

Computer-Assisted Language Learning: Enhancing Phonemic Awareness of Thai Primary School Students

Niramol Thajakan⁺ and Usaporn Sucaromana

Department of Western Languages, Faculty of Humanities, Srinakharinwirot University

Abstract. The objective of this study is to investigate Thai primary school students' views on enhancing English phonemic awareness with a multimedia CALL program. The participants in the study comprised nine Thai primary school students who were classified into good, fair, and poor groups according to their English proficiency scores. The participants were taught for twelve period with a multimedia CALL program which focused on (/k/ and /g/), (/f/ and /v/), and (/s/ and /z/). Later, three participants from each group were randomly selected to participate in a semi-structured interview that was conducted after practicing with the multimedia CALL program. The results of the study show that the participants' phonemic awareness had improved after practicing with the multimedia CALL program and that they also had positive views on enhancing phonemic awareness with the multimedia CALL program.

Keywords: Phonemic Awareness, CALL, Multimedia, Primary School Students, Language Learning

1. Introduction

Phonemic awareness is a necessary early language literacy skill for the development of language skills in young learners. Having a low level of phonemic awareness can result in language learning difficulties for many learners, especially in reading, spelling, and writing [1]. Previous studies ([2]; [3]; [4]) have shown that many Thai EFL learners at all educational levels face difficulties in learning a language and that one of their problems is a lack of phonemic awareness. For example, many Thai learners who have weak phonemic awareness cannot distinguish between voiced and voiceless consonants in the English language. One study [5] showed that the English sounds /g/, /v/, /z/, /θ/, /ð/, /ʃ/, /ʒ/, /dʒ/, /tʃ/, and /r/ are problematic sounds for Thai EFL learners to recognize, distinguish and pronounce. Since these nine sounds do not exist in the Thai consonant system, Thai EFL learners have language learning difficulties in identifying and discriminating these sounds ([6]; [7]; [8]). This results in Thai EFL learners being unaware of these nine problematic sounds and thus learning language ineffectively. Consequently, this problem should be addressed [9].

Such awareness should be taught at an early age between three to eight [10]. Teaching phonemic awareness to young learners can help them to acquire and to develop their language skills better than those who do not. In addition, it can lead them to improve their language and literacy in the long term ([11]; [12]). Even though teaching phonemic awareness to ESL/EFL learners may differ from teaching L1 learners due to the phonological differences, it can still start at an early level such as L1 learners [13]. Teaching phonemic awareness to young learners can be accomplished utilizing many different methods, activities, and teaching materials. Therefore, teachers should choose the type of instruction that is suitable for their age group [14].

A multimedia Computer-Assisted Language Learning Program or multimedia CALL program is considered to be effective when used as a supportive tool to enhance young learners' phonemic awareness [15]. Studies on enhancing young learners' phonemic awareness with multimedia CALL programs ([16]; [17]; [18]) have been conducted in many countries and have shown positive results. However, studies on developing the phonemic awareness of Thai EFL learners, especially young learners, through use of a multimedia CALL program have apparently not been conducted. For this reason, the researcher aimed to investigate Thai primary school students' views on improving phonemic awareness with a multimedia CALL program.

2. Methodology

⁺ Corresponding author. Tel.: + 66 8 6586 8627
E-mail Address: niramol.th19@gmail.com

2.1. Participants

The participants in this study were Thai male and female primary school students. Fifty students were randomly selected to practice phonemic awareness with a multimedia CALL program. Since these students had different English language capabilities, the researcher obtained the students' English proficiency scores from their teacher and used these scores to classify them into three groups; good, fair, and poor. After practicing phonemic awareness with a multimedia CALL program, nine participants consisting of three participants from the good, fair, and poor groups were randomly selected to participate in a semi-structured interview.

2.2. Instruments

There were three instruments used in this study:

- Phonemic awareness tests

The phonemic awareness tests were used to measure the Thai primary school students' achievements in phonemic awareness of English. In this study, the researcher constructed the tests by adapting two types of phonemic awareness test: Assessment and Instruction in Phonological Awareness 2002 [19] and Kirwan Assessment [20]. The researcher created three phonemic awareness tests which were tracked by a pretest and posttest. These tests accessed three minimal pairs (/k/ and /g/), (/f/ and /v/), and (/s/ and /z/). Each phonemic awareness test was divided into three levels of phonemic awareness: phoneme isolation, phoneme identity, and phoneme categorization. Each test consisted of 15 items with 5 items for each level of phonemic awareness. There was a time limit of 20 minutes for each test.

- Multimedia CALL program

The study created a multimedia CALL program, *Enjoy the Sounds!*, which was an integrative CALL that ran from a CD-ROM. It integrated phonemic awareness with multimedia—texts, sounds, and pictures. The multimedia CALL program covered the problematic sounds in the English language that Thai EFL learners experience difficulties in recognizing and distinguishing, namely the three minimal pairs (/k/ and /g/), (/f/ and /v/), and (/s/ and /z/). In each minimal pair, there were three levels of phonemic awareness, consisting of phoneme isolation, phoneme identity, and phoneme categorization. There were 20 items for each level of phonemic awareness. The participants were limited to 35 minutes of practice for each level of phonemic awareness. The multimedia CALL program was provided as a supportive tool for the participants with the aim of enhancing their English phonemic awareness.

