**IMPROVING VOCABULARY MASTERY AND READING COMPREHENSION OF
EIGHTH GRADE STUDENTS OF SMPN 18 BENGKULU THROUGH
MORPHOLOGICAL AWARENESS INSTRUCTION**

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Abstract

The purpose of this study was to find out whether or not Morphological Awareness Instruction could improve students' vocabulary mastery and reading comprehension. This study also aimed to find out the students' perception concerning the use of Morphological Awareness Instruction. A true experimental research method was applied to achieve the goal. The sample of this study was sixty students of SMPN 18 Kota Bengkulu which were chosen by using two stages of random sampling. To collect the data set of questionnaire and tests were used. Independent sample t-test was applied in analyzing the data. The results showed that (1) Morphological Awareness Instruction significantly improved students' vocabulary mastery; (2) Morphological Awareness Instruction significantly improved students' reading comprehension, and (3) there were positive perceptions of the students toward the use of Morphological Awareness Instruction in learning vocabulary and reading.

Keywords: Morphological Awareness Instruction, vocabulary mastery, reading comprehension.

INTRODUCTION

Vocabulary is a vital aspect in language. It is one of the language components in four language skills. For the students, vocabulary helps them practice and perform their language skills better. The students can write sentences easily either oral or in written by having a lot of vocabulary. Nunan (1991) states that the students who have rich vocabulary might become a successful English learner. On the other hand, it will be difficult for the students to master the other language skills without mastering vocabulary. In general, no language acquisition is possible without understanding the vocabulary both in the first and the second language (Kweldju, 1997 as cited in Jumariati, 2010, p. 2).

The students need not only to learn a lot of words but also to remember them. Thornbury (2002) states that learning is remembering. In fact, many students find some difficulties to

remember the vocabulary that is taught by the teacher in learning English vocabulary. Some evidences prove that learners find it difficult to learn English Vocabulary. According to researcher's interview with the teacher and students of SMP N 18 Bengkulu, the students remember a little bit of English Vocabulary. The students remember the vocabulary only at the time they learn and then they forget the vocabulary they have learned.

Students also complain that their school grade is always low in English subject because they have a problem remembering the words in learning English vocabulary. The difficulties in remembering English vocabulary can arise from the technique that is used by the teacher in teaching English vocabulary in classroom.

English, like many other languages, consists of four skills, listening, speaking, reading and writing. Among the four skills, reading is the skill that may often be used and it is an essential foundation of learning and seeking information and knowledge. The information one gets from reading can help him/her in his/her study and enables them to gain good grades.

Comprehension is a very essential thing in reading. Reading is a complex task requiring different skills and knowledge in a single performance. According to Alyousef (2006, p. 64) there are at least six general skills and knowledge involved in reading. They are automatic recognition skills, vocabulary and structural knowledge, formal discourse structural knowledge, content/world background knowledge, synthesis and evaluation skills/strategies and metacognitive knowledge and skills. Therefore, there are many students that fail to reach the required reading performance in reading comprehension tests because they do not have those skills and knowledge.

Many factors also contribute to the students' success in reading, such as students' motivation, students' confidence, and students' own skills (Simanjuntak, 1988, p.2-13). Then, Simanjuntak also mentions that those factors can be optimized into good way if the teacher can use good technique in the classroom. To make any sense of information or trully comprehend the text, a reader should involve several other skills and strategies, such as predicting, inferring, questioning, making connections, evaluating, visualizing, note-taking, and so on (Riverside Unified Shool District, 2004).

Morphological Awareness Instruction, as some experts have proven by their research, can be a solution for vocabulary and reading comprehension problem. According to Nagy,

Berninger and Abbott (2006), Morphological Awareness influence reading comprehension directly, it also contributed to reading comprehension indirectly that it is contributed significantly to vocabulary which in turn contributed significantly to reading comprehension.

Morphological awareness has been found to make a significant contribution to passage-level reading comprehension over and beyond key reading-related variables such as phonology and vocabulary (Carlisle, 1995) and Carlisle (2000) also reported that morphological awareness was a significant predictor of reading comprehension in Grade 5. Furthermore, Nagy, Berninger and Abbott (2006) states that morphological awareness made a strong, unique contribution to reading comprehension in Grades 4–9. Similarly, Katz (2004) reported that morphology was a strong contributor to reading comprehension above and beyond its relation with vocabulary in Grades 4 and 6.

