ /ɛ/ /b/ /wɛb/



.....ed



.....en

gets 1 point.

/b/ /ε/ /d/ /bed/

/h/ /ε/ /n/ /hen/

/r/ /ε/ /d/ /red/

/t/ /ε/ /n/ /ten/

/w/ /ε/ /t/ /wet/

/j/ /ε/ /t/ /jet/

/b/ /ε/ /s/ /t/ /best/

/r/ /ε/ /s/ /t/ /rest/



.....et



.....est



.....est

5. Help the children recognize the letters and sounds by completing the missing ending letter before generating the sound of each letter again.

T: Now, let you work in pair.

I'll give you 5 more pieces of paper for writing down the missing letter.

Some needs 2 ending letters. Can you remember? I'll display one picture at a time. Come to place your answer in front of the class and pronounce each sound. The first come to me gets 2 points.



we.....



be.....



te.....



je.....



we.....




he....

re....

be....



6. Help the  ze the letters and sounds by using “team sound-off” activity. Devide the class into 2 teams. Provide letter cards of **e,b,r,h,w,t,j,d,n,st** for each team. Display a picture and have them form the word from the given letters. The first done group stands up and gets 5 points. Another group pronounces each sound.

T: Look at this picture.

Form a word that means this picture.

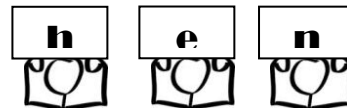
Continue with pictures of jet, ten, wet, red, web, rest, best



6. Divided into 2 teams. Sit in a circle. Try to form the word as fast as they can after teacher displays a picture. The first done group shows their word. Others pronounce each sound.

The first group displays the letter cards this way mentioned below. Then another group pronounce.

/h/ /e/ /n/ /hɛn/



Step 3: Blend words (20 min)

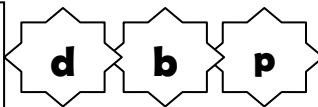
1. Encourage them discriminate the initial letter and its phoneme. Display pictures and say the name of each picture. Let children identify the beginning letter.

*T: Which letter does the picture start with?
Come, point and pronounce the letter.*

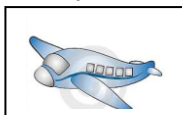
/wɛt/



/bɛst/






/jɛt/



/rɛd/



/hɛn/

1. I  / thɪ  thɪ  :hes the picture then pronounce its sound and whole word.

w /wɛt/





b /bɛst/









j /jɛt/











r /rɛd/

h /hɛn/

r /rɛst/

 <p data-bbox="379 409 448 439">/rɛst/</p>  <p data-bbox="379 712 432 741">/tɛn/</p>  <p data-bbox="379 862 448 891">/bɛd/</p> 	<p data-bbox="959 376 1102 405">t /tɛn/</p> <p data-bbox="959 472 1114 501">b /bɛd/</p>
<p data-bbox="304 1014 895 1160">2. Use onset and rhyme advise oral blending. Display the following words on the projector then run finger under each letter to guide them blend.</p> <div data-bbox="464 1182 802 1379" style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p data-bbox="523 1200 738 1368"> et jet wet get est best rest ed bed red en hen ten eb web </p> </div> <p data-bbox="341 1301 443 1330">Sample</p> <p data-bbox="341 1346 464 1375">/ɛ/ /t/ /ɛt/</p> <p data-bbox="571 1391 754 1420">/w/ /ɛt/ /wɛt/</p> <p data-bbox="571 1435 738 1464">/g/ /ɛt/ /gɛt/</p>	<p data-bbox="927 1014 1461 1088">2. Try to blend each word orally together. Then, one by one.</p>
<p data-bbox="304 1480 895 1626">3. Introduce the activity “Guess it”. In this activity teacher orally segment words and have the class try to blend and guess what they are.</p> <p data-bbox="368 1653 815 1715"> <i>T: "I'm thinking of an animal. It's a /h/... en. What am I thinking of?"</i> </p> <p data-bbox="368 1742 815 1805"> <i>T: I'm thinking of bedroom objects, It's a /b/... ed. What am I thinking of?"</i> </p> <p data-bbox="363 1832 815 1895"> <i>T: I'm thinking of a number, It's a /t/... en. What am I thinking of?"</i> </p> <p data-bbox="363 1921 815 1984"> <i>T: I'm thinking of a color, It's a /r/... ed. What am I thinking of?"</i> </p>	<p data-bbox="927 1480 1469 1581">3. Each group tries to blend the sounds orally and pick a given picture from previous activities to show the answer.</p> <p data-bbox="1007 1619 1310 1648">Ss: "A hen!" /h/ /ɛn/ /hɛn/</p> <p data-bbox="1007 1727 1302 1756">Ss: "A bed!" /b/ /ɛd/ /bɛd/</p> <p data-bbox="1007 1832 1310 1861">Ss: "ten!" /t/ /ɛn/ /tɛn/</p> <p data-bbox="1007 1937 1302 1966">Ss: " red!" /r/ /ɛd/ /rɛd/</p>