- Semi-structured interview

To elicit the Thai primary school students' views on utilizing a multimedia CALL program to improve phonemic awareness, three participants from the good, fair, and poor groups were randomly selected to take part in a semi-structured interview after practicing phonemic awareness with the multimedia CALL program. The questions in the interview were open-ended and designed to determine the students' views on improving phonemic awareness with the multimedia CALL program. In order to avoid misunderstanding and to prevent miscommunication, the interview was translated into Thai which is the first language of the participants. During the interview, a tape recorder was used to record all the information supplied by the interviewed participants. Each interview took between 10 and 15 minutes. The questions used in the interview were:

- Can you distinguish the minimal pairs /k/ and /g/ after practicing with the *Enjoy the Sounds!* program?
Can you give me an example?
- Can you distinguish the minimal pairs /f/ and /v/ after practicing with *Enjoy the Sounds!* program?
Can you give me an example?
- Can you distinguish the minimal pairs /s/ and /z/ after practicing with *Enjoy the Sounds!* program?
Can you give me an example?
- Which minimal pairs are the most difficult for you? Why?
- Do you enjoy practicing with the *Enjoy the Sounds!* program? Why? Why not?

2.3. Procedures

After practicing phonemic awareness with the multimedia CALL program for twelve periods, a total of nine participants, comprising three students from each of the good, fair, and poor groups, were randomly selected to participate in the interview. The purpose of the semi-structured interview was to investigate the participants' views on practicing phonemic awareness with a multimedia CALL program. Before each interview, the researcher asked the participants of permission to record audio during the interview. The interview took between 10 and 15 minutes per person.

2.4. Data analysis

A qualitative data analysis was conducted using the data obtained from the semi-structured interview. The purpose of the interview was to find out the students' views on improving phonemic awareness with a multimedia CALL program. It took place after the participants had finished practicing phonemic awareness with the multimedia CALL program. Nine participants, comprising three participants from each of the good, fair, and poor groups, were interviewed in Thai. A tape recorder was used to record the interview so as to facilitate the review process. Then, the data was classified into positive or negative views.

3. Findings

Nine participants, comprising three participants from each of the good, fair, and poor groups, were randomly selected to be interviewed in this study, on their views on improving phonemic awareness with a multimedia CALL program.

The participants were asked "Can you distinguish the minimal pairs /k/ and /g/ after practicing with the *Enjoy the Sounds!* program? Can you give me an example?" "Can you distinguish the minimal pairs /f/ and /v/ after practicing with *Enjoy the Sounds!* program? Can you give me an example?" and "Can you distinguish the minimal pairs /s/ and /z/ after practicing with *Enjoy the Sounds!* program? Can you give me an example?" All of them confidently answered "Yes, I can." The participants were more confident that they were able to distinguish the three minimal pairs that they had learned. In addition, they could give the researcher examples to demonstrate that they really had distinguished those minimal pairs. This showed that the participants' phonemic awareness had improved. Some of the participants' responses are shown below:

"Yes, I can. For example, /gus/ belongs to the /g/ sound and /kar/ belongs to the /k/ sound."

"Yes, and I can show you an example. /fæt/ begins with the /f/ sound and /væn/ begins with the /v/ sound."

The participants were also asked "Which minimal pairs are the most difficult for you? Why?" The minimal pairs /f/ and /v/ were the most difficult for seven participants and the minimal pairs /s/ and /z/ were the most difficult for two participants because these minimal pairs sounded similar. A typical response was:

"I think the most difficult minimal pairs are /s/ and /z/ because /s/ and /z/ are quite similar."

In addition, the participants were asked "Do you enjoy practicing with the multimedia CALL program? Why? Why not?" All of them answered "Yes." They all enjoyed practicing phonemic awareness with the multimedia CALL program, this was attractive and the lessons were easy to understand since they utilized pictures and sounds. Below are some of the responses obtained during the participants' interviews:

"I enjoyed practicing with the multimedia CALL program because I felt like I was playing a game."

"Yes. I could practice by myself and my friends could not laugh at me when I answered incorrectly."

"I really enjoyed practicing with the multimedia CALL program because it was beautiful and interesting. I also competed with my classmates."

From these results, it can be concluded that the phonemic awareness of these Thai primary school students had been improved as a result of practicing with the multimedia CALL program. As stated by [21], if students have complete phonemic awareness it can give them greater satisfaction and produce higher self-esteem. In addition, these Thai primary school students had positive views on enhancing phonemic awareness with the multimedia CALL program. They were motivated and interested in the multimedia CALL program. As claimed by [22], a multimedia CALL program can increase students' interest and motivation because it provides a variety of activities which can encourage students to practice phonemic awareness. Furthermore, it can produce a positive language learning environment because students find the program enjoyable and thus it attracts students to learn the language [23].

4. Conclusion

In conclusion, a multimedia CALL program can be a supportive tool for Thai primary school students for enhancing their early language literacy skills. Additionally, it can be a tool to increase the students' interest and their motivation to improve their phonemic awareness. This study found that, encouraging students to learn is possible by designing and creating interesting tools for them and by supporting them so that they will be able to improve their phonemic awareness with a multimedia CALL program. An interesting tool can attract students and lead to positive views on learning phonemic awareness in the classroom.

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6. References

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