THE USE OF ESI TO IMPROVE STUDENTS ENGLISH PRONUNCIATION OF WORD STRESS

Aree Tehlah[1]*

[1]Rattaphum College, Rajamangala University of Technology Srivijaya, Songkhla, Thailand
*e-mail: maleng_gan@hotmail.com

Abstract:

The purposes of this study were: 1) to investigate the learners' background knowledge of English pronunciation in terms of word stress; 2) to investigate the effectiveness of explicit suffixation instruction (ESI) in developing students' English pronunciation; and 3) to investigate the learners' satisfaction with explicit suffixation instruction in developing students' English pronunciation. Subjects were 61 students of 2nd year Diploma program at Rattaphum College, Rajamangala University of Technology Srivijaya, Songkhla province. They were divided into two groups: 31 students of the experimental group, and 30 students of the control group. This study was conducted throughout the first semester in academic year 2012 (May-September 2012). There were 4 instruments used in this study: 1) the pre-test; 2) the treatment about explicit suffixation instruction; 3) the post-test; and 4) the questionnaire.

The findings showed that: 1) the learners' background knowledge of English pronunciation in both groups was not significantly different; 2) the explicit suffixation instruction could enhance the knowledge of English pronunciation of the students in the experimental group and showed a significant difference at 0.01 level (t = 7.25); and 3) the learners' overall satisfaction of the explicit suffixation instruction in developing English pronunciation was positively high ($\bar{x}$ = 3.84). This indicates that the explicit suffixation instruction can not only help students improve their English pronunciation, but it also enhances learners' satisfaction with learning of English pronunciation in terms of word stress.

Key words: ESI, English pronunciation, word stress, suffixation

Introduction:

One of the most difficult troubles facing non-native speakers of English is pronunciation. It is usually the largest obstacle to overcome when trying to achieve fluency. Mastering pronunciation in EFL context seems a highly challenging objective for Thai students who even have studied English for many years but are unable to speak like native speakers due to their inability to pronounce the sounds of words properly. Pronunciation is an integral part of second or foreign language learning since it directly affects learners' communicative competence as well as performance on the career. It is the primary medium for communication in which people share ideas and understandings with each other (Jenkins, 2000). Correct pronunciation is an important factor determining the meaningfulness and success of communication.

Learning word pronunciation is focused on the phonological component which involves the speaker's ability to know the sounds and ways to pronounce words. It involves knowing stress patterns, pronunciation of consonants and vowels in understanding different forms of words (Freeman & Freeman, 2009). As defined by Peter Roach (2004), pronunciation has been viewed as the sum of three components. The components are sounds, stress and intonation. Stress is the most important part of acquiring the pronunciation of the English language. It is a suprasegmental feature defined as the degree of force with which a word or syllable is uttered. A stressed syllable is produced by using more air from the lungs than is used for unstressed syllable (Richards & Platt, 1992). According to Roach (2004), there are three levels of stress including primary, secondary, and unstressed. The primary stress results from pitch movement or tone that gives the strongest type of stress; the secondary stress, on the other hand, is weaker than the primary stress; and the third level of stress cannot be felt that much in a word, that is unstressed. Moreover, the significant stress contrasts are very important of indifferent phonemes. For example, when the word "*import*" is pronounced with the first syllable sounding stronger than the second, English speakers hear it as a noun whereas the second syllable is stronger, the word is heard as a verb. These examples show sound contrast that extend over several segments, and such contrasts are called suprasegmental.

Stress as a suprasegmental feature, more specifically, poses its own problems, especially when suffixes are added to words. There are different types of suffixes, two of which are neutral and stress-moving (Roach, 2004). Neutral suffixes are some that makes no changes in the place of stress when added to words. For instant, *happy* + *ness* = *happiness* (Richards & Platt, 1992). On the other hand, stress-moving suffixes refers to the suffixes which change the pattern of stress in a word when added, such as <-*ic*>. For example, in the word <*economy*>, stress is on the second syllable. After adding the suffix <-*ic*> in the word <*econom*ic>, stress moves to the third syllable. Regarding this study, it was focused on the stress-moving when added with suffixes, that is, as certain suffixes are added to a word, they can cause the stress shift to the penultimate syllable immediately preceding that suffix.

