



Redesigning Approach in Developing Vocabulary Skills among English Language (ESL) Learners: Efficacy of Direct Morphological Instruction

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Abstract— Reading is only completed with comprehension with which the acquisition of vocabulary plays a vital role. It necessitates reading teachers to innovate vocabulary teaching strategies that will cater the needs of English Language (ESL) Learners. The study investigated the efficacy of Direct Morphological Instruction in developing vocabulary skills. Quasi-experimental method of research was used in the study, specifically the non-equivalent control group design. Two (2) intact and comparable sections of Grade 7 pupils, consisting of 30 and 35 students, respectively, from the Laboratory High School in Nueva Ecija University of Science and Technology-Gabalton Campus were selected as participants of the study. The pre-test was administered to both groups prior the implementation of Direct Morphological Instruction to the Experimental Group and the traditional approach to the Control Group. The researcher-made learning module was used for the 15-day vocabulary-building remedial instruction. Upon completion of the 15-day vocabulary-building instruction, the participants were given a fifteen-item post-test, and the data gathered were then analyzed using inferential and descriptive statistics. The results revealed that Direct Morphological Instruction provided the participants with an evident progress in terms of their vocabulary skills but the difference between the post-test results of the Control and Experimental Group was not significant. Positive attitude of the respondents towards the vocabulary-teaching technique introduced was also affirmed in the results.

Keywords— vocabulary, morphological instruction, reading comprehension, experimental study, ESL

I. INTRODUCTION

Reading is clearly a process and is only completed when comprehension is attained (Buendicho, 2010) which supports Giron's (2016) statement that comprehension is the heart and goal of reading instruction. He further emphasized that vocabulary is very important to reading comprehension. It is substantiated by Scammaca et. al. (2007) when he stated that improved knowledge of word meanings and concepts is beneficial for students' reading comprehension. Readers cannot understand what they are reading without knowing what most of the words mean. Likewise, as children learn to read more advanced text, they must learn the meaning of new words. Typically, the research shows that the more words that a learner knows, the greater the likelihood of comprehension of the text (Schmitt et. al., 2011) lack of that knowledge is the main

and the largest obstacle for second language readers to overcome Schmitt (2010).

The literature on reading calls for the teaching of vocabulary because the number of words that a learner knows has a direct effect on reading comprehension. Recent research however indicates that teaching vocabulary may be problematic because many teachers are not confident about the best practice in vocabulary teaching and at times do not know where to begin to form an instructional emphasis on word learning.

In this view, recent researches focused on Morphological structure of words anchored on the concept of Verhoeven and Perfetti (2011) that good morphological awareness is an index of lexical quality because morphemes have semantic, phonological, and syntactic properties. In

addition, it is an indicator of highly specified lexical representations that is related to vocabulary knowledge.

They worked on Seidenberg's (2005) ideas that there are three interrelated cognitive systems involved in visual word recognition and pronunciation that facilitate an individual's ability to make meaning from print: the Phonological, Orthographic, and the Semantic systems which is shown in the triangle model of reading. And they affirmed that morphology plays the central role in the triangle model as it is associated simultaneously with orthographic, phonological, and semantic features of words and thus can influence all three of these cognitive systems in the process of reading and come up to the modified triangle of reading.

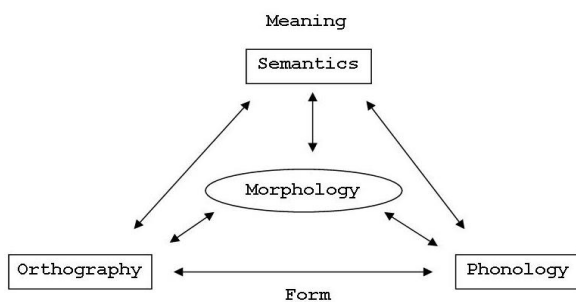


Fig.1: Modified Triangle Model of Reading (Seidenberg, 2005)

Wei (2012) in his Word Part Technique, proved that a very effective way of remembering new vocabulary is to relate it to words that are already known and that contain the same word stem or root word. He further illustrates that almost 60% of English vocabulary comes from French, Latin, or Greek and these languages make use of word parts – prefixes, suffixes and word stems. His Word Part Technique provides useful insights into the English language and its word building system which can be used for systematic teaching of new word stems as a part of vocabulary lesson. However, it is not a strategy for finding out the meaning of the word but a strategy for remembering the meaning.

