

THE EFFECTIVENESS OF USING EDUCANDY IN ELT TO IMPROVE STUDENTS' VOCABULARY MASTERY

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ABSTRACT

This study aimed to find out the Effectiveness of using Educandy in improving English vocabulary mastery of seventh grade students at MTs. Safinatul Huda 02 Karimunjawa. This emphasized on reinforce students vocabulary in learning process. This study used an Experimental method, with a treatments. The data was obtained by means of multiple choice and Essay questions. Evidenced by obtaining a Normality test with a sig. 0.200 is greater than 0.05 which means the research data is normally distributed. The results of calculation using SPSS 23. In the equal variances assumed section, the value of sig.

2-tailed was $0.000 < 0.05$. this shows that there is a significant difference in the mean scores of students in the experimental class and the control class. Therefore, H_0 is rejected and H_a is accepted. Then the t -observe is higher than the t table, which is $8.025 > 2.000$ with a significance level of 5%. Based on the analysis of the results, the researcher concluded that the use of Educandy can improve students vocabulary mastery.

Keywords: *Educandy; Vocabulary; Learning Media*

Introduction

English is one of the important languages in the world that should be acquired. It is hard to deny because English is the official language worldwide. According to Rao (2019), English has achieved global status as the most widely used language for communication internationally. In other words, it is a necessary language for achieving a wide range of professional and personal objectives (Nishanti, 2018). As a result, most countries integrate English learning into their curriculum. They believe that learning English is an essential aspect of its development. If

students want to master English, they must have a lot of vocabulary to support the mastery of these four skills (Salih, 2015:4). There are four skills in English that need to be mastered namely speaking, writing, reading and listening. The language components are: vocabulary, grammar, pronunciation and spelling.

Vocabulary is one of the important language components in studying English. If the students' vocabulary mastery is low, it is certain that students will not be able to use English (Asyiah, 2017:9). Vocabulary plays an important role in the development of spoken language and early literacy (Hill, 2012). According to Alqahtani (2015) vocabulary can be defined as a group of meaningful words or the total number of words in a language. It can be defined as one of the components of language, along with sound, grammar, and culture (Wulanjani, 2016). According to Lelawati (2018) also state that vocabulary is the stock of word items owned by the

speaker or writer. It can be applied to all words in a language or to certain words or phrases used in dialects, registers, or terminology. According to Wulanjani (2016) vocabulary should be integrated with four English skills, namely, listening, speaking, reading, and writing.

Therefore the teacher must apply appropriate techniques to solve the problem. In other words, it can be said that the students often encounter problems in applying the four language skills; one of the causes is due to the limitations of the vocabulary. Many researchers have investigated the implementation of game learning in educational contexts, and they have found generally positive attitudes from students (Castaneda et al, 2016). One of the games can be used as one educational technique in the teaching and learning process (Zou & Li, 2015). In recent studies, an agreement has emerged that mobile-assisted vocabulary learning leads to increases in student's

vocabulary (Sandberg et.al, 2014) and that it can increase student's vocabulary acquisition and reduce "the burden of memorization" (Wu, 2015:176). Moreover, some have found the effectiveness of application comparable to face to face teaching (Rachels, 2017) and researchers have found increase in vocabulary acquisition (Steel & Yildiz, 2012). Calvo-Ferrer (2015) found that applications are highly effective tools for foreign and second language learners to acquire new vocabulary.

Teacher can use gamification application as an innovation of learning media in the classroom. In line with this, by Sari et.al, (2020), claimed that use of gamification has succeeded in forming a fun learning environment. According to Flores (2015), gamification can be defined as game features and design principles in non-game contexts. Gamification is suitable for young learners because it is an important component of their learning. According to

Fajarina (2017), stated that playing games can encourage children to be more involved and involved with other people. In line with this, children enjoy playing games, and they will be happy if they can play an interesting game. Moreover, gamification has a substantial beneficial effect on success and progress by providing personalized and meaningful feedback (Kickmeier, 2014). Gamification has many applications for students in the field of education, including: Quiz, Kahoot, Tic Tac Toe, Word Wall, and Educandy. In the form of research that will be carry out, researcher will use the Educandy game to be apply in class. This application has interesting features in learning English vocabulary for young learners. So, the researcher will choose apply the Educandy game in the learning process.

