Development of English Pronunciation with Phonics

Kamonnate Iadkert
Department of English for International Communication,
Faculty of Science and Technology,
Rajamangala University of Technology
Nakhon Si Thammarat, Thailand
e-mail: nu_nah@hotmail.com

Abstract— Phonics instruction is to teach students correspondence between graphemes in written language and phonemes in spoken language and how to use these correspondences to read and spell words. Thai students’ ability of English speaking and listening are, in general, still minimal. On the other hand, they have been forced to learn grammar instead. To improve their English command and learning achievement, the phonics instruction should be taught in class. This current study aimed to evaluate English consonants pronunciation competence of students (N=20) majoring in English for International Communication, Faculty of Science and Technology, Rajamangala University of Technology Srivijaya, Nakhon Si Thammarat Province, Thailand. The participants were taught pronunciation with phonics approach of 10 exercises. After that they were asked to read aloud a 30-word list for a pretest and a posttest. The results showed that the mean score of posttest is higher than the pretest (P < 0.01). The phonics instructional effectiveness was 90.57 / 86.47, higher than the criteria set at 80/80.

Keywords-phonics; English pronunciation

I. INTRODUCTION

English has become the world’s international language, used for international communication mostly among non-native speakers of other languages. It is undeniable that Thai students do not speak English fluently and accurately enough although they have studied English for many years. The speaking and listening ability in English of Thai students has been minimal because they have a few chances to practice speaking English in or outside classrooms. The students are trying to translate from Thai to English. They tend to carry the intonation, phonological processes and pronunciation rules from Thai into English speech. They may also create innovative pronunciations for English sounds which are not found in the speaker’s first language. Similar to ESL learners of other contexts, Derwing and Rossiter (2002) surveyed 100 adult ESL learners in Canada to learn about their pronunciation difficulties and strategies. Over 50% of the learners reported that pronunciation contributed to breakdowns in communication.

Although pronunciation instruction is unlikely to lead to native-like speech, it can help L2 speakers improve their intelligibility. Research on the effectiveness of pronunciation instruction is limited, but some studies have demonstrated that instruction can make a positive difference. Instruction for beginning learners is thought to be needed on several fronts, including phonemic awareness, phonics, fluency, reading comprehension, and vocabulary.

Educators are always looking for valid and reliable predictors of educational achievement. One reason why educators are so interested in phonemic awareness is that research indicates that it is the best predictor of the ease of early reading acquisition (Stanovich, 1993-94), better even than IQ, vocabulary, and listening comprehension. With little or no direct instruction, almost all non-native English learners develop the ability to understand spoken language. They do not know that spoken language is made up of discrete words, which are made up of syllables, which themselves are made up of the smallest units of sound, called “phonemes.” This awareness that spoken language is made up of discrete sounds appears to be a crucial factor in the learners learning to read.

Phonics instruction is a way of teaching reading that focuses on letter-sound relationships. During phonics instruction children are taught letter-sound correspondences and how to use them to spell and read words. When learners have good decoding skills, they read more fluently and comprehend more of what they read. Phonics instruction works because it teaches readers the predictable patterns of sounds and symbols produced in the English language (LDA of Minnesota, 2004). According to Ehri (2002), phonics is a method of instruction that teaches students correspondence between graphemes in written language and phonemes in spoken language and how to use these correspondences to read and spell words. It notes that phonics instruction is systematic when the major grapheme-phoneme correspondences are taught and they are covered in a clearly defined sequence. Systematic phonics instruction in kindergarten and first grade results in better growth in comprehension. The ability to read the words in a text accurately and automatically is highly related to successful reading comprehension. Children from various backgrounds make greater gains in reading when they have received systematic and explicit phonics instruction in kindergarten and first grade (www.shelbyed.k12.al.us). An essential component of effective phonics lessons is that teachers provide direct and explicit instruction on each skill presented (Carnine et al, 2004). In explicit instruction, teachers clearly identify the objective of the lesson and briefly explain why learning the targeted skill is important.

Numerous studies (for examples see Devonshire et al, 2013; Duncan et al., 2013; LDA of Minnesota, 2004; Smith, 2003) have shown that phonological awareness teaching...
programs that include letter-name and letter-sound correspondence have a greater positive impact on reading development than interventions involving phonological awareness or sound-letter instruction alone. Training in phonemic awareness and phonics may lead to higher scores on tests of phonemic awareness and phonics knowledge, but such instruction will not improve struggling readers' ability to read (Ivey and Baker, 2004).