Hence, this study adapted and modified morphological instruction considering the concept that learning to analyse the meaningful parts of a word enhances students' ability to decode words of more than one syllable and learns to identify words by breaking them down into morphemes, or meaning-bearing units (Gambrell & Morrow 2015). Knowledge of prefixes, roots, and suffixes can aid a reader in using context clues. Moreover, prefixes, suffixes, and Greek and Latin word parts tell readers something about word meaning. Thus, learning one word's part can add dozens of words to a reader's vocabulary.

Another important notion that has been reviewed is that explicit instruction in identifying prefixes and suffixes and learning the meanings of the most common affixes enables students to decode and understand the meaning of hundreds of words and word families, thus more quickly and broadly expanding their vocabulary than when they memorize lists of unrelated words (Gutlohn & Bessellieu, 2014). Particularly, struggling readers benefit from additional explicit instruction to help them acquire and apply tools to gain success in reading (Cantrell & Wheeler, 2011) as cited in Gambrell & Morrow (2015). Explicit teaching paired with attainable goals has been found to increase students' reading achievement levels (Triplet, 2007).

According to Buendicho (2010), pupils learn vocabulary directly when they are explicitly taught both individual words as well as word-learning strategies. Hence, Direct Morphological Instruction will be helpful for the pupils to learn difficult words, such as words that represent complex concepts that are not part of the students' everyday experiences and that direct instruction of vocabulary relevant to a given text leads to better reading comprehension.

II. METHODS

In this study, the experimental method was used particularly the pre-test-post-test group research which requires careful attention to be given to the assigning subjects to groups. However, in as much as the subjects would have been assigned to the groups prior to the inception of this investigation by virtue of their being students of particular classes, this design is referred to as —non-equivalent control group design, which falls under the quasi-experimental design.

Sampling Technique

Purposive sampling technique was used in assigning the two intact and comparable sections of the Grade 7 students in the Laboratory High School in NEUST –Gabaldon Campus who were officially enrolled during the Academic Year 2017-2018. From the two sections of Grade 7, section B being the Control Group and Section C being the Experimental group composing of 30 and 35 students, respectively, were the respondents of the study. They were particularly chosen after collecting and reviewing their grades in English 7 during the First Quarter. The mean scores of the first quarter rating of the control and experimental groups in English 7 differed by a slight margin of 0.36 with the computed t value of 0.438 which is less than the tabulated value of 2.00 in a two-tailed test at .05 level of significance. It indicates that there was no significant difference in the performance of the two groups

as far as their first quarter rating in English 7 was concerned.

Scope and Limitations

Data from students designated by the school as having learning disability, language impairment, or autism were excluded from the experiment.

Instruments

As basis, the researcher used a standardized reading comprehension test which was constructed with great precision by professional test makers and are intended to disperse scores across a wide range corresponding to the normal probability curve, thus, differentiating among the individuals taking the test (Mertler & Charles, 2008). Specifically, the researcher used the set of reading comprehension selections from the TOEFL Junior, the most widely respected English-language proficiency test in the world, in constructing the pre-test and post-test. The test was intended to measure the vocabulary size of the respondents. It consisted of 15 multiple choice items.

The validity and reliability of the pre-test and post-test was calculated via piloting the test items on thirty (30) students from the same grade level and section at Gabaldon Vocational Agricultural High School, the school nearest to the actual respondents' school. Its face validity was also confirmed by the researcher's adviser as well as members of the panel during the proposal defense.

