Effectiveness of Explicit Affixation Instruction on English Vocabulary Development

Aree Tehlah¹ and Premin Karavi²

1. Graduate Student, M.A. (TEIL), Prince of Songkla University
2. Assistant Professor, Ph.D. (Linguistics), Department of Language and Linguistics, Faculty of Liberal Arts, Prince of Songkla University

Abstract

The purpose of this study were: 1) to investigate the learners’ background knowledge of English vocabulary with affixes through four types of vocabulary development: word meanings, word classes, word spelling, and word pronunciation; 2) to investigate the effectiveness of explicit instruction on the use of affixation in vocabulary learning; and 3) to investigate the learners’ satisfaction of explicit affixation instruction on English vocabulary development. Subjects were 61 of second-year vocational students at Hatyai Commercial School, 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 2011 (May-September 2011). There are 4 instruments used in this study: 1) the pre-test, 2) the treatment composing of 12 affixation learning lesson plans under the explicit instruction, 3) the post-test, and 4) the questionnaire. The data gathered from the pre-test and post-test were analyzed by Statistical Packages for the Social Sciences (SPSS) using the series of T-tests.

The findings showed that 1) the learners’ background knowledge of English vocabulary with affixes in both groups was at a low level and was not significantly different; 2) the explicit affixation instruction could enhance the learners’ knowledge of English vocabulary and showed a significantly difference at 0.01 (t=11.483); and 3) the learners’ overall satisfaction of the explicit affixation instruction on English vocabulary development revealed positively high ($\bar{x} = 3.84$). The satisfaction on the explicit instruction was at the high level ($\bar{x} = 3.94$), the satisfaction on the advantage of English vocabulary learning was at the high level ($\bar{x} = 3.87$), and the satisfaction on the English affixation learning was also at the high level ($\bar{x} = 3.72$). This indicates that the explicit affixation instruction not only can help students improve their English vocabulary learning, but it also enhances learners’ satisfaction on English vocabulary development.

Key word: affixation, explicit instruction, vocabulary development
1. Introduction

Vocabulary plays an important role in English language study. It is central to language and crucially important for second language (L2) students. The mastery of vocabulary is an essential component of second language acquisition. Meara (1996) pointed out that there is significant evidence to show that vocabulary skill is very essential and useful to all aspects of L2 proficiency especially in reading. L2 learners firstly may acquire their second language from the written form. Mori and Nagy (1999) claimed that the texts are an important source of learning vocabulary for students. To be able to read the texts, students should have as much vocabulary as possible. The problems might happen when the students read with low vocabulary. As mentioned by Levine and Reves (1998: 302), “lack of adequate vocabulary is one of the obstacles to the text comprehension”. Although many learning strategies are introduced in order to help L2 students acquired words, L2 students still have reading problems when encountering texts outside the class. Many linguists tried to create a framework in order to explain what knowledge language learners should have in knowing a word completely.

The proper solution conveys the effective benefit for students’ learning. The way to help students is to motivate them to infer or to find the meaning of the unknown words. This research study focused on the strategy of using word parts to infer the meaning of a whole word, which it refers to “word formation” strategy. Ingo (2002) stated that the word formation strategy is used to reinforce a phonetic element, affix, or letters that make a word difficult to pronounce or spell. It is obviously composed by putting together smaller elements to form larger words with more complex meanings. For example, employee can be analyzed as being composed of the verb employ and the ending –ee, the adjective unhappy can be analyzed as being derived from the adjective happy by the attachment of the element un-.

According to Nation (2001, 2005), “students can learn unknown words if they recognize the word parts then make use of each part to understand the meaning of the whole”. Word formation strategy is used by the students when they recognize the words, seeing that the new word consists of stem and affixes, which are prefixes or suffixes. Then, the students use the information from the stem and affix to infer the meaning of the whole word. An affix is a morpheme that is attached to a word to form a new word (Scalise, 1984: 79). It is a meaningful letter or group of words part that alters meaning either at the beginning of the word or the end of the word. This could be particular useful tool helping English learners who have at least some language knowledge to expand vocabulary capability by using this word parts. The knowledge of word parts is claimed to facilitate the recognition of the words
with the same stem (Schmitt and Zimmerman, 2002). Schmitt and McCarthy (1997:277) have mentioned that knowing how words are made up “can help students to have at least a receptive knowledge” of the words in the same family. Nattinger (1988:69) stated that the impact of word parts is that “many words built about a particular root are gathered so that the associations among them can be seen. Even though the meanings of these words may be slightly different, clustering them will help students in remembering their general meaning”. Inferring from word parts becomes a strategy for vocabulary learning since it makes learning more successful and decreases the difficulty in vocabulary learning.