The teaching and learning process in MTs. safinatul Huda 02 Karimunjawa of four skills in English lessons had some problems. Based on the

authors experience when did observation, the problems that occur in school were that students of MTs. safinatul huda 02 Karimunjawa got low scores in vocabulary mastery. Specific factors influenced their reading comprehension, such as students' inability to enunciate words correctly, a lack of vocabulary, and inability to comprehend some English-language books.

There are some findings showed that there are a lot especially teenagers who play a game as entertainment. Not only having game as entertainment, but also a medium for get knowledge. According to Putri (2019) the benefits of using games in teaching and learning activities no need to be doubted. In this case the game can motivate, train skills, can also improve perception and stimulation as well as being able to develop ability assessment a strategy, and manage media and tools to get answers or smart solution (Vitianingsih, 2016). The genre of

this game is game quiz. This game is able to hone logic to increase knowledge. The use of brain abilities will have an impact on increasing motivation for someone to learn more of knowledge (Famukhit, 2020). This game consists of several "multiple choice" questions that have a time each the question is this will add passion and desire to complete game to get the highest score.

This study aims at finding the effectiveness of using Educandy in teaching vocabulary for students. It was to know the students' vocabulary mastery of the Seventh Grade of MTs. Safinatul Huda 02 Karimunjawa in Academic Year 2022/2023.

Method

Quasi-experimental research using a none-equivalent control group design was used in this study. 44 students who had almost similar characteristics and almost balanced learning

outcomes were involved in this study. Purposive random sampling was used to get the sample of this study. An objective test was utilized as a tool. There were 40 multiple-choice questions and 5 essays. The authors used the formula for calculating the multiple-choice tests by Jihad and Haris (2013) to know the score of the students' responses.

Pre-test was conducted to both experimental and control class. The purpose of pre-test was to get the information of the students' ability especially in vocabulary mastery before the researcher give a treatment. Then, the treatments in four times were given to the experimental class. The aim of the treatment would be to help students improve their vocabulary skills using Educandy. Post test was conducted after the students got treatments. It was to check the students' improvement of their vocabulary related to the topic.

To analyze the data obtained from the research results, descriptive and hypothesis statistical analysis will be used. The data collected in the form of pretest and posttest scores were then calculated.

FINDINGS

The Calculation of Trying Out the Test

The instruments were tried out analyze the validity and reliability of item test before the test is use for pre-test and post-test in experimental class and control class of MTs. Safinatul Huda 02 Karimunjawa and take VII B as the sample to try out the item test. There are 28 numbers ware valid and there are 17 numbers invalid. Meanwhile based on SPSS calculation, it showed that in cronbach's Alpha was $0.894 > 0.60$. This showed that the test instrument was reliable for using in the next test. After the author passed the stages of validity and realibility test, the

author used valid items in the instrument for data collection, namely pretest and posttest.

Pre-test and Post-test Score

The pre-test of experimental research was given to the student before meeting treatment and post-test was given to the student after getting the treatment. As stated in the pre-test the highest score was 56 and the lowest score was 40. On the other hand, in the post-test the highest score was 92 and the lowest score was 70. The data results on the post-test average score is higher than the pre-test average score ($80.27 > 47.90$).

The highest score of control class in the pre-test was 52 and the lowest score was 30 on the other hand, the highest score in post-test was 85 lowest score was 68 The mean score of the pre-test was 42.27 and post-test was 74.

Normality and Homogeneity Testing

There were two test used by the researcher, namely normality test and homogeneity test. This test was carried out before the t-test to determine whether the data had a normal distribution and has the same variance.

Table 1. Normality test

| | CLASS | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|--|----------------------|---------------------------------|----|-------|--------------|----|------|
| | | Statistic | Df | Sig. | Statistic | df | Sig. |
| VSS Treatment | PRE-TEST Experiment | .106 | 25 | .200* | .958 | 25 | .379 |
| | POST-TEST Experiment | .122 | 25 | .200* | .943 | 25 | .172 |
| | PRE-TEST Control | .149 | 25 | .158 | .953 | 25 | .287 |
| | POST-TEST Control | .128 | 25 | .200* | .974 | 25 | .746 |
| *. This is a lower bound of the true significance. | | | | | | | |
| a. Lilliefors Significance Correction | | | | | | | |

Table 1 showed that the normality significance of pre-test in experimental class is 0.200. thus, control class gained 0.158 significance in pre-test. It means that the data in both classes are normally distributed because the significance showed is higher than $\alpha = 0.05$ ($0.200 > 0.05$; $0.158 > 0.05$). Moreover, the result of post-test reveals that the normality

significance for both classes is same (0.200). The results indicated that the data were also normally distributed because both classes have significance more than $\alpha = 0.05$ ($0.200 > 0.05$; $0.200 > 0.05$).