For instance, the usefulness of teaching pronunciation is the significance of speaking skill to convey the meaning and communication achievement. The teacher can make a noticeable improvement if the aspect of pronunciation such as stress pattern is explicitly taught to the learners (Richards & Renandya, 2002). Supporting Richards & Renandya's view, Hall (2002) suggested that teaching students explicitly might be the best way to get much knowledge about their study. The fundamentals of explicit instruction have evolved across the past 40 years which supported the link between the effective explicit instruction and positive outcomes for students. According to Steedly, Dragoo, Arefeh & Luke, (2008), "*explicit instruction refers to an instructional practice that carefully constructs interactions between students and their teacher*". It is the effective methodology whereby students are guided through the learning process with clear explanations and demonstrations of the instructional target, and supported practice with feedback until independent mastery has been achieved. Rosenshine (1987) described this form of instruction as "a systematic method of teaching with emphasis on proceeding in small steps, checking for students understanding, and achieving active and successful participation by all students". Lisa (2009) claimed that this type of instruction is not merely providing the definition of terms, such as text features, but having a teacher actually providing many opportunities for students to use, discuss, and compare the text features of several different samples of actual text students will use in classroom. For most, it could be concluded that explicit instruction is the effective method enabling students to become independent learners.

There is no previous study about the pronunciation focusing on stress pattern when added suffixes with Thai undergraduate students. Thus, this study endures the value of pronunciation in aspects of English suprasegmental feature. The researcher investigated the students' knowledge of English pronunciation targeting six suffixes, *–tion, –ity, –ian* of the noun suffix, and *–ous,-ic,-ial* of the adjective suffix with a specific interest in word stress shifting. The subjects' knowledge was measured by using a reading test. It supports the view of pronunciation as vital to intelligibility and as an essential component of communicative competence (Morley, 1991). This study sought to answer the following three research questions.

1. At which level is the students' English pronunciation knowledge?
2. Can the explicit suffixation instruction enhance students' English pronunciation?
3. To what extent are students satisfied with the explicit suffixation instruction in developing their English pronunciation?

Methodology:

Subjects

The subjects in this research were 61 students studying in the 2nd years of the Diploma program, Rattaphum College, Rajamangala University of Technology Srivijaya, Songkhla province. All 61 subjects were majors in Business Computer. They were divided into 2 groups: 31 of the experimental group and the other 30 of the control group. Their average age was between 18-19 years old. They had studied English for approximately 10 years. The research was conducted on the subjects through the course *English 1* during the first semester of academic year 2012 (May-September 2012). By the pre-test, they had the same ability of English pronunciation.

Instruments

There were four major research instruments: 1) the pre-test; 2) the treatment about explicit suffixation instruction; 3) the post-test; and 4) the questionnaire. These instruments were used to reach the aims of this study as follows:

Pre-test

The pre-test was first used to measure students' background knowledge of English pronunciation with suffixes before the experiment. The test aimed to investigate the learners' ability to pronounce the words in terms of shifting the stress and changing the pronunciation when added with some suffixes. The test was focused on two types of suffixes which varied the stress and pronunciation of the words. The selected suffixes were *-ian, -ity, -tion* of noun suffixes and *-ous, -ic, -ial* of adjective suffixes. This test was a sentence reading test. There were 24 sentences which the target suffixed words were inserted in only 12 sentences in the first set. The rest of them were inserted with 12 base words in order to compare whether students pronounced the bases and target words differently, i.e. *addict, addiction.* The researcher recorded the students' reading during the test. The total score of the test was 97 marks. The scores from the pre-test were aimed to be compared with those from the post-test to examine the effectiveness of explicit suffixation instruction in developing English pronunciation.