<p><i>T: I'm thinking of an aircraft, It's a /j/... et. What am I thinking of?"</i></p> <p><i>T: I'm thinking of an address of spider, It's a /w/... eb. What am I thinking of?"</i></p>	<p><i>Ss: "A jet!" /j/ /ɛt/ /jɛt/</i></p> <p><i>Ss: "A web!" /w/ /ɛb/ /wɛb/</i></p>
<p>4. Use phoneme manipulation: deletion and substitution. Let them choose the picture that matches the new word with beginning letter replacement.</p> <p><i>T: Look at this picture.</i>  ten</p> <p><i>Changing the first sound to /h/ What is the new word?</i></p> <p><i>T: Look at this picture.</i>  jet</p> <p><i>Changing the first sound to /w/ What is the new word?</i></p> <p><i>T: Look at this picture.</i>  bed</p> <p><i>Changing the first sound to /r/ What is the new word?</i></p> <p><i>T: Look at this picture.</i>  rest</p> <p><i>Changing the first sound to /b/ What is the new word?</i></p>	<p>4..Look at the picture and listen carefully what sound is replaced and then pick the picture of new word.</p> <p><i>Changing the /t/ sound in ten to /h/ sound makes a new word /hɛn/</i></p> <p> hen</p> <p><i>Changing the /t/ sound in ten to /w/ sound makes a new word /wɛt/</i></p> <p> wet</p> <p><i>Changing the /t/ sound in ten to /r/ sound makes a new word /rɛd/</i></p> <p> red</p> <p><i>Changing the /r/ sound in rest to /b/ sound makes a new word /bɛst/</i></p> <p> best</p>
<p>5. Apply phoneme manipulation strategy: final sound deletion to state the ending letter. For example,</p> <p><i>Point to the letter r and say /r/ Point to the letter e and say /ɛ/ Slowly slide finger under the letter re and say /re/ slowly. Then quickly slide finger under the letter re and /re/ quickly Next point to the letter d and say /d/ Slowly slide finger under red and say /rɛd/ slowly</i></p>	<p>5..Delete the final sound and try to blend the rest.</p> <p><i>/rɛ/ /rɛ/ /d/ /rɛd/</i></p>

<p style="text-align: center;"><i>Circle the word and say /rɛd/</i></p>	
<p>6. Have children practice discriminating ending sounds. Have them identify the 2 words that have the <u>same</u> ending sounds.</p> <p><i>T: Let us say the words together. Two of the words end with the same sound. Can you tell me which two end with the same sound? red, rest, bed. (display 3 pictures and words) Which two end with the same sound? Please come and underline the letters.</i></p>	<p>Sample answers:</p> <p><i>/rɛd/ and /bɛd/ end with the same sound /d/.</i></p>
<p>7. Promote them to recognize ending letter and its sound. Teacher places three pictures in front of the children and let them say all 3 names and pick one picture that ends with <u>different</u> sound,</p> <p><i>T: (Show the picture that ends with the different sound.) Can you name these pictures? Which one has different ending sound?</i></p> <p> <i>different sound. Can you name these pictures? Which one has different ending sound?</i></p> <p> <i>different sound. Can you name these pictures? Which one has different ending sound?</i></p> <p><i>T:  different sound. Which one has different ending sound?</i></p> <p><i>T:  different sound. Can you name these pictures? Which one has different ending sound?</i></p> <p></p>	<p>Sample answers.</p> <p><i>Yes, they are bed, red, and best. The odd one is the word “best”. It ends with “st” but others end with “d”</i></p> <p></p> <p></p> <p></p> <p></p> <p></p>

