

# THE EFFECTIVENESS BETWEEN DISCOVERY LEARNING AND WORD WALL METHODS IN IMPROVING VOCABULARY AT SEVENTH GRADE STUDENTS

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## Abstract

Some of the teacher is having a problem when using discovery learning as a method to improve the vocabulary of a student. Based on the objective of this research, the writer conduct wordwall method on SMP mutiara 1 Bandung that will help on improving student vocabulary, and hopefully it can be applied simultaneously to increase interest in learning especially in English course in SMP Mutiara 1 Bandung. Based on the results of research that has been done by the writer, there are very helpful results in developing the method of Word Wall as a teaching material capable of improving the quality of learning and also can improve students vocabulary. From the test results of normality and homogeneity that the data used is homogeneous and distributed normally, so that the process of the research can be continued as it should be.

**Keywords:** Vocabulary, Discovery Learning, Wordwall

## INTRODUCTION

In this study writers conducted a study in SMP Mutiara 1 Bandung, this is one of the junior high school lies in Jl. Maleber utaran No 37, Bandung. There are 7 Class at this school, there is 3 Class of class VII, 2 class of class VIII and 2 class of class IX. Writers was given the opportunity to conduct research at the SMP Mutiara 1 Bandung, this relates to the student's lack of interest in foreign language lessons. The use of a good method can usually provide a new atmosphere for students in the learning process, learning will be effective if there is a strong willingness from the students. Therefore, an effective learning is characterized by the occurrence of the processes of learning in students. A person is said to have undergone a learning process when in the inside is changes, from not knowing became know, from don't understand be understood, etc. (Aunurrahman, 2010, p. 34).

According to Apsari, Mulyani & Lisdawati (2019), teaching strategy is a means that teacher chose and used for delivering learning material. Based on the results of observation on SMP Mutiara 1 Bandung, the usual method that was used is discovery learning methods. It turns out that discovery learning methods, there are many students who have difficulty in understanding a vocabulary. The method of discovery learning itself can be defined as the process of learning occurs when students are not presented the information directly, but students are required to organise the understanding of that information independently.

To improve the students' learning interest toward reading skill, the lecturer need to know the nature of reading, how to teach reading effectively, and what instructional materials is the most suitable for their students, in addition to pedagogical competencies (Parmawati & Yugafiati, 2018, p. 2). Writer assume that the use of methods of Discovery learning in SMP Mutiara 1 Bandung is less appropriate in the process of learning in the classroom, so that the student needed stimulus variations from the other learning methods, such as the Word Wall method.

From this problem, writer uses word wall method to compare between discovery Learning Approach that was used in SMP Mutiara 1 Bandung, so the title of these research is : "EFFECTIVITY BETWEEN DISCOVERY LEARNING AND WORD WALL METHODS IN IMPROVING VOCABULARY ON VII Th GRADE".

### **Discovery Learning Approach**

According to Suprihatiningrum (2014, p. 244), there are two ways in Discovery Learning, namely: 1) Free Discovery Learning i.e. discovery learning without any hint or direction. 2) Guided Discovery Learning i.e. learning that takes the role of the teacher as a facilitator in the process of his education.

Discovery Learning methods can be implemented in one communication or two-way communication depending on the magnitude of the classes, which are described in more detail as follows (Hamalik, 2009, p. 187): 1) one-way approach direction System based on the presentation of one way that's done by the teacher. The structure served in the form of stimulating students doing discovery process in front of the class. The teacher submits a problem and then solve those problems through the steps of discovery. 2) a two-way system, a two-way system involve a students in answering the questions of the teachers. Students doing discovery, while the teachers guide them in the right direction.

### **Word Wall Method**

Word wall is a collection of vocabulary that organized systematically shown with large letters and taped on the wall of a classroom. (Cleaver, 2018) a walls is dedicated to displaying high frequency words (these could be sight words or words that are used a lot in your class) that are important for your students to know and use. Word wall is a media content that should be used instead of just displayed or viewed. This media can be designed to enhance learning and group activities and also involve the students in the creation and activity of its use.