Homogeneity test was conducted to find that the data has the same variance or different variance. The data of homogeneity test as follow:

Table 2. Homogeneity Test of Pre-test and Post-test

| Test of Homogeneity of Variance | | | | | |
|---------------------------------|--------------------------------------|------------------|-----|--------|-------|
| | | Levene Statistic | df1 | df2 | Sig. |
| Result of Test | Based on Mean | 0,687 | 1 | 38 | 0,412 |
| | Based on Median | 0,586 | 1 | 38 | 0,449 |
| | Based on Median and with adjusted df | 0,586 | 1 | 37,319 | 0,449 |
| | Based on trimmed mean | 0,664 | 1 | 38 | 0,420 |

Test of Homogeneity of Variance

| | | Levene Statistic | df1 | df2 | Sig. |
|----------------|---------------|------------------|-----|-----|-------|
| Result of Test | Based on Mean | 4,779 | 1 | 38 | 0,035 |

| | | | | |
|---|-------|---|--------|-------|
| Based on Median | 4,515 | 1 | 38 | 0,040 |
| Based on Median and with adjusted df | 4,515 | 1 | 34,468 | 0,041 |
| Based on trimmed mean | 4,561 | 1 | 38 | 0,039 |

From the data above, it showed that the significance value of levene in the homogeneity test. The result from pre-test was $0.412 > 0.05$ and the result form the post-test $0.035 > 0.05$. It showed that the data had the same variance because it had a significance value higher than 0.05. it means the data was homogeneous. After that, the data can be analyzed using the independent T-test.

Test of Significance Testing

The author compared the results of the post-test score of students in the experimental class and the control calss to find out if there was a significant difference after being given treatment Experimental class. The following was the result of the data calculation.

Table 3. Group Statistic

| | Kelas | N | Mean | Std. Deviation | Std. Error Mean |
|--------------------------|----------------------|----|-------|----------------|-----------------|
| Hasil Vocabulary Mastery | Post Test Experiment | 22 | 84.91 | 3.689 | .787 |
| | Post Test Control | 22 | 74.00 | 5.201 | 1.109 |

Table 3 described that there were 22 students in each class. The total students involved in this study were 44 students. The mean score in the experimental class was 84.91 and in the control class was 74.00. It showed that there was a significant difference in the mean score of post-test in the experimental class and the control class.

Table 4 Independent T-test

| Independent Samples Test | | | | | | | | | | |
|--------------------------|-------------------------|-----------------------|-------|------------------------------|----|-----------------|-----------------|-----------------------|-----------------|--------|
| | | Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Interval of the | |
| | | | | | | | | | Lower | Upper |
| Hasil Vocabulary Mastery | Equal variances assumed | 3.067 | 0.087 | 8.025 | 42 | 0.000 | 10.909 | 1.359 | 8.166 | 13.653 |
| | Equal | | | | | | | | | |

| | | | | | | | | | |
|-----------------------------|--|--|-------|--------|-------|--------|-------|-------|--------|
| variances not assumed | | | 8.025 | 37.864 | 0.000 | 10.909 | 1.359 | 8.157 | 13.661 |
|-----------------------------|--|--|-------|--------|-------|--------|-------|-------|--------|

In the data above, it was known that the significance value of the Levene test is $0.87 > 0.05$, which means that the data is homogeneous. In the equal variances assumed section, the value of sig. 2-tailed was $0.000 < 0.05$. It showed that there is a significant difference in the mean scores of students in the experimental class and the control class. Therefore, H_0 is rejected and H_a is accepted. Then the t-observe is higher than the t table, which is $8.025 > 2.000$ with a significance level of 5%.