Treatment of Explicit Suffixation Instruction (ESI)

The treatment in this study aimed to provide students with the teaching under the explicit suffixation instruction. The treatment was designed as 8 lesson plans and was used throughout the semester. The students in the experimental and control groups were taught by the researcher. The experimental group was added up with the 30-minute lesson plans of explicit suffixation instruction in every class processing in 5 main steps: (1) stating a clear objective at the beginning of the lesson, (2) demonstrating a particular comprehensive practice, (3) the teacher working alongside with students, (4) students beginning to repeatedly use strategies and individually practice, and (5) providing students with occasions to reflect on the teaching and learning. The lesson plans were covered with the knowledge of the suffixation and the activities demonstrating to students. The teaching procedure began with dictation. The students were asked to listen to the native speakers' voice and wrote the words they heard. The teacher presented the words with suffixes, showed how they were combined and pronounced the words focusing on the stress pattern shifting when adding with suffixes. Students corrected their mistakes, and were asked to read out loud. Then, they individually repeated and practiced.

Post-test

The immediate post-test was administered after the treatment in week 14. The post-test was used as the pre-test both the test paper and the test process of which the test purpose was to investigate students' English pronunciation development.

Questionnaire

The questionnaire was administered only to the experimental group on week 14. The aim of the questionnaire was to survey the students' satisfaction with the explicit suffixation instruction in developing students' English pronunciation. This questionnaire consisted of 2 main parts: (1). the first part consisted of 12 items asking for students' personal information—age, sex, and English educational background; (2). the second part consisted of 30 items on a five-point Likert scale asking for students' satisfaction which divided into 3 sub-parts: 1). students' satisfaction with the explicit instruction; 2). students' satisfaction with the pronunciation learning; 3). students' satisfaction with the English suffixation learning.

Data Collection and Analysis

In the 1st week of this study, students were administered with the pre-test to investigate students' knowledge of English pronunciation. The total scores of the test were 97. Then the raw scores were calculated to indicate the mean value and standard deviations. The independent sample t-test was used to find out the students' English pronunciation knowledge. The result of the pre-test was kept and later compared with the post-test scores to see the difference of the test performances.

The immediate post-test was administered after the treatment of the 14th week. The experimental group received the treatment of the explicit suffixation instruction. The post-test used at this stage was the same as that of the pre-test. At the end of the treatment, the researcher measured both groups of students in order to see whether they differently had any improvement of their English pronunciation ability. To answer if the explicit instruction increases the learners' ability of English pronunciation, the pre-test and post-test were estimated by using the pair sample t-test.

Results and Discussion:

This research study aimed to find out at which level the English pronunciation knowledge of learners before the experiment was, whether the explicit instruction could improve their knowledge of English pronunciation, and at which level students was satisfied with the explicit suffixation instruction of English pronunciation in terms of word stress. The details were described as follows.

3.1 Students' Background Knowledge of English Pronunciation

The first research question of this study was put forward for the investigation to find out students' English pronunciation knowledge. To answer the first question, the pre-test was administrated on the subjects of the experimental group and the control group. Within the first week of the research, they were individually asked to read English sentences in the test of word pronunciation. The answers from the students were recorded by using the audio visual material—MP4. The total score of the pre-test was 97. The performance of the students in both the control and the experimental groups on the pre-test was moderate as illustrated in Table 1.

Table 1: Comparison of Total Pre-test Scores in Experimental and Control Groups

Subject (N)	$\bar{x}$ (Total: 97)	S.D.	T-values	Sig. (2-tailed)
Experimental (31)	53.71	10.65	0.59	0.55
Control (30)	52.07	10.92		

**significant at 0.01
*significant at 0.05

It was found that their levels of English pronunciation knowledge were at the moderate levels (more than 50% of the total scores). From Table 1, the pre-test mean score of the experimental group was 53.71 and that of the control group was 52.07. Students' English pronunciation knowledge between the experimental groups and the control group was not significantly different (p>0.01). Although the mean score of the experimental group was slightly higher than that of the control group, this difference was not significant. This clearly indicated that before the experiment, the subjects of both groups were at the same level of English pronunciation knowledge. Likewise, to see which suffixes students had mastered most in each aspect of English pronunciation in terms of word stress, the pre-test mean scores were compared. The results are shown as follows.