By using the word wall it is expected that students will increase their English vocabulary comprehension without having to always depends on the use of a dictionary or meaning of the word given by the teacher. There are two main approaches in popular vocabulary learning, namely: a) word list approach, b) contextual approach. Word list approach for examples that gives a list of words and their meanings directly on the students. A list of these words probably has to do with the topics being studied by students or maybe not. The second approach is a contextual approach to vocabulary learning, resting on a range of activities related to searching for the meaning of a word. (Sulistiyani & Susanti, 2017, p. 3) By applying word wall, students can remember the vocabulary without feeling that they are very serious in studying. Through the habit such as looking the word wall, indirectly they remember the vocabulary.

Of the two approaches above according to the writer, the frugal approach is most enjoyable for students is a contextual approach. This is due to that all students can engage directly through a variety of activities to seek and find the meanings of a word with mentored by teachers, although of course not to always use this approach every times writer entering class. Writer uses the word list approach when students ask about the meaning of the vocabulary that has been pronounced by the writer. Writer has put into practice the learning of vocabulary using a contextual approach that is by using Word Walls as a media.

**METHOD**

The research experiments with this type is quasi-experimental design. Experiments in which research in this study provided a special treatment against a sample of research” (Sugiyono, 2011, p. 172). Experimental model used is a Pretest-Posttest Experiment class and Control class. This research was conducted at SMP Mutiara 1 Bandung, with a population in the research are 2 classes, namely class VII-1 and Class VII-2 that each class have 29 students. Below is the result of pre test and post test of the students :

**Table 1. Result of Pre Test and Post Test**

| NO | NAME       | EXPERIMENT CLASS |           | NAME       | CONTROL CLASS |           |
|----|------------|------------------|-----------|------------|---------------|-----------|
|    |            | Pre-Test         | Post-Test |            | Pre-Test      | Post-Test |
| 1  | STUDENT 1  | 78               | 82        | STUDENT 1  | 68            | 75        |
| 2  | STUDENT 2  | 70               | 74        | STUDENT 2  | 72            | 80        |
| 3  | STUDENT 3  | 73               | 80        | STUDENT 3  | 65            | 73        |
| 4  | STUDENT 4  | 68               | 76        | STUDENT 4  | 68            | 77        |
| 5  | STUDENT 5  | 73               | 80        | STUDENT 5  | 67            | 74        |
| 6  | STUDENT 6  | 70               | 75        | STUDENT 6  | 72            | 73        |
| 7  | STUDENT 7  | 73               | 76        | STUDENT 7  | 70            | 75        |
| 8  | STUDENT 8  | 68               | 77        | STUDENT 8  | 76            | 79        |
| 9  | STUDENT 9  | 74               | 80        | STUDENT 9  | 69            | 73        |
| 10 | STUDENT 10 | 64               | 75        | STUDENT 10 | 74            | 79        |
| 11 | STUDENT 11 | 66               | 75        | STUDENT 11 | 70            | 76        |
| 12 | STUDENT 12 | 61               | 64        | STUDENT 12 | 71            | 73        |
| 13 | STUDENT 13 | 81               | 84        | STUDENT 13 | 70            | 74        |
| 14 | STUDENT 14 | 71               | 76        | STUDENT 14 | 68            | 74        |
| 15 | STUDENT 15 | 75               | 79        | STUDENT 15 | 65            | 73        |
| 16 | STUDENT 16 | 79               | 82        | STUDENT 16 | 74            | 80        |
| 17 | STUDENT 17 | 67               | 76        | STUDENT 17 | 62            | 70        |
| 18 | STUDENT 18 | 72               | 79        | STUDENT 18 | 69            | 78        |
| 19 | STUDENT 19 | 74               | 78        | STUDENT 19 | 65            | 69        |
| 20 | STUDENT 20 | 60               | 68        | STUDENT 20 | 65            | 74        |
| 21 | STUDENT 21 | 74               | 80        | STUDENT 21 | 71            | 77        |
| 22 | STUDENT 22 | 66               | 69        | STUDENT 22 | 66            | 72        |
| 23 | STUDENT 23 | 60               | 70        | STUDENT 23 | 74            | 78        |
| 24 | STUDENT 24 | 64               | 67        | STUDENT 24 | 75            | 75        |

|    |            |    |    |            |    |    |
|----|------------|----|----|------------|----|----|
| 25 | STUDENT 25 | 74 | 82 | STUDENT 25 | 69 | 75 |
| 26 | STUDENT 26 | 69 | 77 | STUDENT 26 | 69 | 80 |
| 27 | STUDENT 27 | 79 | 86 | STUDENT 27 | 75 | 79 |
| 28 | STUDENT 28 | 68 | 80 | STUDENT 28 | 70 | 75 |
| 29 | STUDENT 29 | 76 | 83 | STUDENT 29 | 69 | 73 |