Pronunciation is recognized as a fundamental skill which students should acquire, primarily because it can impact accuracy and comprehension (Lambacher, 1996). There are some common difficulties for ESL/EFL students when learning English pronunciation. According to Kenworthy (1987) and Brown (1994), the factors that cause these difficulties are phonological differences between their native language (L1) and their second language/foreign language (L2). Thai students in particular have problems in pronouncing some English consonants (Mano-im, 1999). Based on the research of Iadkert (2009) on the error analysis in the pronunciation of English consonants among students majoring in English for International Communication of Rajamangala University of Technology Srivijaya, the results were found that the most problematic sounds included fricative and affricate. Although research studies on speaking skills and pronunciation are common within English as a second and foreign language, the research with Thai learners seems to be marginalized. Moreover, the area of teaching pronunciation with phonics approach to Thai learners of English studying in the university level seems to be relatively less explored. In light of this research, despite the importance for successful communication, this study aimed to explore pronunciation development of university students by using phonics approach. The instructional effectiveness was also assessed.

II. METHODOLOGY

A. Objectives of the Study

The current study aims to evaluate English consonants pronunciation competence of students majoring in English for International Communication, Faculty of Science and Technology, Rajamangala University of Technology Srivijaya, Nakhon Si Thammarat Province, Thailand. In this study, English pronunciation competence refers to ability to pronounce English consonants including affricates and fricatives. Specifically, the study has two main objectives: (1) to evaluate the English consonants pronunciation ability of students who were taught phonics, and (2) to assess the instructional effectiveness of pronunciation exercises in accordance phonics. More specifically, this study attempted to answer the following questions:

1. Does phonics instruction improve students' ability of English pronunciation?
2. How is the instructional effectiveness of the pronunciation exercises assigned to the students?

B. Participants

The participants were Thai university students (N=20), majoring in English for International Communication, from Faculty of Science and Technology, Rajamangala University of Technology Srivijaya. All of them, at the time of study, were first year students, and were randomly selected to participate in this study.

C. Instruments

In this study, a pre and a post test, and a pronunciation lesson in accordance systematic synthetic phonics instruction were used to investigate the participants' ability pronunciation.

The pretest and the posttest comprise a list of selected words to test the participants’ ability to pronounce the English words of fricative and affricate sounds. To select the words used in this part, first, a list of 30 words was compiled from New Headway Pronunciation: Pre-Intermediate, Student's Practice Book (Bowler, 2009). To assure that the data obtained from the participants can be generalized, the list of 30 words was used in a pilot study with 10 students. As a result, the list was used as the test of English pronunciation of one- and two-syllable words. Ten sounds of fricative /f, v, θ, δ, s, z, ʒ/ and affricate /tʃ, dʒ/ with 3 three words each. The participants were asked to read aloud 30 words from an A4 sheet of paper.

The lesson of pronunciation was prepared into three steps:

1. Content presentation was conducted by describing the students how to pronounce English consonants, especially the problematic sounds of fricatives /f, v, θ, δ, s, z, ʒ/ and affricates /tʃ, dʒ/ (Iadkert, 2009). Knowledge of individual letter sounds is of value only when incorporates into the larger picture represented by phonemic awareness. The participants were taught the elements of phonics by starting with the core of a word pattern and building a series of words by adding onsets and rimes.

2. Pronunciation exercises were created by collecting from New Headway Pronunciation: Pre-Intermediate, Student's Practice Book (Bowler, 2009). The instructional effectiveness of the exercises was assessed E1/E2 (80/80).

3. Practice was conducted by the participants through the consonant digraphs used in CVC words as well as minimal pairs. The participants had to drill the pronunciation with their partners and the listening practice from an audio cd.

D. Data Collection

The phonics instruction was conducted in the second semester of academic year 2012 for five weeks, as well as the instructional effectiveness. The test administration took place before and after the instruction.

E. Data Analysis

As for the data gained from the task of pronunciation, the test was scored manually by the author. All data were analyzed by the computer program, showing statistical test. In order to determine the effect of phonics approach on the participants' pronunciation, means, standard deviation and pair t-test were performed. The analysis of the effectiveness of the phonics instruction calculated by the formula E1/E2 refers to the efficiency of retention of learning and the criteria set at 80/80.
III. RESULTS

A. Participant Improvement from Pretest to Posttest

Results show statistically significant improvement from the pretest to the posttest by using t-test, paired two samples for means. The test scores from the pronunciation task showed that the mean score of posttest is higher than the pretest (P < 0.01) as shown in Table I.

### TABLE I. TEST RESULTS

<table>
<thead>
<tr>
<th>Tests</th>
<th>Mean (Total score=30)</th>
<th>S.D.</th>
<th>t</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>13.7</td>
<td>4.35</td>
<td>16.79</td>
<td>0.000</td>
</tr>
<tr>
<td>Posttest</td>
<td>23.5</td>
<td>5.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(B=20)

B. Scores of Pronunciation Exercises

Considering the pronunciation exercises of 20 participants, all of them could pass the tests during the training, 40% at good level and 60% at very good level as shown in Table II.