Tankersley (2005) suggested that effective vocabulary learning for students should include encouraging students to experiment with words, and explicitly teaching word meanings and word formation strategy. In addition, Hall (2002) suggested that teaching students explicitly might be the best way for them 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: 4), “explicit instruction refers to an instructional practice that carefully constructs interactions between students and their teacher. Teachers clearly state a teaching objective and follow a defined instructional sequence. They assess how much students already know on the subject and tailor subsequent instruction, based upon that initial evaluation of student skills. Students move through the curriculum repeatedly practicing skills at a pace determined by the teacher’s understanding of student needs and progress”. Explicit instruction 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: 34) 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”.

According to Lynn (2007), explicit instruction is an important instructional strategy to become actively engaged in learning and ultimately independent learners. Explicit instruction provides students with a learning environment that supports student autonomy, internalization of new skills, and allows students to value learning and achievement, which fulfills the self-determination theory (Deci & Ryan, 1985, cited in Lynn, 2007). Lisa (2009) claimed that explicit 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. Moreover, explicit instruction provides students with “a reasonable challenge,
chances to take an additional step in their zones of proximal development” (Palincsar & Brown, 1984: 156).

Explicit instruction also refers to instruction that has an academic focus with teacher and student interaction and teacher monitoring. This type of instruction relies on the teacher to explain, model, and think aloud about the academic focus of the lesson. In addition, explicit instruction relies on time for students to practice a newly learned skill or strategy with teacher guidance and feedback. Finally, explicit instruction enables students to become independent learners.

2. Methodology

Subjects

The population in this research was 70 students which were randomly chosen as 61 subjects. The subjects in this research were 61 students studying in the 2nd years of vocational certificate, Hatyai Commercial School, Songkhla province. This research is conducted on the subject through the course E.2201-2805, Reading in Business Document during the first semester of academic year 2011 (May-September 2011). By the pre-test they have the same ability of English vocabulary knowledge. The subjects were divided into 2 groups: 31 of the experimental group and the other 30 of the control group. Their average age was between 15-16 years old. They had studied English for approximately 9 years. All 61 subjects were major in English.

Instruments

There were four major research instruments: 1) the pre-test; 2) the treatment about explicit affixation instruction; 3) the post-test; and 4) the questionnaire. These instruments are 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 vocabulary with affixes before the experiment. The affixes used in the test consisted of 12 selected affixes which were divided into 4 groups. This test was composed of four types: the test on word meanings, the test on word classes, the test on word spellings, and the test on word pronunciations.

1). Test on word meanings: The part of the test aimed to investigate the learners’ ability about the meaning of new words through the use of affixes. Affixes used in this test were the two types of prefix which varied the meaning of words. These selected prefixes were in-, dis-, mis- of negative prefixes and ex-, en-, sub- of locative prefixes. There were 2 sections of the
test: 1). the matching test consisting of 18 items; and 2). the sentence completion test consisting of 12 items. The total score of this part was 30 marks.

2). Test on word classes: This part of the test aimed to investigate the learners’ ability to classify words into the word classes through the use of affixation. Affixes used in this test were the two types of suffixes which varied the word classes. The selected suffixes were -ian, -ity, -tion of noun suffixes and -ous, -ic, -ial of adjective suffixes. The test was designed in terms of the word classes check list test consisting of 30 items. The total score is 30 marks.

3). Test on word spelling: This part of the test aimed to investigate students’ ability of English vocabulary spelling. The affixes used in this test were all 12 affixes which composed the test into 24 items. The test was the gab filling test. There were 24 incomplete sentences. Students were asked to listen and fill in the blanks with the words they heard. The total score of this semi-dictation test was 24 marks.