During reading

Step 4: Reading connected text (25 minutes)	
Teacher	Students
<p>1. Show students the title of the paragraph. Point out the title and read it aloud. Ask students to see the picture of hen and have them say the</p>	<p>1. Read the title out loud “Ben the Hen” Then read the word “Hen” again</p>

<p>word <i>hen</i>.</p> <p><i>T: Next, I have a story about Ben the Hen.</i></p> <p><i>What is this? (point the picture of hen)</i></p> <p><i>Ben will go somewhere and get something interesting. Do you want to know how he goes and what he gets?</i></p>	
<p>2. Monitor student-adult reading to practice oral reading fluency in connected text. Present small paragraph “<i>Ben the hen.</i>”</p> <p>Teacher reads aloud sentence by sentence first, providing the students with a model of the reading. Then tell students to repeat reading aloud several times to form their reading fluency.</p> <p><i><u>Ben the hen</u></i></p> <p><i>Ben is the red hen.</i></p> <p><i>Ben gets in a red jet.</i></p> <p><i>The jet is the best.</i></p> <p><i>The best jet gets wet.</i></p> <p><i>The jet gets in a web.</i></p> <p><i>Ben gets into bed.</i></p> <p><i>Ben gets rest on the bed.</i></p> <p><i>Ben gets up.</i></p> <p><i>Ten jets are on the bed.</i></p>	<p>2. Listen carefully. Then repeat after teacher.</p>
<p>3. Provide the paragraph. Have them underline the short vowel /e/ words in the worksheet.</p> <p><i>T: Look at your worksheet. How many words with short vowel /e/? Underline your answers.</i></p>	<p><i><u>Ben the hen</u></i></p> <p><i><u>Ben</u> is the red <u>hen</u>.</i></p> <p><i><u>Ben</u> gets in a red <u>jet</u>.</i></p> <p><i>The <u>jet</u> is the <u>best</u>.</i></p> <p><i>The <u>best jet</u> gets <u>wet</u>.</i></p> <p><i>The <u>jet</u> gets in a <u>web</u>.</i></p> <p><i><u>Ben</u> gets into <u>bed</u>.</i></p> <p><i><u>Ben</u> gets <u>rest</u> on the <u>bed</u>.</i></p> <p><i><u>Ben</u> gets <u>up</u>.</i></p> <p><i><u>Ten jets</u> are on the <u>bed</u>.</i></p>
<p>4. Reads aloud sentence by sentence again, providing the students with a model of fluent reading.</p>	<p>4. Listen Carefully.</p>
<p>5. Listen they read by themselves about 4-5 times. Then correct and give feedback until they can read all.</p>	<p>5. Read by themselves about 4-5 times.</p>
<p>6. Motivate them read more active with the code “Ben the hen” T calls S1 to read independently the first sentence. Then, T says “Ben the Hen” and calls on S2 read the 2nd sentence. (S1 stops then S2 reads).</p>	<p>6.Keep an eye on the sentences and read aloud when they are called and stop when they hear “Ben the Hen”</p>
<p>7. T discuss some word recognition miscue with the Ss.</p>	<p>7.Read some miscue words until he or she feel capable of reading it fluently.</p>
<p>8. Provide sentence strips, shuffle and</p>	<p>8.Pick a sentence to read. After finish</p>

<p>face down. Have each student pick one strip, face up and read out sound. After that, let them brain storm to put the strips in the order. Then have them read aloud.</p>	<p>reading, rearrange the sentences in the order and read aloud.</p>
<p>9. Discuss about the story. <i>T: Now, can you tell me where does he go? How does he go? What does he get?</i></p>	<p>9. Sample answers: <i>I don't know. /He dreams./ He doesn't go anywhere. He gets in bed. He goes by jet. He gets ten jets.</i></p>
<p>10. Explains more words (green ones) with the actions and picture.</p> <p style="text-align: center;"></p> <p>Ben gets in a red jet <i>T: I'm Ben. I walk to the jet and sit on the jet. I get in a jet.</i></p> <p style="text-align: center;"></p> <p>The jet is the best. <i>T: Look at the thump up. It means very very good.</i></p> <p style="text-align: center;"></p> <p>The best jet gets wet <i>T: Look at the jet. (spray water to it) The jet gets wet.</i></p> <p style="text-align: center;"></p> <p>The jet gets in a web. <i>T: Look at the jet. (move the jet picture to the web) It gets in a web.</i></p> <p style="text-align: center;"></p> <p>Ben gets into bed. <i>T: Look at the hen. (move the hen picture into the jet) Now he gets into bed</i></p> <p style="text-align: center;"></p> <p>Ben gets rest on the bed.</p>	