### TABLE II. SCORES OF PRONUNCIATION EXERCISES

<table>
<thead>
<tr>
<th>Participants</th>
<th>Scores of 10 exercises (Total score=100)</th>
<th>Level of criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>76</td>
<td>Good</td>
</tr>
<tr>
<td>2</td>
<td>78</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>84</td>
<td>Very good</td>
</tr>
<tr>
<td>4</td>
<td>85</td>
<td>Very good</td>
</tr>
<tr>
<td>5</td>
<td>77</td>
<td>Good</td>
</tr>
<tr>
<td>6</td>
<td>87</td>
<td>Very good</td>
</tr>
<tr>
<td>7</td>
<td>76</td>
<td>Good</td>
</tr>
<tr>
<td>8</td>
<td>82</td>
<td>Very good</td>
</tr>
<tr>
<td>9</td>
<td>95</td>
<td>Very good</td>
</tr>
<tr>
<td>10</td>
<td>86</td>
<td>Very good</td>
</tr>
<tr>
<td>11</td>
<td>82</td>
<td>Very good</td>
</tr>
<tr>
<td>12</td>
<td>77</td>
<td>Good</td>
</tr>
<tr>
<td>13</td>
<td>79</td>
<td>Good</td>
</tr>
<tr>
<td>14</td>
<td>83</td>
<td>Very good</td>
</tr>
<tr>
<td>15</td>
<td>89</td>
<td>Very good</td>
</tr>
<tr>
<td>16</td>
<td>88</td>
<td>Very good</td>
</tr>
<tr>
<td>17</td>
<td>85</td>
<td>Very good</td>
</tr>
<tr>
<td>18</td>
<td>82</td>
<td>Very good</td>
</tr>
<tr>
<td>19</td>
<td>79</td>
<td>Good</td>
</tr>
<tr>
<td>20</td>
<td>89</td>
<td>Good</td>
</tr>
</tbody>
</table>

C. Phonics Instructional Effectiveness

The research result was that the effectiveness of the exercises was 90.57 / 86.47, higher than the criteria set at 80/80. When the effectiveness after the training E2 was considered and found to be 86.47 and then it was compared with the effectiveness during the training E1 which was 90.57, it was found that the exercises during the training was higher than the posttest as shown in Table III.

### TABLE III. PHONICS INSTRUCTIONAL EFFECTIVENESS

<table>
<thead>
<tr>
<th>Exercises</th>
<th>E1</th>
<th>E2</th>
<th>E1/E2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>90.57</td>
<td>86.47</td>
<td>90.57 / 86.47</td>
</tr>
</tbody>
</table>

IV. DISCUSSION

This study aimed to evaluate English consonants pronunciation competence of students majoring in English for International Communication, Faculty of Science and Technology, Rajamangala University of Technology Srivijaya. The result of this study, generally, showed that the phonics instruction can improve the learners’ pronunciation. The results of the current study can shed light onto some practical suggestions and implications on teaching and learning pronunciation. It was found that the learners of English pronunciation were able to benefit from a phonics approach, even though many of the words on which they were tested were unlikely to be in their oral vocabularies. Although reading comprehension was not measured, good word reading is a fundamental skill in developing understanding of text (Gough & Tunmer, 1986).

The results obtained from this study suggest that the ability of learners of English consonants taught by phonics approach was improved, the posttest score higher than the pretest. The synthetic phonics approach facilitated both the learners’ letter-sound knowledge and their reading and spelling skills, supporting the conclusion of the National Reading Panel that learning phonemic awareness in the context of print and letters is an effective way to develop reading skills (Ehri et al, 2001). It might be suggested that if the learners had a prior program to develop their phonemic awareness skills they might have done even better. If a learner learnt to read in L1 using an alphabet where the letters had different pronunciations to those used in L2, there might be some confusion about which sound corresponds to a letter, for example, comparing the sounds of English consonants /tʃ/, ʒ/ and Thai consonant /ق/. However, it has been found that learners can learn to read using two alphabetic systems where some of the letter sounds look similar but have a different pronunciation. The findings support the suggestion of Kenworthy (1987) and Brown (1994); the factors that cause these difficulties are phonological differences between their native language (L1) and their second language/foreign language (L2).

Considering the effectiveness of the exercises during the training, perhaps the participants understood the lessons in average because it was due to the retention of the contents, resulting in good memory and higher score of pronunciation for the test during the study than test posttest. However, the scores of posttest were higher than the pretest. The reason was because the test after the training consisted of randomly selected words which the participants understood well, resulting in learners doing better than the pretest. Therefore, the phonics instruction for university students majoring in English for International Communication could be used for teaching.
V. CONCLUSION

This study investigated English consonants pronunciation competence of students majoring in English for International Communication, Faculty of Science and Technology, Rajamangala University of Technology Srivijaya, Thailand. This study has shown that it is possible to teach university students learning to pronounce and further to read English as a foreign language by a phonics approach. The approach was to teach the participants how to sound and blend letters in order to read unfamiliar words in order to establish a basis for fluent text reading. The phonics instructional effectiveness was higher than the criteria.

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