To prove that the population used homogeneous, then conducted a test of its homogeneity of the population with the help of the program SPSS. Its homogeneity test is used to determine whether populations have the same Variant value or not. Its homogeneity test is carried out with the help of SPSS program with test Levene statistics. Test results of its homogeneity of the population can be seen in table 1. as follows:

**Table 2. Test of Homogeneity**

| Test of Homogeneity of Variances |                                      | Levene    | df1 | df2    | Sig. |
|----------------------------------|--------------------------------------|-----------|-----|--------|------|
| Result                           |                                      | Statistic |     |        |      |
|                                  | Based on Mean                        | 5,625     | 1   | 56     | ,021 |
|                                  | Based on Median                      | 5,803     | 1   | 56     | ,019 |
|                                  | Based on Median and with adjusted df | 5,803     | 1   | 42,751 | ,020 |
|                                  | Based on trimmed mean                | 5,450     | 1   | 56     | ,023 |

Variant of population is said to be homogeneous if  $> 0.05$  significance. on Levene Statistics Based on Mean known sig ,021 is greater than 0.05. This suggests that the population is HOMOGENEOUS Variant.

Furthermore writer does test normality if the research data is distributed normally or not. Normal data is an absolute requirement before we do the analysis of parametric statistics (Paired Sample T-Test and Independent Sample T-Test). Here writer uses a Kolmogorov-Smirnov Test and a test of Shapiro-Wilk normality test data in research. The results of the test of normality can be seen in table 2. as follows.

**Table 3. Test of Normality**

| Tests of Normality |                       | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|--------------------|-----------------------|---------------------------------|----|-------|--------------|----|------|
| Result             | Class                 | Statistic                       | df | Sig.  | Statistic    | Df | Sig. |
|                    | Pre-Test Eksperiment  | ,113                            | 29 | ,200* | ,972         | 29 | ,603 |
|                    | Post-Test Eksperiment | ,153                            | 29 | ,081  | ,946         | 29 | ,144 |
|                    | Pre-Test Control      | ,108                            | 29 | ,200* | ,968         | 29 | ,505 |
|                    | Post-Test Control     | ,158                            | 29 | ,063  | ,945         | 29 | ,135 |

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the output above on the value of significance (sig) to all of the data on either the test of Kolmogorov-Smirnov or the Shapiro-Wilk test is  $> 0.05$  significance level, pretest and posttest class experiments with word wall method is , 603 and 144, greater than 0.05. Pretest and posttest with control class model of discovery Learning is 505 and ,135 is greater than 0.05. So it can be concluded that the data is Distributed NORMALLY.

## RESULTS AND DISCUSSION

### Results

The research has a goal to answer formulation of the problem, and that is to find out if there is a difference in the results of the Discovery Learning methods and Word Wall methods on the English course in Class VII of SMP Mutiara 1 Bandung. To know the difference, writer will do the hypothesis test.

Before conducting the Independent Sample Test, to find out the difference between Discovery Learning methods and Word Wall methods, writers will do the test of Paired sample T-test to tell the difference results study on post-Test and Pre-Test of experiment class and control class. Below is a table 3. Test of Paired sample T-test.

**Table 4. Paired Sample Test**

#### Paired Samples Statistics

|        |                       | Mean  | N  | Std. Deviation | Std. Error Mean |
|--------|-----------------------|-------|----|----------------|-----------------|
| Pair 1 | Pre-Test Eksperiment  | 70,59 | 29 | 5,673          | 1,053           |
|        | Post-Test Eksperiment | 76,90 | 29 | 5,287          | ,982            |
| Pair 2 | Pre-Test Control      | 69,59 | 29 | 3,510          | ,652            |
|        | Post-Test Control     | 75,28 | 29 | 2,963          | ,550            |