Ben gets up
 T: I'm Ben. I get rest (pretend to sleep then lay down and close the eyes) and then get up(open the eyes and sit)

After reading

Step 5: Reading-writing connection (10 minutes)

Teacher	Students
<p>1. Give each student a piece of plain paper for dictation activity. <i>T: I'll say the sounds of each word. You write the words.(e.g./j/ /e/ /t/)</i> Continue other words; hen, ten, wet, red, web, rest, best, and get. Then check their answers and have them read aloud each word.</p>	<p>1. Write the words. <i>Ss: (Write the word) jet, hen, ten, wet, red, web, rest, best, get</i> <i>Ss: (Read aloud the words) jet, hen, ten, wet, red, web, rest, best, get)</i></p>
<p>2. Provide five sentences below in the worksheet. Let them read out loud the whole paragraph again. Then have them write numbers to order the situations. <i>T: These are the conclusion of the paragraph you have read. Can you remember? Now, you read out loud "Ben the Hen" again. Then put the number 1-5 to order the situation.</i></p> <p>.....Ben falls into bed. Ben gets in the red jet. Ben and ten hens are on the bed. The jet gets wet. The jet gets in the web.</p>	<p>2. Read orally together and put the number 1-5.</p> <p>..4..Ben gets into bed. ..1..Ben gets in the red jet. ..5..Ten jets are on the bed. ..2..The jet gets wet. ..3..The jet gets in the web.</p>
<p>3. Provides the summary worksheet to the Ss and let them write. Then have them read aloud the first to the fifth situation.</p> <p>Topic.....</p> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Event # 1</div> <div style="margin-left: 20px;">_____</div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Event # 2</div> <div style="margin-left: 20px;">_____</div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Event # 3</div> <div style="margin-left: 20px;">_____</div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Event # 4</div> <div style="margin-left: 20px;">_____</div> </div> </div>	<p>3. Rewrite the sentences in the order. Then read aloud all five sentences.</p> <p>Topic <u>Ben the Hen</u></p> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Event # 1</div> <div style="margin-left: 10px; text-align: center;">1</div> <div style="margin-left: 20px;">Ben gets in the red jet.</div> <div style="margin-left: 20px;">_____</div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Event # 2</div> <div style="margin-left: 10px; text-align: center;">2</div> <div style="margin-left: 20px;">The jet gets wet.</div> <div style="margin-left: 20px;">_____</div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Event # 3</div> <div style="margin-left: 10px; text-align: center;">3</div> <div style="margin-left: 20px;">The jet gets in the web.</div> <div style="margin-left: 20px;">_____</div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Event # 4</div> <div style="margin-left: 10px; text-align: center;">4</div> <div style="margin-left: 20px;">Ben falls into bed.</div> <div style="margin-left: 20px;">_____</div> </div> </div>

<p>4. Have each student read the entire paragraph again after finish their worksheet whether the student is able to read word accurately and fluently with appropriate expression and phrasing.</p>	<p>4. Read aloud the entire paragraph one by one.</p>