In this study, the writer wanted to find out whether or not there was any significant difference in vocabulary mastery and reading comprehension of students who were taught by using Morphological Awareness Instruction as compared to those who were not and to find out the students' perception about the use of it. The writer conducted this research by involving the eighth grade students of SMP N 18 Kota Bengkulu.

METHOD

Research Design

In conducting the study, the writer used a true experimental research method. The research design was pretest-posttest non equivalent group design. The students of experimental group for vocabulary and experimental group for reading got the treatment intensively by using Morphological Awareness Instruction.

Population and Sample

The population of this study was the eighth grade students of SMPN 18 Bengkulu in academic year 2014/2015. There were total 72 students from 3 Classes. 60 students selected by using two stages of random sampling method and they were divided into 3 groups where each group consisted of 20 students.

Teaching Procedure

In this research the procedures of treatment were as follows: The researcher divided the students into three groups consisted of two experimental groups and a control group. Next, the pretest was given to all groups. In the treatment, the researcher used morphological

awareness instruction strategy to the experimental group for vocabulary and experimental group for reading while for control group the researcher did not give any treatment. The last, posttest was given to the three groups.

Experimental Group 1- Vocabulary

1. Pre Activities

- The teacher reviewed the last lesson then the students repeated the vocabulary and dialogue taught yesterday by using flashcards and the textbook.

2. Whilst Activities

- Teacher gave and taught new words to the students. Teacher asked the students to identify the words morphologically and then the students had a discussion before they did it by themselves

3. Post Activities

- Teacher closed the teaching and learning activities

Experimental Group 2- Reading

1. Pre Activities

- The teacher asked them pre-reading questions to establish background knowledge of the context and then told them the topic of today's reading text and lesson.

2. Whilst Activities

- The teacher told the reading text to the students and asked them to use their background knowledge to guess what the text talked about.
- After checking the students' comprehension, the teacher led them to read the text aloud. Then they read the text aloud by themselves.
- The teacher told the students that before explaining the reading text in detail, the teacher was going to review the grammar focus(morphology)
- The teacher distributed the worksheets then the teacher used the example on the worksheet to do a demonstration and led the students to do the exercise.

3. Post Activities

- The teacher summarized the reading text.
- The teacher re-stated the rules of grammar focus

Instrumentations

The data were collected by using tests and questionnaire. Tests were used to find out the students' vocabulary mastery and reading comprehension before and after the treatment. Tests were also administered to see the significant difference between students' vocabulary

mastery and reading comprehension in experimental and control group. In study, there was morphological awareness test that contained word identification, word analogy and morpheme identification test. These morphological awareness tests were adapted from Chang, Wagner, Muse, Chow, and Shu (2005). To collect the data for reading comprehension, the writer also used test. The total number of test was 40 multiple choice questions.

Questionnaire was given to the students to know about their perceptions concerning the use of morphological awareness instruction in improving their vocabulary mastery and reading comprehension. There were three general questions after the students finish their reading tasks and in order to gain a better understanding of the participants' perceptions of the tests and their vocabulary learning, specific questions are included at the end of each test (Vocabulary Level Test, Morpheme Identification and Morphological Structure Awareness test) and more general questions were given after completion of all three tasks.

Data Analysis

The vocabulary level test was summarized by mean frequency and standard deviation across the three different levels (2000, 3000 and 5000). The scores obtain were added to get the total scores of the three levels. In order to highlight the differences in the vocabulary knowledge that was employed by each groups, the results of all the participants in total and the separate results of each group (experimental and control group) were compared. The results of the morphological awareness test were also analyzed for the mean for the two parts (Morpheme Identification and Morphological Structure) and the group as the whole.

To analyze the data of reading comprehension, students' scores were determined by calculating the correct answer. One correct answer was scored 1. The result of students' reading comprehension was taken from the numbers of the right answers were divided to the total number of the test and multiplied by 100. Independent group t-tests were carried out to see if the groups mean differences were significant.

FINDINGS AND DISCUSSION

Normality and Homogeneity of the Data

The data of the study were analyzed by using normality and homogeneity tests before the data were analyzed statistically. Shapiro-Wilk test was used to analyze the normality and Levene's test was applied to obtain the homogeneity.