Table 2: Comparisons of Scores on Word Stress in Each Suffix Morpheme of Both Groups in Pre-test

Target *Suffixes* (N)	Subject group				T-value	Sig. (2-tailed)
	Experiment (31)		Control (30)			
	$\bar{x}$	%	$\bar{x}$	%		
<-*tion*> (2)	0.81	40.5	0.97	48.5	1.72	0.09
<-*ity*> (2)	0.29	14.5	0.37	18.5	0.62	0.53
<-*ian*> (2)	0.81	40.5	0.70	35.0	0.95	0.34

<-*ous*>	(2)	0.00	0.0	0.07	3.5	1.46	0.14
<-*ic*>	(2)	0.10	5.0	0.03	1.5	0.99	0.32
<-*ial*>	(2)	0.19	9.5	0.03	1.5	1.99	0.07

**significant at 0.01
*significant at 0.05

The data in Table 2 shows that the control group had knowledge of word stress with the suffix <-*tion*> with the mean score 0.97 better than that of the experimental group. Besides, the experimental group correctly pronounced words with the suffix <-*ian*> more with the mean score of 0.81. Based on the pre-test mean scores of both groups, however, they were not significantly different. It can be assumed that the students' background knowledge of English pronunciation, particularly of word stress, was at the same level.

3.2 Effectiveness of Explicit Suffixation Instruction in Developing Students' English Pronunciation

The second research question was put forward to see whether the explicit instruction could help the learners improve their English pronunciation knowledge through the practice of suffixation. To answer this research question, the scores of the pre-test and the post-test in both the control and the experimental groups were analyzed and compared, and it was found that the explicit suffixation instruction could considerably enhance students' ability in English pronunciation as shown in Table 3.

Table 3: Comparison of Pre-test and Post-test Scores of Experimental and Control Groups

Subject (N)		Pre-test $\bar{x}$	Post-test $\bar{x}$	T-values	Sig. (2-tailed)
Experimental	(31)	53.71	57.55	7.25	0.00**
Control	(30)	52.07	51.23	1.28	0.21

**significant at 0.01
*significant at 0.05

In Table 3, the control group gained the scores of 52.07 in the pre-test and 51.23 in the post-test, and the T-value shows that there was no statistically significant difference($p > 0.01$). This means the control group had no improvement in English pronunciation in terms of word stress due to the fact that they were not given with the explicit instruction as their treatment.

On the other hand, the experimental group gained the scores of 53.71 in the pre-test and 57.55 in the pos-test. The T-value (7.25) shows that there was the significant difference at 0.01 levels. Students in the experimental group who received the explicit suffixation instruction as the treatment could much better perform the rate of achievement in English pronunciation in terms of word stress. This means they had the English pronunciation improvement after they were provided with the explicit suffixation instruction. It can be assumed that explicit suffixation instruction can help the students improve their English pronunciation. It enhanced their knowledge of word stress.

Moreover, to see if the experimental group and the control group behaved differently, the post-test of both groups were compared by using Independent sample t-test. The results of the experiment are shown in Table 4

Table 4: Comparison of Post-test Scores in Experimental and Control Groups

Subject (N)	$\bar{x}$ (Total : 97)	S.D.	T-values	Sig. (2-tailed)
Experimental 31	57.55	11.86	2.08	0.04*
Control 30	51.23	11.74		

**significant at 0.01
*significant at 0.05

According to Table 4, the post-test mean score of the experimental group (57.55) was much higher than that of the control group (51.23). This indicated that there was a significant difference at the 0.05 level. That means the students in the experimental group who were provided with the explicit instruction of suffixation could gain the higher rate achievement in the post–test than the control group which were not provided with the explicit suffixation instruction, that is explicit instruction of suffixation could obviously enhance learners' English pronunciation in terms of word stress. It can be concluded that the explicit instruction is the appropriate method in helping learners improve their English pronunciation. Moreover, to see which suffixes student in the experimental group mastered the most, the results are shown in Table 5.