Appendix F

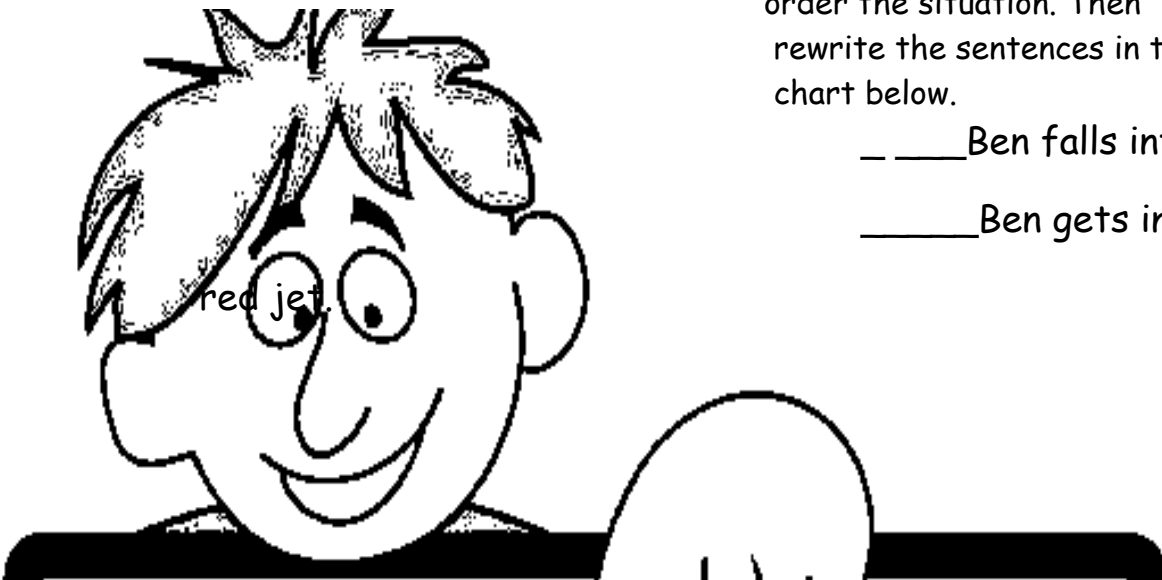
Sample task sheet assignment

Worksheet

Write number 1-5 on the line to order the situation. Then rewrite the sentences in the chart below.

_____ Ben falls into bed.

_____ Ben gets in the



are on

_____ Ben and ten jets

the bed.

_____ The jet gets wet.

_____ The jet gets in

the web.



Topic.....

Event # 1 _____

Event # 2 _____

Event # 3 _____

Event # 4 _____

Event # 5 _____

Appendix G

Sample Research Instrument Evaluation

a tick (✓) in the rating box (+1,0,-1) the score to which the items appropriate according to your opinion. Please specify comments for each item.

+1 = Congruent 0=Questionable -1 = Incongruent

Assessment Issues	+1	0	-1
1. Lesson layout and design			
-The layout and design of the lesson is appropriate and clear.			

-The layout and design of the lesson is organized effectively.			
Comments:			
2. Objectives			
-The objectives are clear.			
-The objectives are relevant to the content of the lesson.			
Comments:			
3. Instruction			
-The teaching steps engage struggling readers in an appropriate sequence.			
-The instructions are clear and explicit.			
-The time given for each teaching step is appropriate.			
Comments:			
4. Activities			
-The activities are practical.			
-The presentation activities are child appropriate-playful, engaging and interactive.			
-The activities contain sufficient amount of tasks that promote accuracy in reading aloud			
-The activities contain sufficient amount of tasks that promote fluency in reading			
Comments:			

5. Materials and worksheets			
-The materials and worksheets are appropriate for the lesson.			
-The materials and worksheets are linked with the topics.			
Comments:			

Appendix H

Sample of Students' Learning Logs

Name.....Date.....

Title.....

1. What activities do you like or dislike in this lesson?

.....

And why?

.....

2. What do you want your teacher to include in or exclude from the lesson? And why?

I would like to include the activity of..... in

because.....

I would like to exclude the activity offrom

because.....

3. Do you find reading "Pat and Nat" easy after finishing the lesson? If yes, how is it

Appendix I

Sample of Students' Learning Logs (Thai Version)

บันทึกการเรียนรู้

คำชี้แจง : ให้นักเรียนเขียนแสดงความคิดเห็นเกี่ยวกับบทเรียน “Ben the Hen”

Name.....Date.....Title.....

1. นักเรียนชอบกิจกรรมใดในบทเรียนนี้

.....

เพราะเหตุใดจึงชอบ

.....

2. นักเรียนต้องการให้ครูเพิ่มกิจกรรมแบบใดอีก หรือต้องการตัดกิจกรรมใดออก เพราะเหตุใด
ฉันต้องการให้ครูเพิ่มกิจกรรมต่อไปนี้อีก ได้แก่.....