#### Paired Samples Test

|        |  | Paired Differences |                |                 |                                | 95% Confidence Interval of the Difference | T  | df   | Sig. (2-tailed) |
|--------|--|--------------------|----------------|-----------------|--------------------------------|---|----|------|-----------------|
|        |  | Mean               | Std. Deviation | Std. Error Mean |                                |   |    |      |                 |
| Pair 1 | Pre-Test Eksperiment - Post-Test Eksperiment | -6,310             | 2,634          | ,489            | Lower: -7,312<br>Upper: -5,309 | -12,903                                   | 28 | ,000 |                 |
|        | Pre-Test Control - Post-Test Control         | -5,690             | 2,537          | ,471            | Lower: -6,655<br>Upper: -4,725 | -12,078                                   | 28 | ,000 |                 |

Based on the output of pair 1 retrieved value of sig. 0,000  $< 0,005$ , then it can be concluded that there is a difference in the results of learning from the pre-test Experiment class and Post-Test

Experiment class. Then from the results obtained pair 2 retrieved value of sig. 0,000 <0,005, then it can be concluded that there is a difference in the results of learning from the pre-test Control class and Post-Test control class.

Furthermore writer will do a test of the Independent Sample Test to tell the difference between Discovery Learning methods and Word Wall methods. The proposed hypothesis is Ho: allegedly there was no difference in the learning outcomes of students who use the Discovery Learning methods, Ha: allegedly there is difference of student learning results that use the Word Wall methods. The conclusion is reject Ho if the results of the t-test with Independent Sample Test < 0.05 while Ho received if the results of the t-test with Independent Sample Test > 0.05. Based on the results of a pretest and posttest experiment class and controls class the unambiguous t-test on Independent Sample Test in table 4 is as follows:

**Table 5. Independent Sample Test**

| <b>Group Statistics</b> |                       |    |       |                |            |  |  |  |  |  |
|-------------------------|-----------------------|----|-------|----------------|------------|--|--|--|--|--|
| Class                   |                       | N  | Mean  | Std. Deviation | Std. Error |  |  |  |  |  |
| Result                  | Post-Test Eksperiment | 29 | 76,90 | 5,287          | ,982       |  |  |  |  |  |
|                         | Post-Test Control     | 29 | 75,28 | 2,963          | ,550       |  |  |  |  |  |

  

| <b>Independent Samples Test</b> |                             |   |      |                              |       |                 |                 |                       |   |       |
|---------------------------------|-----------------------------|---|------|------------------------------|-------|-----------------|-----------------|-----------------------|---|-------|
|                                 |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |       |                 |                 |                       |   |       |
|                                 |                             | F                                       | Sig. | t                            | df    | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |       |
|                                 |                             |   |      |                              |       |                 |                 |                       | Lower                                     | Upper |
| Res                             | Equal variances assumed     | 5,625                                   | ,021 | 1,440                        | 56    | ,155            | 1,621           | 1,125                 | -,634                                     | 3,875 |
|                                 | Equal variances not assumed |   |      | 1,440                        | 44,07 | ,157            | 1,621           | 1,125                 | -,647                                     | 3,889 |

Based on the results of the above it can be concluded that the data of Sig. (2-tailed), is 155 > 0.05. Based on the results of the hypothesis, that H0 is accepted and Ha was rejected, it can be concluded that there is no DIFFERENCE in the average student learning outcomes between Discovery Learning methods and Word Wall methods.

**Discussion**

Based on the results of the analysis of the post-test from t-test then H0 is accepted and Ha was rejected, it is based on the results of significance that is as big as, 155 > 0.05 then it can be concluded there is no difference between Discovery Learning methods and Word Wall methods.

Although there is no difference from the significance of the results we can see that the results of the study of pre-test and Post-test experiment class has increased from 70.59 or 70% to 76.90



or 77% and also pre-test and Post-test of Control class has increased from 69.59 or 69% to 75.28 or 75%.

Based on the data analysis and the discussion above, in terms of value and post-test difference between the average value of the student, indicated that the results of the study on the experiment class that implements the methods of the learning Word Wall only experienced a little increase on the grade than Discovery Learning that applied on the control class. That is, it can be drawn the conclusion that the Word Wall methods and the Discovery Learning methods in SMP Mutiara 1 Bandung can still be applied, because of both of these methods can be done simultaneously to increase interest in learning especially in English course in SMP Mutiara 1 Bandung.

## CONCLUSION

Based on the results of the study it can be concluded that the results of the Sig (2-tailed) is ,155 > 0.05, from both of these methods that is Discovery Learning methods and Word Wall methods, there is no significant difference in the English course in Class VII on SMP Mutiara 1 Bandung.

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