4). Test on word pronunciation: This part of the test aimed to investigate the learners’ ability to pronounce the words in term of shifting the stress and changing the pronunciation when added with some affixes. 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 sentence reading test. There were 24 sentences which the target suffixed vocabularies 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. 

The researcher recorded the students’ reading during the test. The total score of this part 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 affixation instruction on English vocabulary development.

Treatment of Explicit affixation instruction on English vocabulary development

The treatment in this study aimed to provide students with the teaching under the explicit affixation instruction. The treatment was designed as 12 lesson plans and was used throughout the semester. The students were taught by the researcher. The experimental group was taught with the lesson plans of explicit affixation instruction in every class. The lesson plans covered the knowledge of the use of English affixes instructing along the reading class. The 4 different groups of affixes were contained in the lesson plans of the class experimental group. On the contrary, the control group was only given the vocabulary instruction specific
to the reading book students normally utilize in class, which generally does not provide much instruction in English affixes.

**Post-test**

The immediate post-test was administered after the treatment in week 14. The pre-test and the post-test were identical. 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 subjects’ vocabulary learning.

**Questionnaire**

The questionnaire was administrated only the experimental group on week 14. The aim of the questionnaire was to survey the students’ satisfaction on the explicit affixation instruction on English vocabulary development. 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 5 Likert scale asking for students’ satisfaction which divided into 3 sub-parts: 1). students’ satisfaction on the explicit instruction; 2). students’ satisfaction on the advantage of English vocabulary learning; 3). students’ satisfaction on the English affixation learning.

**Data collection and analysis**

In the 1st week of this study, students were administered the pre-test to investigate students’ knowledge of English vocabulary. The total scores in the test were 181 marks. Then the raw scores were calculated to indicate the mean value and standard deviations. The independent sample t-test was the statistics to find out the students’ English vocabulary knowledge. The result of the pre-test was kept to compare with the post-test scores to see the difference of the test performances.

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

This research study aims to find out at which level the English vocabulary knowledge of learners is, whether the explicit instruction can improve the students’ knowledge of affixes, and at which level students were satisfied with the explicit affixation instruction on English vocabulary development. The details were described as follows.

3.1 Students’ background knowledge on English vocabulary

The first research question of this study was put forward for the investigation to find out students’ English vocabulary knowledge. To answer the first question, the pre-test was administrated on the subjects of the experimental group and the control group. The performance of the students in both the control and the experimental groups on the pre-test was low as illustrated in Table 1.

Table 1: Comparison of total Pre-test scores in experimental and control groups

<table>
<thead>
<tr>
<th>Subject (N)</th>
<th>$\overline{x}$ (Total: 181)</th>
<th>S.D.</th>
<th>T-values</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental (31)</td>
<td>74.45</td>
<td>15.364</td>
<td>.664</td>
<td>.509</td>
</tr>
<tr>
<td>Control (30)</td>
<td>71.90</td>
<td>14.634</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was found that their levels of English vocabulary knowledge were at the low levels (less than 50% of the total scores). From the Table 1, the pre-test mean score of the experimental group was 74.45 and that of the control group was 71.90. Students’ vocabulary knowledge between the experimental groups and the control group were not significantly different (p>0.01). Although the mean score of the experimental group was slight 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 vocabulary knowledge.

3.2 Effectiveness of explicit affixation instruction on learners’ English vocabulary development

The second research question was put forward to see whether the explicit instruction could help the learners improve their English vocabulary knowledge through the practice of affixation. To answer this research question, 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 affixation instruction could considerably enhance students’ ability in vocabulary development as shown in Table 2.
In Table 2, the control group gained the scores of 71.90 in the pre-test and 70.80 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 vocabulary development 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 74.45 in the pre-test and 85.03 in the post-test. The T-value (11.483) shows that there was the significant difference at 0.01 levels. Students in the experimental group who received the explicit affixation instruction as the treatment could much better perform the rate of achievement in vocabulary development. This means they had the vocabulary knowledge improvement after they were provided with the explicit affixation instruction. It can be assumed that explicit affixation instruction can help the students improve their English vocabulary knowledge. It enhanced their vocabulary development.