เพราะว่า.....

ฉันต้องการให้ครูตัดกิจกรรมดังต่อไปนี้ออกไปได้แก่.....

เพราะว่า.....

3. นักเรียนคิดว่าเนื้อเรื่องบทนี้อ่านง่ายใช่หรือไม่

ใช่ เพราะ ว่า

ไม่ใช่ เพราะ ว่า.....

4. ข้อเสนอแนะเพิ่มเติมหลังจากจบบทเรียนนี้ได้แก่

.....

5. นักเรียนคิดว่าตอนใด หรือช่วงใดที่ทำให้นักเรียนสามารถอ่านออกได้ (เลือกจากขั้นตอน

ดังต่อไปนี้ ทบทวนบทเรียนเดิม, แนะนำเสียงและการสะกด, ผูกผสมคำ, อ่านเรื่องที่ครูนำมา,

หรือฝึกอ่าน-เขียน)

.....

Appendix J

Research Instrument Evaluation (For Students' Learning Logs)

Please put a tick (✓) in the rating box (-1,0,1) the score to which the items appropriate according to your opinion. Please specify comments for each item.

-1 = Disagree or not appropriate 0 = Not sure 1 = Agree or appropriate

Item	+1	0	-1
1. What activities do you like or dislike in this lesson? And why? ระบุกิจกรรมที่ชอบและ/ หรือไม่ชอบ ในบทเรียนนี้ พร้อมทั้งบอกเหตุผล			
The question is clear.			
The question can elicit students' opinion			
The questions are useful and supportive the study.			
The Thai statement contains the same meaning as the English statement.			
Comments:			
2. What do you want your teacher to include in or exclude from the lesson? And why? ระบุสิ่งที่นักเรียนอยากให้เพิ่มและ/ หรือตัดออกจากบทเรียนนี้ พร้อมทั้งบอกเหตุผล			
The question is clear.			
The question can elicit students' opinion			
The questions are useful and supportive the study.			
The Thai statement contains the same meaning as the English statement.			
Comments:			
3. Do you find how to read "Pat and Nat" is easy after finishing the lesson? If yes, how is easy? If not, what are the difficulties? หลังจากที่จบบทนี้แล้ว นักเรียนคิดว่าการอ่านเรื่อง "Pat and Nat" ง่ายใช่หรือไม่ (ถ้าใช่ การอ่านในบทนี้ง่ายอย่างไร ถ้าไม่ใช่ อะไรที่ทำให้การอ่านในบทนี้ยาก)			
The question is clear.			
The question can elicit students' opinion			
The questions are useful and supportive the study.			
The Thai statement contains the same meaning as the English statement.			
Comments:			
4. What are questions you have after finishing the lesson? ระบุปัญหา คำถาม หรือข้อสงสัย ที่นักเรียนยังไม่เข้าใจในบทเรียนนี้			
The question is clear.			
The question can elicit students' opinion			
The questions are useful and supportive the study.			
The Thai statement contains the same meaning as the English statement.			
Comments:			

Other comments and suggestions

.....

.....

.....

.....

Appendix K

Percentages for Oral Reading Accuracy Scores
(Each number indicates percentage correct)

Appendix L

How to score accuracy on graded word list of IRI test

Morris (2008) explained how to administer, score, and interpret the word recognition from graded word lists as follows;

1. Start. Start the test at the preprimer level.
2. Administration. Flash each word for approximately $\frac{1}{4}$ second.

If students response is correct, proceed to next word in the list.

If the flash response is incorrect, expose the word for an untimed response. Then proceed to the next word.

- Recording responses. Mark the score sheet only when an error is made. If the student misreads a word on the flash or untimed presentation, write his or her response in the appropriate column. If the students do not respond to a word write **0** in the appropriate column. If students hesitate $\frac{1}{2}$ second or more in responding to a flashed word, write **h** in the flash column and put a \checkmark in the untimed column.

	Flash	untimed
1.accept	0	asset
2.favor	flavor	0
3.seal		
4.buffalo	h	\checkmark
5.slipper		

- Stop. Stop the test when the student's flash score on a given list falls below 50%.

