Effects of Using Phonics Instruction and Computer Assisted Language Learning to Enhance Word Pronunciation of Primary III Students

Nalinee Pudpetchkaeo¹, Parussaya Kiatkheeree², Supanrigar Watthanaboon³
¹,²,³Program in Teaching English for Academic and Occupational Purposes, Faculty of Education, Suratthani Rajabhat University

Abstract
This paper aimed to develop computer assisted language learning (CALL) and investigate Primary III students’ competency in reading aloud before and after using phonics instruction and the CALL. The samples consisted of 26 Primary III students in the second semester of academic year 2016 at Watsawangmanus School. Data was collected through the CALL on phonics, an evaluation form in English reading aloud with a difficulty index value at 0.72, discrimination at 0.61 and reliability at 0.90. The data was analyzed by using means, standard deviation, and t-test for dependent. The study found that computer assisted language learning had the efficiency level at 80.44/80.31 that was in line with the criteria at 80/80. The results of the study revealed that the students’ competency in reading aloud after using the phonics instruction and the CALL were significantly higher at .05 level.

Keywords: phonics instruction / computer assisted language learning (CALL) / word pronunciation

Introduction
The ability to read intelligently, correctly and coherently depends on the foundation of all other English skills as spelling, listening, speaking, and writing. In Thailand, all teachers face the similar problems in teaching English, especially they stuffed with the vocabulary, pronunciation, and grammar. This made the government gives precedence to English teaching. The office of the Basic Education Commission Thailand (2008) indicates the importance of English teaching at all levels to encourage students being able to
communicate and use English in real situations and acquire the knowledge by themselves creatively.

Katamba (2008) mentioned that the vocabulary is valuable object for the learners. It can help the learners to acquire and comprehend language in a wider range. No doubt, vocabulary is linked to all English skills. Therefore, the vocabulary and reading are relevant in learning English and communication. Furthermore, teaching reading skills are important for students; the pronunciation skill is one of the most important skills for communication. Because correct pronunciation of words will help language users read and speak like native speakers and get what they really want to communicate. As a result, both the audiences and the speakers understand the same topic. Hence, practicing word pronunciation in the correct way will help the learners read and speak like the native speakers. In practicing pronunciation the learners have to learn about the consonant and vowel sound, ending sound, blending, linking sound, stress and intonation. All these factors are essential to help the learners pronounce the words correctly.

From the study, the researchers defined that teaching methodology which helps the learners pronounce in the way and know the meaning of the words is phonics instructions. Phonics is the method whereby the learners are taught learning in gaining letter-sound and acquisition knowledge that letter sounds can be blended together to pronounce words.

Jones (2017) asserted that phonics instruction is useful for spelling after they learn phonics segmentation skill and know the links between the letters and the sounds. (Griffith, 1991). According to the study of Lloyd and Wernham (1998), it is emphasized that there are 26 letters that made 42 sounds of consonants and vowels sound. After the learners learn in sounding out the letter, blending and segmentation, they will pronounce the words correctly. This way was called Jolly Phonics.

At present, phonics instruction, particularly Jolly phonics, is popular in English speaking countries, especially in England. In Thailand phonics was taught in some private schools. Lloyd (2008) identified that, the learners have to know the letter sounds. In the starting stage for learning, we can use the letter cards, and blend the single letters, digraph, and blend the letter which didn’t follow the rule like the word end with y and e.
In addition to use phonics instructions to solve the problem for pronunciation, applying a new computer technology to use in teaching English was conformed to the National Education Act of 2012. Panchalae (2011) noted that computer assisted language learning (CALL) is one of the teaching tools that attracts the learners to learn the language. In addition, Sinudom (2003) stated that CALL was a tool that stimulates the learners’ curiosity to try and learn new things in English language because it can present the language through illustrator, sound, animation. Moreover, it has the interaction between the learners, teacher, and CALL. So that, using CALL in the classroom is the complex of teaching process, that consist of presenting the language, exercise, reviewing, doing pre and posttest. All the components the teachers can prepare for the learners.