Table 1. Result of Normality and Homogeneity Analysis

Group	Pretest			Posttest		
	Statistic	Df	Sig.	Statistic	df	Sig.
Vocabulary 1 (Control)	.939	20	.228	.967	20	.700
2 (Experimental)	.979	20	.918	.928	20	.143
Reading 1 (Control)	.950	20	.371	.958	20	.497
2 (Experimental)	.962	20	.587	.962	20	.577
Levene Test for Equality of Variances						
Type of Test	Levene Statistic		Significance			
Vocabulary Pretest	1.184		0.283			
Vocabulary Posttest	9.497		0.003			
Reading Pretest	0.445		0.509			
Reading Posttest	1.291		0.263			

As presented in Table 1, since all the p-values of the normality and homogeneity tests exceeded 0.05, it can be concluded that the data were both normal and homogeneous.

Descriptive Statistics

Vocabulary Test

There were 115 questions in vocabulary test which were divided into 2 parts. The first part was 90 vocabulary level tests (2000, 3000, and 5000 word level), the second part was 25 questions of morphological awareness test. In the control group's pretest, the highest score was 75.4; the lowest was 17.7; the mean was 54.5. In the posttest, the highest score was 79.9; the lowest was 23.5; the mean was 57.8. In the experimental group's pretest, the highest score was 77.8; the lowest was 35.6; the mean was 59. In the posttest, the highest score was 97.2; the lowest was 78.1; the mean was 87. The complete results of the pretest and posttest of students' vocabulary test scores are in the Appendix. Table 7 shows students' scores distribution in the control and experimental groups.

Table 2 The Score Distribution of Students' Vocabulary Test in the Control and Experimental Groups

Score	Category	Experimental Group				Control Group			
		Pretest		Posttest		Pretest		Posttest	
Interval		F	%	F	%	F	%	F	%
80-100	A	0	0.0	16	80.0	0	0.0	1	5.0
70-79	B	4	20.0	4	20.0	3	15.0	3	15.0
56-69	C	9	45.0	0	0.0	8	40.0	7	35.0
<55	D	7	35.0	0	0.0	9	45.0	9	45.0

Table 3 The Mean Posttest Score of Students' Vocabulary Test in the Control and Experimental Groups

Group	Vocabulary Test				
	Level 2000	Level 3000	Level 5000	MA Test	MST Test
Control	13(43,6)	12(40,7)	6(21,0)	5(96,0)	13(66,0)
Experimental	27(91,3)	26(87,2)	22(73,7)	5(100)	16(79,3)

In Table 2, the results showed that in the pretest there was no student (0%) who was in the 80-100 score interval. There were 4 students (20.0%) in the 70-79 score interval, 9 students (45%) were in the 56-69 score interval, and 7 students (35.0%) were below 55 which mean that 16 students failed. In the posttest, the students' vocabulary score increased. There was 16 student (16.0%) who gained score >80. One student got the highest score with the score 97.2. In the 70-79 score interval, there were 4 students (20%) and there was no student who got score below 70.

While in control group's pretest, the highest score was 75.4, the lowest was 17.7, and the mean was 54.5. In the posttest, the highest score was 79.9, the lowest was 23.5, and the mean was 57.8. In table 7, the results also showed that in the control group pretest and posttest there was no student (0%) who gained scores >80. In pretest, there were 3 students (15.0%) in the 70-79 score interval, 8 students (40.0%) were in the 56-69 score interval, and 9 students (45%) gained score below 55.

In the posttest, there was 1 student (5.0%) who gained score >80. The students in the 70-79 score interval were 3 students (15.0%) and 16 students (80%) gained score below 70 and they were still failed. The result was also counted for every aspect. The mean posttest scores for each aspect in experimental group were higher than control group. Table 3 shows the students' mean scores in posttest of control and experimental group.

Reading Comprehension Test

There were 40 questions in reading comprehension test. In the control group's pretest, the highest score was 70; the lowest was 32.5; the mean was 51.9. In the posttest, the highest score was 72.5; the lowest was 35; the mean was 56.1. In the experimental group's pretest, the highest score was also 70; the lowest was 27.5; the mean was 51.5. In the posttest, the highest score was 90; the lowest was 50; the mean was 71.9. It shows that the posttest mean score in the experimental group was higher than control group. The complete results of the

pretest and posttest of students' reading comprehension test scores are in the Appendix. Table 9 shows students' scores distribution in the control and experimental groups.