Table 5: Comparisons of Score on Word Stress in Each Suffix Morpheme in Post-test of Both Groups

Target *Prefixes* (N)	Subject group				T-value	Sig. (2-tailed)
	Experiment (31)		Control (30)			
	$\bar{x}$	%	$\bar{x}$	%		
<-*tion*> (2)	0.61	30.5	0.27	13.5	2.52	0.01**
<-*ity*> (2)	0.74	37.0	0.70	35.0	0.36	0.72
<-*ian*> (2)	1.13	56.5	0.57	28.5	3.88	0.00**
<-*ous*> (2)	0.34	16.0	0.13	6.5	1.57	0.05*
<-*ic*> (2)	0.32	16.0	0.07	3.5	2.00	0.04*
<-*ial*> (2)	0.71	35.5	0.57	28.5	1.15	0.25

**significant at 0.01
*significant at 0.05

As shown in Table 5, the post-test mean scores in both groups were different, and statistically significant difference at the 0.01 level was in the suffixes <-*tion*> and <-*ian*>. They were significantly different at 0.05 level at the suffixes <-*ous*> and <-*ic*>. The experimental group had more knowledge of these suffixes than that of the control group. The rest of target suffixes showed no significant difference. It can be concluded that explicit suffixation instruction can help the students improve their English pronunciation in terms of word stress.

3.3 Students' Satisfaction with the Explicit Suffixation Instruction (ESI)

The third research question was put forward to investigate the students' satisfaction with the explicit suffixation instruction on English pronunciation development. The five-point Likert scale questionnaire was used in interpreting the level of satisfaction. There were five ranges of the mean scores which represented the learners' satisfaction. The results revealed that students' overall satisfaction was reported at a high level as shown in Table 6.

Table 6: The Students' Satisfaction with the Explicit Suffixation Instruction in Developing Students' English Pronunciation

Component	$\bar{x}$	S.D.	Level of Satisfaction
1. Students' satisfaction with the explicit instruction	3.94	0.62	High
2. Students' satisfaction with the English pronunciation learning	3.87	0.45	High
3. Students' satisfaction with the English suffixation learning	3.72	0.57	High
Total	3.84	0.48	High

In Table 4, the students' satisfaction on the explicit suffixation instruction on English pronunciation development was at the high level ($\bar{x}$ = 3.84, S.D. = 0.62). When looking into different components, the satisfaction with the explicit instruction was at the high level ($\bar{x}$ = 3.94, S.D. = 0.45), the satisfaction with the English pronunciation learning was at the high level ($\bar{x}$ = 3.87, S.D. = 0.57), and the satisfaction with the English suffixation learning was also at the high level ($\bar{x}$ = 3.72, S.D. = 0.48). It can be seen that the subjects showed their high satisfaction with all components, so they appeared to be satisfied with the explicit suffixation instruction in developing their English pronunciation.

Conclusion:

Based on the results, it was found that the pre-test scores of both groups were moderate and not statistically different. Both the subjects in control and experimental groups could incorrectly pronounce the words and stress pattern. They may not have enough knowledge of the stress pattern shifting when the words adding with suffixes. This indicated that they were at the same level of English pronunciation knowledge. After being provided with the explicit suffixation instruction, the subjects in the experimental group gained much improvement in their post-test performance. The post-test mean score of the experimental group (57.55) was much higher than that of the control group (51.23), and they were significantly different at the 0.05 level. The students in the experimental group who were provided with the explicit suffixation instruction could gain the higher rate of achievement in the post–test. Also, the subjects in the experimental group showed positive satisfaction in the explicit suffixation instruction in developing their English pronunciation. Thus, the explicit instruction of suffixation can be claimed as the effective method for students who lack of English pronunciation knowledge in terms of word stress. It is the appropriate method that helps learners improve their English pronunciation.

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