Experimental Procedure

Proper coordination was done regarding the class schedule of the two sections which served as the participants of the study, thus, both groups were treated equally. The schedule of classes, the classroom situation and the method of teaching were considered to eliminate the effects of differentiated factors on the result of the experiment. Moreover, the physiological environment of the two groups' classroom was ensured to be comparable in terms of lighting and ventilations.

The researcher conducted the vocabulary-building sessions during the following schedule. The Experimental Group had their sessions every 9:15 to 9:45 in the morning from Monday to Friday. Whereas, the Control group had their sessions every 9:45 to 10:15 in the morning, that is, right after the experimental group. The vocabulary-building sessions were conducted in Room 2 and Room 3 at the Laboratory High School Department.

The frequency of teaching inputs is important. In accordance with Rose (2009) concept of "little and often" which is supported by Scammacca et. al. (2007) arguing for daily or near daily teaching sessions, thus, the schedule of sessions were conducted purposely thirty (30) minutes everyday for three consecutive weeks.

The researcher ensured that each vocabulary-building session that was taken up by both groups provided the respondents with exactly the same reading selections and set of words during the 15-day vocabulary-building sessions. The reading selections used in each session were taken from Superteacher.com, a cite providing various and valid activity sheets in all areas of English especially the reading selections. The researcher chose fifteen (15) short selections, stories, and passages appropriate for grade 7 pupils and made sure that each of those selections was localized and indigenized with the help and confirmation of her adviser and three other English teachers in the researcher's school.

During the experiment, the control group was subjected to the traditional way of vocabulary-building technique, that is, giving the students meaning of the words for them to memorize it, while in the experimental group, the researcher employed direct morphological instruction wherein the students were taught and guided to analyze the parts of the words for them to unlock their meaning. Each session lasting for thirty (30) minutes was incorporated and included in the respondents' English class schedule as part of their daily vocabulary development lessons from Monday to Friday within three (3) consecutive weeks.

The following were the steps followed in the experimental group: (1) the teacher introduced the specified topic regarding morphology; (2) the teacher gave sample of words and demonstrated how to analyze it (demonstrate);(3) the teacher, together with students analyzed the 10 word set (guided practice); (4) the teacher read the selection in which the 10 words that were analyzed beforehand while the students follow in their hand-outs; (5) the teacher gave the student the same 10 word set for the students to analyze them alone (independent practice).

Remedial sessions that are of short duration, but intensive, may offer the most efficient approach (Brooks, 2007). Considering the idea of having intensive and short duration of remedial sessions, the experimental sessions lasted for 30 minutes everyday for 3 consecutive weeks which were covered in the Third Quarter Period. This was also based on the frequency of Vocabulary Development in the DepEd's Curriculum Guide for Third Quarter A.Y. 2017-2018. After each session, both groups were given exactly the same type of vocabulary-building exercise or the independent practice which was recorded and reviewed by the researcher.

Pre-test and Post-test

Prior to vocabulary-building sessions, the respondents were given a pre-test which was administered individually during the regular class time at the respondents' school. The test was intended to measure the vocabulary size of

the respondents. It is composed of four reading selections adapted from the TOEFL Junior and a fifteen (15) multiple choice items of vocabulary test as suggested by the panel members. The teacher first read the reading selection before she did the same with the students to make sure that everyone has understood it. Afterwards, they were given enough time to answer the vocabulary questions after each reading selection.

On the other hand, the post-test was given after all the learning targets in the vocabulary-building sessions have been achieved within three (3) weeks.

The experimental period started on the second week of the Third Quarter Period and ended on the fifth week of the same grading period of Academic Year 2017-2018. The respondents of both groups were given thirty (30) minutes to answer the post-test which is expected to define the effectiveness of the devised vocabulary-building technique.

Statistical Treatment

To determine the comparability of the control and experimental groups, the mean, standard deviation and t-test were used based on their Grade in English 7 during the First Quarter. The researcher also used the same treatment to compare the performance of the two groups in their pre-test and post-test.