Table 4 The Score Distribution of Students' Reading Comprehension Test in the Control and Experimental Groups

Score	Category	Experimental Group				Control Group			
		Pretest		Posttest		Pretest		Posttest	
Interval		F	%	F	%	F	%	F	%
80-100	A	1	5.0	4	20.0	0	0.0	0	0.0
70-79	B	1	5.0	7	35.0	2	10.0	4	20.0
56-69	C	5	25.0	8	40.0	6	30.0	7	35.0
<55	D	13	65.0	1	5.0	12	60.0	9	45.0

In Table 4, the results showed that in the pretest there was only 1 student (5.0%) who was in the 80-100 score interval and also 1 student (5.0%) in the 70-79 score interval, 5 students (25.0%) were in the 56-69 score interval, and 13 students (65.0%) were below 55. This means students reading comprehension was very low.

In the posttest, the students' reading comprehension score was increased. There were 4 students (20.0%) who gained score >80. One student got the highest score with the score 90. In the 70-79 score interval, there were 7 students (35%), 8 students gained score >60 and there was only 1 student got score below 55. It shows a significance increasing of students' score after the treatment.

On the other hand, in control group's pretest, the results showed that in the control group pretest and posttest there was no student (0.0%) who gained scores >80. In pretest, there were 2 students (10.0%) in the 70-79 score interval, 6 students (30.0%) were in the 56-69 score interval, and 12 students (60.0%) gained score below 55. The scores also show the lack of students' reading comprehension.

In the posttest, there was no student (0.0%) who gained score >80. The students in the 70-79 score interval were 4 students (20.0%) and 16 students (80%) gained score below 70. This result means most of the students' scores have no differences between pretest and posttest. Almost all of the students still failed.

t-Test Analysis

The results of independent sample t-test of students' reading comprehension in the experimental and control group were presented in Table 9. The mean score of vocabulary mastery posttest in the control group was 57.8 and in the experimental group was 86.8. So,

there were 28.945 differences in the mean of both groups. The significance level of students' reading comprehension was 0.00. This result indicated that there was significant difference of students' vocabulary mastery because the significance level was lower than alpha (0.05).

Table 5 The Results of Independent Sample t-test of Students' Vocabulary Mastery and Reading Comprehension in the Control and Experimental Groups

	Group	Mean score of posttest	Mean Difference	Std. Deviation	Sig (2-tailed)
Vocabulary	Control	57.835	28.9450	14.4749	.000
	Experimental	86.780		6.2450	
Reading	Control	56.125	15.8000	11.7673	.000
	Experimental	71.925		10.0332	

The same way was used to calculate the result of independent group t-test of students' reading comprehension. As the result, the mean score of students' reading comprehension posttest in the experimental group was 56.1 and in the control group was 71.9. There were 15.80 differences between the mean of these groups.

Based on the results presented in Table 5, the significance level of students' reading comprehension score was 0.000. It means that there was a significant difference between students' reading comprehension in the control and experimental group. In sum, there were significant differences in students' vocabulary mastery and reading comprehension in the both groups but the gain score of vocabulary and reading comprehension in experimental group was higher than the control group.

Students' Perceptions

Questionnaires were administered to find out about students' perception towards the use of morphological awareness instruction to improve students' vocabulary mastery and reading comprehension. To judge the students' perception on the morphological awareness, there were two questions asking their opinions about 1). The difficulty level of the two types of the tests, and 2). Their preferences for one of the two types. These perceptions give insight into the relative difficulty of the two types of morphological awareness. More than one-third of the students considered that the Morpheme Identification test was neither difficult nor easy. In addition, there were approximately 3% more students who considered this task easy compared with students who found it a difficult test. On the other hand, approximately 39% of the students thought that the Morphological Structure test was a difficult test. Approximately 65% of the students preferred the Morpheme Identification to the

Morphological Structure test. These findings are consistent with the ceiling effect evident in the results of Morpheme Identification test.