From the problem that the researcher faced in teaching English at Watsawangmanus school for 4 years, the learners could not read or pronounce the easy words. The problems were caused by lacking of continuity in learning English. And before the researcher used this technique, the learners learnt English only one period (60 minutes) for a week. The techniques that they used for learning the word were the rote and remembering without others good techniques to learn the language. Some of them could not read the words that specified in the curriculum in primary III. The problem that the researcher referred was the starting point to develop CALL to enhance word pronunciation of primary III students.

**Purpose of the study**

1. To develop a CALL in the style of phonics to improve word pronunciation.
2. To compare Primary III students’ competency in reading aloud before and after using phonics instruction and the CALL.

**Research Hypothesis**

In order to address the problem of this study, the following hypotheses were tested at .05 level of significance.

1. The CALL in the style of phonics to improve word pronunciation of Primary III Students has the efficiency level with the criteria at 80/80.
2. The students’ competency in reading aloud after using the phonics instruction and the CALL is significantly higher than before the experiment.

Literature Review

Reading is a basic skill that is important for learning in every level. Crawley and Mountain (1993) mentioned that reading is the psycholinguistics process. The reader have to get the meaning of reading from the alphabets, perception, visualization, and the thinking processes with by means of experiences to get understanding the meaning of the words. In Thailand, Chatwirote (2011) studied about pronunciation of Thai students who could not read aloud the English vocabulary. From the research, the problem did arise from 1) lacing of using the language, 2) age of learners, 3) proficiency 4) attitude of learners, and 5) the differences between phonological system of Thai and English.

Phonics is one teaching method which can be applied to improve the word pronunciation. Tungsanga (2010) reported that it is a teaching method for teaching literacy and pronunciation by using the sound of the alphabets instead of the names and blending 26 alphabets to read the words. While Lloyd (1998) researched and developed the Jolly Phonics while he was a teacher in Woods Loke Primary School in England. There are 42 letter sounds to teach in Jolly phonics program. The way to teach phonics have to follow the four steps 1) Phonics awareness 2) Phonics 3) Reading Fluency and 4) Vocabulary. There are five main elements to the teaching: 1) learning the letter sound, there are 42 main sounds of English. 2) learning letter formation, the children are shown how to form each letter correctly. Initially, the children form the letters in the air, at the same time as the teacher and then writing it. It is important to teach the children how to hold their pencil correctly. 3) Blending, the children need to be taught how to blend the sounds together to hear a word. The aim is to enable the children to hear the word when the teacher says the sounds, e.g., ‘c-a-t’. 4) Identifying Sounds In Words, Start with words that have three sounds in them. 5) Tricky Words, tricky words are words that cannot always be worked out by blending. There are three spelling techniques are to teach tricky word that are look, say it as it sounds, and mnemonics, and continually revising for reading and spelling.
Teaching language in the past, the teachers didn’t bring the technology to apply in the class as not much as they can. It differs from the present that new technology is brought to facilitate for the teacher and the learners in the classroom such as computer, the internet, online game and CALL. CALL is used in teaching to facilitate the language learning process. The teacher can input the contents and present the language in it. It also enables interaction of learners and gives feedback when learners finish the lesson. Panpho (1996) reported that CALL is the special instruction set for teaching language. It can reinforce learners to learn the language effectively. Currently, there are many programs to develop and design CALL. One of the programs that can design the CALL is Adobe Captivate. It is an easy program to use for developing the CALL by oneself. The PowerPoint program can be used to design any lesson and later integrate in the Adobe Captivate to add more astute to attract the learners. Undeniably, there is a variety of tools to create a creative lesson for students on computer assisted language learning program.

Methodology

The participants, research instruments, procedure, data collection, and data analysis are addressed respectively in this section. The methodology used of the study was principally experimental. The approach was adopted because of its relevance to the study.

Participants

Participants involved in the study consisted of 26 primary III students from Watsawangmanus School. This group of participating students was selected through simple random sampling technique. They were enrolled in the second semester of 2016 academic year.

Measurement and data collection

The data used for this research were collected by the researcher’s designed instrument is as follows: 1) CALL which consisted of 7 groups of the 42 letter sounds with lesson and test inside the CALL, 2) the lesson plans of 18 hours, 3) the students reading aloud pretest and posttest consisted of 42 items and 4) the evaluation form of CALL. To test
the efficiency level of CALL with the criteria at 80/80, students were tested before and after using phonics instruction and the CALL while they were also tested after finish each lesson. The scores of each test were calculated and measured to identify the efficiency level of the CALL.