To see if the experimental group and the control group behaved differently, the post-test of both groups were compared. According to the Table 3, the post-test mean score of the experimental group (85.03) was much higher than that of the control group (70.80). this indicated that there was the significant difference at the 0.01 level. That means the students in the experimental group who were provided with the explicit instruction of affixation could gain the higher rate achievement in the post–test than the control group which were not provided with the explicit affixation instruction, that is explicit instruction of affixation could obviously enhance learners’ vocabulary development. It can be concluded that the explicit

Table 2: Comparison of Pre-test and Post-test scores of experimental and control groups

<table>
<thead>
<tr>
<th>Subject (N)</th>
<th>Pre-test $\bar{x}$</th>
<th>Post-test $\bar{x}$</th>
<th>T-values</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental (31)</td>
<td>74.45</td>
<td>85.03</td>
<td>11.483</td>
<td>.000**</td>
</tr>
<tr>
<td>Control (30)</td>
<td>71.90</td>
<td>70.80</td>
<td>1.044</td>
<td>.305</td>
</tr>
</tbody>
</table>

**significant at 0.01

Table 3: Comparison of Post-test scores in experimental and control groups

<table>
<thead>
<tr>
<th>Subject (N)</th>
<th>$\bar{x}$ (Total : 181)</th>
<th>S.D.</th>
<th>T-values</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental 31</td>
<td>85.03</td>
<td>18.860</td>
<td>-3.161</td>
<td>.002**</td>
</tr>
<tr>
<td>Control 30</td>
<td>70.80</td>
<td>16.155</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**significant at 0.01
instruction is the appropriate method in helping learners improve their vocabulary development.

3.3 Students’ satisfaction on the explicit affixation

The third research question was put forward to investigate the students’ satisfaction on the explicit affixation instruction on vocabulary development. The five-point Likert scale questionnaire was used for interpreting the level of satisfaction. There were five ranges of the mean score which represented the learners’ satisfaction. The results revealed that students’ overall satisfaction was reported at a high level as shown in Table 4.

Table 4: The students’ satisfaction on the explicit affixation instruction on English vocabulary development

<table>
<thead>
<tr>
<th>Component</th>
<th>( \bar{x} )</th>
<th>S.D.</th>
<th>level of satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students’ satisfaction on the explicit instruction</td>
<td>3.94</td>
<td>0.62</td>
<td>high</td>
</tr>
<tr>
<td>2. Students’ satisfaction on the advantage of English vocabulary learning</td>
<td>3.87</td>
<td>0.45</td>
<td>high</td>
</tr>
<tr>
<td>3. Students’ satisfaction on the English affixation learning</td>
<td>3.72</td>
<td>0.57</td>
<td>high</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.84</strong></td>
<td><strong>0.48</strong></td>
<td><strong>high</strong></td>
</tr>
</tbody>
</table>

In Table 4, the students’ satisfaction on the explicit affixation instruction on English vocabulary development showed at the high level (\( \bar{x} = 3.84 \), S.D. = 0.62). When looking into different components, the satisfaction on the explicit instruction was at the high level (\( \bar{x} = 3.94 \), S.D. = 0.45), the satisfaction on the advantage of English vocabulary learning was at the high level (\( \bar{x} = 3.87 \), S.D. = 0.57), and the satisfaction on the English affixation 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 most components, so they appeared to be satisfied with the explicit affixation instruction on English vocabulary development.

4. Conclusion

Based on the result, it was found that the pre-test scores of both groups were low and not statistically different at 0.01 levels. Both the subjects in control and experimental groups could rarely do the test. They may not have enough knowledge of affixation. This indicated that they were at the same level of English vocabulary knowledge. After being provided with the explicit affixation instruction, the subjects in the experimental group gained much improvement in their post-test performance. The post-test mean score of the experimental group (85.03) was much higher than that of the control group (70.80), and they were significantly different at the 0.01 level. The students in the experimental group who were
provided with the explicit instruction of affixation could gain the higher rate of achievement in the post–test. Also, the subjects in the experimental group showed positive satisfaction in the explicit affixation instruction on English vocabulary development. Thus, the explicit instruction of affixation can imply to be the effective method for students who are lack of English vocabulary knowledge. It is the appropriate method helps learners improve their English vocabulary development.

References