The hypotheses were tested at .05 level of significance. The formulas that were proposed by Johnson were used to compare the data.

The t-test was used to test the comparability of the two groups and to determine the significant difference of the pre-test and post-test of the experimental and control groups. The t-test for independent samples was used. This is a non-directional or two-tailed test at $\alpha = .025$ with n_1+n_2-2 degree of freedom.

III. RESULTS AND DISCUSSION

1. Pre-Test Scores of the Control and Experimental Groups

Table 1. Comparison of Pre-Test Scores of the Control and Experimental Group

Mean	Mean	t value	p value	VI
Control Group Pre-test results	Experimental Group Pre-test results			
4.2571	4.3333	-0.163	0.871	Not Significant

The comparison of the pre-test results of both the control and experimental groups is shown in the table above. It manifests that when the pre-test of the control and experimental groups were compared, the computed t-value is -0.163 and the p-value is 0.871 indicating that the mean performance of the control and experimental groups in their pre-test results did not differ significantly.

It further implies that the two groups were comparable in terms of vocabulary size. This indicates that the control and experimental groups were comparable at the beginning of the experimental period.

2. Pre-Test and Post-Test Results of the Control Group

Table 2. Comparison of the Pre-Test and Post-Test Results of the Control Group

Mean	Mean	t value	p value	Verbal Interpretation
Pre-test results	Post-test results			
4.2571	5.9429	-3.548	0.001	Significant

The comparison of the pre-test and post-test of control group is shown in the table above. Considering the mean of pre-test results which is 4.26 and the mean of post-test results which is 5.94, and the computed t-value was -3.55 with the p-value of 0.001, it indicates that the performance of the control group in their pre-test and post-test differed significantly. It can be concluded that the control group showed progress with regards to their vocabulary skills. This means that traditional vocabulary-building technique helped the respondents develop their vocabulary.

The most common way of English Language (ESL) teachers in developing vocabulary among Filipino learners is presenting the words and letting them memorize it or the Whole Word Approach. Using the Whole Word Approach, learners are taught to read by sight and relies upon memorization via repeated exposure to the written form a word paired with an image or an audio. One of the word-attack techniques used is the word bank technique wherein a student is asked to memorize a pool of words, especially those that are unfamiliar to them. This makes them aware of its meaning and grammatical function. While the approach did have a positive effect on later reading achievement, students must be taught with word structures that they are familiar with and to discourage rote memorization.

3. Pre-Test and Post-Test Results of the Experimental Group

Table 3. Comparison of Pre-Test and Post-Test Results of the Experimental Group

Mean	Mean	t value	p value	Verbal Interpretation
Pre-test results	Post-test results			
4.3333	5.9	-3.638	0.001	Significant

Considering the mean of the pre-test results which is 4.33 and the mean of post-test results which is 5.9, and the computed t-value which is -3.64 with the p-value of 0.001, it indicates that the performance of the experimental group in their pre-test and post-test differed significantly. The Experimental group showed an evident progress with regards to their vocabulary skills. This means that Direct Morphological Instruction contributed to the development of the participants' vocabulary.

Considering the concept that learning to analyze the meaningful parts of a word enhances students' ability to decode words of more than one syllable and learns to identify words by breaking them down into morphemes, or meaning-bearing units, the author believed that knowledge of prefixes, roots, and suffixes can aid a reader in using context clues. The word learning strategy was also done explicitly considering the fact that struggling readers benefit from additional explicit instruction to help them acquire and apply tools to gain success in reading.

4. Post-Test Results of the Control and Experimental Group

Table 4. Comparison of the Post-Test Results of the Control and Experimental Group

Mean	Mean	t value	p value	VI
Control Group	Experimental Group			
5.9429	5.9	0.095	0.925	Not Significant

When the post-test of the control and experimental groups were compared, the computed t-value is 0.095 and the p-value is 0.925 indicating that the mean performance of the control and experimental groups in their post-test results did not differ significantly. The table further reflects that the two groups' performance in terms of vocabulary size had no significant difference.