The CALL was developed by using Adobe Captivate 5.0. It was evaluated by the experts before trying out on the students. The efficiency of process and the efficiency of product were calculated from the scores of the test in CALL and the scores from the pretest and posttest.

Procedure

The participants were taught word pronunciation by using phonics instruction and the CALL. The pretest and posttest were used to compare the students’ competency in reading aloud. The class was held everyday. The experiments were carried out for 22 hours, 18 hours for teaching and 4 hours for pretest and posttest. The data collected were analyzed dominantly by using means, standard deviation, and t-test for dependent.

Results

The results of this study are represented in the following tables.

Table 1: The efficiency of the CALL

<table>
<thead>
<tr>
<th>Scores</th>
<th>n</th>
<th>score</th>
<th>mean</th>
<th>$E_1/E_2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the experimental</td>
<td>26</td>
<td>35</td>
<td>28.15</td>
<td>80.44</td>
</tr>
<tr>
<td>After experimental</td>
<td>26</td>
<td>84</td>
<td>67.46</td>
<td>80.31</td>
</tr>
</tbody>
</table>

The efficiency 80.44/80.31

Table 1 presents the scores, the mean and the efficiency of the instrument. It illustrated that that the CALL had the efficiency level at 80.44/80.31 that was in line with the criteria at 80/80.
The results of the study revealed that the students’ competency in reading aloud after using the phonics instruction and CALL were significantly higher at .05 level. Therefore, there was a significant difference in students’ competency in reading aloud before and after using the CALL on phonics.

**Discussion**

Hypothesis one: CALL in the style of phonics to improve word pronunciation of Primary III Students has the efficiency level with the criteria at 80/80.

Based on the results of these findings, it was observed that CALL had the efficiency level at 80.44/80.31 which was higher than the criteria the criteria at 80/80. It can be argued that the Phonics Instruction and CALL can enhance word pronunciation of primary III students. The instrument was assessed by the experts before conducting with the students. The effectiveness of the CALL may be resulted from the seven exercises in CALL which allowed and improved the students to learn from the easy words to the difficult one. Moreover, the CALL was designed to include colorful illustrations, clear sound for hearing which can interact with the students. This finding was in agreement with that of Kittiponkoon (2008) and Sirisook (2015). They reported that CALL had had the efficiency level higher than the criteria 80/80 and the achievement scores after using CALL was higher than the pretest. They learned effectively form this method.
Hypothesis two: The students’ competency in reading aloud after using the phonics instruction and CALL is significantly higher than before the experiment.

The results of the study provided that the students’ competency in reading aloud after using the phonics instruction and CALL were significantly higher at .05 level. The results point to the fact that the contents in the CALL were put respectively from the easiest to the difficult words. Furthermore, participating students could do the exercises in CALL as many times as they wanted to practice hearing the sound, blending the sound and pronouncing the words. The finding conformed to Schagen and Shamsan (2007) who identified that jolly phonics could enhance the spelling especially in the girls. In the same vein, Kingnamcha (2016) highlighted that merging phonics instruction and mnemonics could promote the English vocabulary’s achievement and memory level. The English vocabulary achievement and memory level of the experimental group was significantly higher than the control group at P<0.01.

Conclusion

On the basis of the findings of this study, the following conclusions were drawn. CALL had the efficiency level at 80.44/80.31 that was in line with the criteria at 80/80. The students’ competency in reading aloud after using the phonics instruction and CALL were significantly higher at .05 level. It can be concluded that using phonics instruction and CALL to enhance word pronunciation is effective in facilitating the students and teachers. Thus, teacher should be encouraged to implement the use of CALL in the classroom.

Recommendations

On the basis of the findings of this study, the researcher therefore makes the following recommendations.

1. The students are required to know and understand the phonemes, segmenting blending the sound and then, learn to pronounce words.

2. Teaching through CALL, the teachers should prepare the computers and all equipment ready for students.
3. The teachers are encouraged to change their role to be a facilitator in the classroom to assist students’ learning.

References