5. Scoring. In scoring the test, start with the flash column. Take off 5% for each error in the flash column and subtract the total from 100.
6. Interpretation. A score of 70% or better in the flash column indicates that the student has sufficient sight vocabulary to read at the level.


Appendix M

How to score accuracy on graded reading passages of IRI test

Morris (2008) explained how to administer, score, and interpret the word recognition from graded word lists as follows;

1. Start. Begin the oral reading passages at the highest level at which the students achieved an 80% (or better) score on flash word recognition.
2. Administration. Before beginning, explain to the student that she will be reading aloud a few passages and answering some questions. Tell the child to read at her normal speed. Then turn on the tape recorder and leave it on throughout the oral reading testing.
4. Remember to read to the child the brief introductory statements that precede each passage. Also, be sure to record (using a stopwatch) the number of seconds the child takes to read each passage.

5. Recording response. As the students read the oral passages, record her errors using the following marking system:

Type of error	Marking procedure	Example
Substitution	Write above	<i>tree</i> the train
Omission	Circle	in  water
Insertion	Use a caret and write in	<i>little</i> the ^ puppy
Self-correction	Put a ✓ beside error	<i>fin</i> ✓ a fine day
Help from teacher	Write H above word	<i>H</i> impossible task

6. Stop. Stop the oral reading test when the child becomes frustrated. Signs of frustration include a marked increase in word recognition errors, an increase in meaning-change errors, a need for more teacher help, a significant decrease in rate or fluency, and behavioral signs of frustration.

7. Scoring. To obtain the oral reading accuracy score for given passage, multiply the number of errors (e.g., 10) times the error quotient (e.g., .68) for an error percentage (6.8 Or 7%). Then subtract this number from 100% to obtain the oral reading score (100% x 7% = 93).

8. To obtain the oral reading rate (wpm), multiply 60 times the number of words in the passage and divide by the number of seconds the child took to read the passage (60 x No. of words / No. of speech).

9. To obtain the oral reading comprehension score, count the number of incorrect responses (e.g., 2) and multiply by 16.6%. Subtract this error percentage (33%) from 100% to obtain comprehension score (67%).

10. Interpretation. Oral reading yields three scores: word recognition accuracy, rate, and comprehension. In establishing an oral reading instructional level, all three scores must be considered.

Appendix O
Individual scores of English reading aloud accuracy on graded word lists before and after taking reading program

Students	Graded Word Lists	Pretest		Posttest				
		Preprimer Level	Primer Level	Preprimer Level	Primer Level	First Level	Second Level	Third Level
		(%)	(%)	(%)	(%)	(%)	(%)	(%)
Student A	0	Stop	35	Stop*	Stop	Stop	Stop	
Student B	0	Stop	25	Stop	Stop	Stop	Stop	
Student C	0	Stop	30	Stop	Stop	Stop	Stop	
Student D	0	Stop	30	Stop	Stop	Stop	Stop	
Student E	5	Stop	20	Stop	Stop	Stop	Stop	
Student F	10	Stop	25	Stop	Stop	Stop	Stop	
Student G	20	Stop	35	Stop	Stop	Stop	Stop	
Student H	30	Stop	50	Stop	Stop	Stop	Stop	
Student I	30	Stop	55	Stop	Stop	Stop	Stop	
Student J	30	Stop	75	55	Stop	Stop	Stop	
Student K	35	Stop	65	Stop	Stop	Stop	Stop	

Student L	40	Stop	55	Stop	Stop	Stop	Stop
Student M	40	Stop	80	55	Stop	Stop	Stop
Student N	50	Stop	80	55	Stop	Stop	Stop
Student O	50	Stop	75	80	65	Stop	Stop
Student P	50	Stop	85	85	60	Stop	Stop
Student Q	55	Stop	80	70	35	Stop	Stop
Student R	55	Stop	85	80	30	Stop	Stop
Student S	55	Stop	70	40	Stop	Stop	Stop
Student T	60	Stop	85	80	60	Stop	Stop

*Stop when score of students' reading aloud accuracy on the previous level achieved below 50%

Appendix P
Individual scores of English reading aloud accuracy and fluency of twenty struggling readers on graded reading passages after taking reading program