DISCUSSION

The use of Educandy to improve students' vocabulary mastery scores pre-test and post-test through calculated based on the results test can be the categories using the table below as a guide :

Table 5. Pre-test Vocabulary Mastery

| No | Category | Frequency | Percentage |
|--------------|-------------|-----------|--------------|
| 1. | Excellent | 2 | 4 % |
| 2. | Good | 15 | 42 % |
| 3. | Fairly good | 17 | 34 % |
| 4. | Fair | 6 | 12 % |
| 5. | Poor | 4 | 8 % |
| Total | | 44 | 100 % |

Based on Table 5, pre-test in a multiple-choice test, students' vocabulary skills were tested assessments can be classified as excellent, good, fairly good, fair, and poor. In this test, 2 in every 44 students (4%) received an excellent category, while 15 in every 44 students received a good category (42 %), while 17 of 44 students (34%) were assigned to the fairly good group, 6 of 44 students (12%) were assigned to the fair category, and 4 of 44 students were assigned to the poor category (8%).

Table 6. Post-test Vocabulary Mastery

| No | Category | Frequency | Percentage |
|--------------|-------------|-----------|--------------|
| 1. | Excellent | 6 | 12 % |
| 2. | Good | 22 | 50 % |
| 3. | Fairly good | 14 | 34 % |
| 4. | Fair | 2 | 4 % |
| 5. | Poor | 0 | 0 % |
| Total | | 44 | 100 % |

Table 6 illustrates through post-test vocabulary mastery can be classified into excellent, good, fairly good, fair, and poor categories in multiple-choice assessments. In this test, 6 out of every 44 students (12%) received an excellent rating, while 22 out of 44 students received a good rating (50%), while 14 of 44 students (34%) were assigned to the reasonably fairly good category, 2 of 44 students (4%) were assigned to the fair category, and 0 of 44 students were assigned to the poor category (0%).

Based on the information gathered, and frequency table, the total students involved in this study were 44 students. The mean score in the Experimental class was

84.91 and in the Control class was 74.00. this showed that there was a significant difference in the mean score of post-test in the Experimental class and the Control class. As a result, H_0 is refused but H_a is accepted. Based on these results, used of Educandy can be applied at MTs. Safinatul Huda 02 Karimunjawa and it is a new media for teachers to teach students. In addition, it can help to improve students' vocabulary mastery.

According to Setiawan & Wiedarti (2020), stated that students have to master English vocabulary first before they produce it through speaking or writing. Similary et.al, (2017) stated that one of the skills in language that need to be paid attention to in teaching English is vocabulary. According to Fitriati (2021) Educandy can be used as a medium to attract the attention of students in the learning process in the

classroom. As for the colorful display, as well as audio and moving illustrations that make learning more lively and interesting so that it is easier for students to enjoy the learning. Process the students were also easier to receive information and focus and concentrate on learning. They were very enthusiastic and interested in applying Educandy in class.

CONCLUSION

This research was a quasi experimental research. There are independent variable that is using Educandy media in learning activity to master the materials. Dependent variable is the students' vocabulary mastery. The research is to aims of examine the effect of using Educandy website as medium on students' vocabulary mastery at seventh grade of MTs. Safinatul Huda 02 Karimunjawa in academic year of 2022/2023. Based on the statistical calculation in the previous chapter, it could be concluded that the mean score Experiment class of

pre-test in the table was 47.90 and the students mean score of post-test in the table was 80.27. and the mean score Control class of pretest in the table was 42.27 and the students mean score of post-test in the table was 74. It means that there was significant score by applying Educandy as media in learning activity on students' vocabulary mastery. The students could increase their vocabulary mastery significantly. It was proved from their mean score students post-test. Then, the result of Sig. 2 tailed value is $0.000 < 0.05$ which means that Alternative Hypothesis (H_a) is accepted and Null Hypothesis (H_0) is rejected. Then, the results of the t observe are higher than t table $8.025 > 2.000$ with a significance level of 5%. It can be concluded that Educandy has a significant difference and effect on vocabulary mastery of seventh grade Mts. safinatul huda 02 karimunjawa. Furthermore, Educandy as media in learning activity on vocabulary mastery is appropriate media to apply in vocabulary learning.

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Darussalam English Journal

Volume 3, Number 1, June 2023

eISSN: 2807-3223

DOI: [10.30739/dej.v3i1.201](https://doi.org/10.30739/dej.v3i1.201)

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