In order to find out the students' perception concerning the use of morphological awareness instruction to improve their reading comprehension, the writer administered questionnaire consisted of 3 questions which has close and open ended answers. The questions asked the students' opinion whether morphological awareness Instruction technique can improve their reading comprehension or not; whether the students want to learn English by using Morphological Awareness technique or not; and the students' opinion about the strengths and weaknesses of morphological awareness instruction technique implementation in classroom.

The students could answer Yes or No. All the students said that the technique could improve their reading comprehension and they want to learn English by using this technique. In sum, there were 3 reasons given by the students. They were; 1). Morphological Awareness Instruction technique make the students find the meaning of new words easier; 2). It was easier for the students to get main idea of a paragraph; and 3). It was easier for the students to read some text contained difficult words. However, according to the students' opinion, this technique also has some weaknesses such as; 1). It took time to arrange the words orderly/morphologically; 2). It took longer time than English school hours (2x45 minutes) to learn morphological awareness instruction; and 3). The material especially in learning reading, the material should really fit to learning context.

Interpretations

Based on the result of analyses and findings, there was a significant difference in vocabulary mastery between students who were taught by using Morphological Awareness Instruction and those who were not. It is shown by students' scores after being given a treatment in experimental group which were higher than students' scores in control group. This finding was similar to some studies which found significant differences in the students' vocabulary size and growth when the students were taught by using Morphological Awareness Instruction (Anglin & Wakefield, 1993; Nurhemida, 2007; Al Farsi, 2008).

Furthermore, there were strong differences between the students' pretest and posttest scores of control and experimental group. The mean differences showed that morphological awareness instruction was really helpful for the students to improve their vocabulary mastery as previously Carlisle (1995) has proven that morpheme identification can be seen as a problem- solving strategy that can be used to understand a large number of derived words.

Therefore, morphological awareness is crucial for developing children's independent, vocabulary learning strategies.

Dealing with students' reading comprehension, this study also found that there was a significant difference between the students who were taught by using morphological awareness and those who are not. This result was in line with the previous related study that morphological awareness may lead to comprehension, which eventually will increase vocabulary size, is by facilitating the process of breaking down morphologically complex words. When encountering morphologically complex words in the text, students apply their morphological knowledge to break down the complex words into meaningful morphemes as a way to better understand the word meaning (Wagner, Muse, & Tannenbaum, 2006).

From the results of the questionnaire, we can figure out that there was a positive perception from the students towards the use of morphological awareness instruction technique. The students agreed that this technique could increase their vocabulary and text comprehension. While the result showed that posttest scores in control group was also significantly improved, the students' posttest gain scores in experimental group were highly improved than control group after the treatment. This improvement could be caused by the effectiveness of the technique and in line with the previous study that has done by Curinga (2014). Her research found that there was strong contribution of morphological awareness in improving students' English vocabulary and reading comprehension.

CONCLUSION

Based on the results of the study, analysis, and interpretations several conclusions can be drawn. First, there was a significant difference in vocabulary mastery between students who were taught by Morphological Awareness Instruction and those who were not.

Second, there was a significant difference in reading comprehension between students who were taught by using Morphological Awareness Instruction as compared to those who were not. In sum, using Morphological Awareness Instruction was also significantly improve students' reading comprehension as compared to those who were not.

Then, the students gave various answers to show their perceptions towards the use of Morphological Awareness Instruction in learning vocabulary and reading. They said that using MAI technique was effective to improve their vocabulary and comprehension of a text or paragraph. The students also said that Morphological Awareness Instruction technique make them find the meaning of new words, get main idea of a paragraph and read some text

contained difficult words easier. However, sometimes they felt that it took a little longer time to arrange some words morphologically in order to get the right meaning.

Based on the conclusions, there are some suggestions for English teachers, students and the future researcher who are interested to do a similar research. For English teachers, Morphological Awareness Instruction can be an alternative way in teaching vocabulary and reading.

The students will have a better way to develop their analogy skill in order to help them to get the highest achievement. For students, the contribution of this technique is also recommended for better experience in learning. The students can enrich their vocabulary and have better reading comprehension because this technique provides them to exploit their reading skill and strategy.

Finally, for the researchers who want to conduct similar research, it is recommended to do a preliminary study about the targeted sample. The material should be really fit to the sample's level. Especially to teach reading, the text/material should cover the theme for each meeting. Research in other levels of students is also recommended to know the effectiveness of this technique with different levels of students.

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