This indicates that the control and experimental group gained the same progress from both the traditional

technique and the devised technique which is the Direct Morphological Instruction.

The profile of the participants substantiated the above findings. It clearly showed that most of the participants' parents in the control group have graduated from college and that most of them have various reading materials like reference books at home which could have helped them perform in the post-test considering that parent's background is an important aspect to be given attention in describing students' performance, and being one of the factors that positively relates to children's academic achievement (Umali, 2013). She further emphasized that if parents have good educational background, they would likely be able to guide their children and help them in their academic difficulties. Also, Wu (2013) in his study is convinced that higher-educated parents will place more emphasis on academic achievement and will create home situations that are conducive to study and concentration.

Likewise, having a lot of reading materials was also found to have relevance to the findings because wide reading is related to increases in general knowledge and comprehension (Seitz, 2010) and it is generally accepted that reading is beneficial to vocabulary acquisition (Perfetti, 2010).

5. Pre-Test and Post-Test Results of the Experimental Group

Table 5. Pre-Test and Post-Test Results of the Experimental Group Using the Given Rubrics

Numeric al Score	Verbal Description	Pre-Test		Post-Test	
		F	%	f	%
15	Mastery	0	0.00	0	0.00
10 - 14	Proficient	0	0.00	0	0.00
5 - 9	Developing	13	43.33	24	80.00
4 and below	Needs Improvement	17	56.67	6	20.00
Total		30	100.00	30	100.00

The table presents the pre-test and post-test results of the experimental group using the given rubric. It is clearly shown that 17 or 56.67 % of the respondents in the experimental group were in the level which needs improvement having a score of 4 and below, whereas, on their post-test results, 24 or 80% of them have advanced to the developing level. Thus, it can be safely said that the respondents in the experimental group have showed an evident progress after being exposed to the Direct Morphological Instruction as a vocabulary-building technique.

6. Respondents' Attitude towards Direct Morphological Instruction

The attitude of the respondents towards the employment of Direct Morphological Instruction as a vocabulary-building technique was described in the study. It is clearly shown that all of the ten (10) statements describing the acceptability of the Direct Morphological Instruction got the weighted mean that is within the range of 3.25-4.00 which is verbally described as Strongly Agree. Thus, it can be inferred that almost all of the respondents strongly agreed that they enjoyed and were interested in the devised vocabulary-building technique. This is further supported by the overall weighted mean of 3.58 which is verbally interpreted as "Strongly Agree".

The attitude of students towards learning is an influencing factor that affects their reading comprehension performance (Umali, 2013). Students will more likely comprehend the word if they are interested in what they are doing. It is parallel with McGeown's, et. al. (2015) findings that children's attitudes to reading, reading confidence and enjoyment of learning to read correlated with their word reading skill. Thus, it is important to provide the students with activities that may interest them.

IV. CONCLUSION

In as much as Grade during the First quarter in English 7 is concerned, both of the groups were in the Developing level. It is ensured that both of the control and experimental groups were comparable in terms of vocabulary at the beginning of the experimental period. The results showed that both of the techniques used, the traditional and the devised technique, Direct Morphological Instruction, contributed almost the same progress to the respondents with regards to their vocabulary skills. However, using the given rubric, the respondents in the experimental group have showed an evident progress after being exposed to the Direct Morphological Instruction as a vocabulary-building technique. The participants in the experimental group further affirmed that they enjoyed the vocabulary-building sessions employing Direct Morphological Instruction. In sum, Morphological instruction may be an integral part of reading instruction. Explicit instruction on Morphology provides the greatest impact. Students who learn how to attach meaning to parts of words will be empowered to be better readers. Hence, Direct Morphological Instruction can be effective vocabulary-building approach for adolescent readers.

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