		Pretest (%)	Posttest (%)					
		Preprimer	Preprimer	Primer	First	Second	Third	Fourth
Student P	Accuracy (%)	0	97	96	95	90	77	Stop
	Fluency (wpm)	0	41.33	48.00	65.33	56.8	43.50	Stop
Student T	Accuracy (%)	0	90	97	95	89	Stop	
	Fluency (wpm)	0	43.76	48.78	63.91	47.33	Stop	
Student Q	Accuracy (%)	0	97	95	90	89	Stop	
	Fluency (wpm)	0	39.15	35.29	32.13	35.5	Stop	
Student O	Accuracy (%)	0	97	95	90	89	Stop	
	Fluency (wpm)	0	39.15	35.29	32.13	35.5	Stop	
Student R	Accuracy (%)	0	95	95	91	89	Stop	
	Fluency (wpm)	0	37.20	37.20	36.70	35.10	Stop	
Student M	Accuracy (%)	0	95	92	86	Stop		
	Fluency (wpm)	0	37.95	34.90	30.94	Stop		
Student N	Accuracy (%)	0	92	93	84	Stop		
	Fluency (wpm)	0	51.66	44.44	30.15	Stop		
Student S	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student L	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student K	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A

**Individual scores of English reading aloud accuracy and fluency of twenty struggling readers on graded reading passages after taking reading program
(Continue)**

		Pretest (%)	Posttest (%)					
		Preprimer	Preprimer	Primer	First	Second	Third	Fourth
Student J	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student I	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student H	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student G	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student F	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student E	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student D	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student C	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student B	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A
Student A	Accuracy (%)	0	N/A	N/A	N/A	N/A	N/A	N/A
	Fluency (wpm)	0	N/A	N/A	N/A	N/A	N/A	N/A

**Appendix Q
Students' opinions on reading program from students' leaning logs**

	Reason why they like and dislike reading program		
	Enjoyable with games and activities	Easy lesson	Be asked to read one by one.
Lesson 1:	87.36	09.64	3.00
Lesson 2:	87.47	10.53	2.00
Lesson 3:	87.95	10.05	2.00
Lesson 4:	85.37	12.63	2.00
Lesson 5:	85.99	12.88	1.13
Lesson 6:	86.83	11.54	1.63
Lesson 7:	88.90	10.23	0.87
Lesson 8:	87.97	11.29	0.74
Lesson 9:	90.67	09.23	0.10
Lesson 10:	91.12	08.88	0.00
Lesson 11:	89.97	10.03	0.00
Lesson 12:	91.69	08.31	0.00
Lesson 13:	94.00	06.00	0.00
Lesson 14:	90.00	10.00	0.00
Lesson 15:	91.00	09.00	0.00
Average	89.09	10.02	0.90

	The activities that Enhanced reading accuracy and fluency	
	Letter-sounds knowledge enhanced accurately	Many times of repeated reading enhanced fluency
Lesson 1:	70.53	29.47
Lesson 2:	79.76	20.24
Lesson 3:	65.90	34.10
Lesson 4:	67.20	32.80
Lesson 5:	58.98	41.02
Lesson 6:	60.12	39.88
Lesson 7:	58.76	41.24
Lesson 8:	62.55	37.45
Lesson 9:	54.87	45.13
Lesson 10:	69.23	30.77
Lesson 11:	65.75	34.25
Lesson 12:	56.76	43.24
Lesson 13:	72.98	27.02
Lesson 14:	69.37	30.63
Lesson 15:	77.69	22.31
Average	66.03	33.97

Appendix R

Lists of Expert Validating the Instruments

Experts validating lesson plans and students' learning log

1. Ruedeerath Chusanachoti, Ph.D.

Faculty of Education, Chulalongkorn University

2. Krittarat Krittawattanawong

Demonstration School, Chulalongkorn University

3. Ms. XZ C. Duco

TEFL teacher of Wat Udomrangsee school, Bangkok Metropolitan

Administration

BIOGRAPHY

Kamonwan Sookmag was born in Phetchaburi, Thailand. She obtained her B.Ed. in Education majoring in English from faculty of Education, Prince of Songkhla University in 2004. In 2009, she continues her Master degree in Teaching English as a Foreign Language, Faculty of Education, Chulalongkorn University. She is an English teacher at Wat Udomrangsee school, Bangkok Metropolitan Administration.