



## THE EFFECTIVENESS OF *DUOLINGO* APPLICATION IN TEACHING VOCABULARY AT THE SEVENTH GRADE STUDENTS OF JUNIOR HIGH SCHOOL

(An Experimental Research of the Seventh Graders of MTs. Gondang  
Wonopringgo Pekalongan in the Academic Year of 2018/2019)

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### Artikel Info

Diunggah:

25/04/2022

Diterima:

25/04/2022

Dipublikasi:

25/04/2022

### Abstract

Vocabulary is an important element in order to master the four language skills in English education. Teachers has done many efforts and innovation in classroom management and relevant teaching media in order to improve teaching and learning qualities. The use of computer assisted language learning (CALL) nowadays become a topic that still relevant to be discussed in the world of education as one of the solutions to deal with 4.0 industrial revolution. The objectives of research were: 1) To describe the implementation of *Duolingo* application in teaching vocabulary. 2) To describe the effectiveness of *Duolingo* application in teaching vocabulary. The population was all the students of Mts. Gondang Wonopringgo Kabupaten Pekalongan grade VII. The researcher used Cluster Random Sampling. The instruments used by the writer were test, interview, questionnaire and documentation. The technique of data analysis employed was paired sample t-test.

The result of the study: 1) *Duolingo* application can be implemented to the seventh-grade students of Mts. Gondang Wonopringgo Pekalongan. The steps were as follows; first, the student must open their browser tab and typed [www.duolingo.com](http://www.duolingo.com). After redirection, the students chose the language they wanted to learn (in this research they chose English). Next, the students filled the account using their name and email address. Facebook and google account can be used as well to sign up if they already have one. After doing sign up/login process, the students had to complete the task given by *Duolingo* starts from basic 1 until test phase. This task involving reading, typing, listening, and speaking section. Students' comprehension can be assessed through the test which can be accessed through <https://englishtest.duolingo.com>. 2) the students' score after taught by using *Duolingo* application showed significant result. The result showed that  $P\text{-value} < 0,0511,664 > 8955$ , it means that there were any significant influences between score of pre-test and post-test. It can be concluded that *Duolingo* application is effective in teaching vocabulary at the seventh-grade students of Mts. Gondang Wonopringgo Pekalongan in the academic year of 2018/2019. Therefore, the writer suggested that *Duolingo* application can be one of alternative media to teach English for young learners.

**Key Words :** duolingo, english, teaching media, vocabulary

## 1. Introduction

A medium (plural, media) is channel of communication. Media in the teaching and learning are very important. The media are helpful in delivering information and can help to make simple the teaching process and to make it perfect, as well as allow teaching to practice to principle of object teaching and learning illustration. The aim of media are instrument of motivation if they are used to stimulate learning, and the media in teaching English is very important, because teaching vocabulary without using one of the media will not give good result.

Media can be subdivided into three kinds. There are audio, visual and audio visual. Audio media is a media that can be listened this media is used to listen and understand oral text, for example, radio, cassette recorder, and tape recorder. Visual media is a media that can be watched and touch for example, picture, realia, map, and miniature. Audio visual media is a media that can be watched and listened, for example TV, LCD (liquid crystal display) , and film. In this modern era, the use of computer-assisted language learning (CALL) become common for educational purposes. This research focuses on Duolingo application as an audio visual.

Jumariati (2010) says that vocabulary learning is the important aspect in learning a foreign language. Students will improve much if they learn more words and expressions. Even if students' grammar are excellent, they are still having difficulties to communicate English without a wide vocabulary. Since English is not our national language, it is not easy to master the vocabulary. Based on Teachers Observation in Mts. Gondang Wonopringgo Kabupaten Pekalongan showed that the students had difficulties in achieving some of basic competences in English subject. The reason because the students were lack in English vocabulary building and unable to memorize all of it using only dictionary. That is why vocabulary becomes an important element in order to master the four language skills in English.

Teachers has done many efforts and innovation in classroom management, teaching and learning and relevant teaching media in order to improve teaching and learning qualities. The use of computer assisted language learning (CALL) nowadays become a topic that still relevant to be discussed in the world of education as one of the solution to deal with 4.0 industrial revolution .

The role of computer assisted language learning (CALL) also very important. That is because computer assisted language learning (CALL) can be used as one of communication method between teachers and students. Not only as a tools to achieve the standards of competence, but also increase students' attention and motivation to follow the lesson. In addition, the use of media can also stimulate students to do more learning activities. For example, observing, recording, playing, and other learning activities. This is similar to that delivered by Sudjana and Riva'i in Kustandi and Sutjipto (2011: 22) that the benefits of teaching media in the learning process of students is very large, among the others, learning will be more interesting for students, learning materials will be more various and clear in meaning, moreover students can do more learning activities.

## 2. Research Method

Research is the formal, systematic, application of the scientific method to the study of problem. Suryabrata (2003) states that, “research is a process that is done systematically and logically to get the solution of the problems or to get the answer from a certain question. The aim of the research was to discover the answer to meaningful question using scientific procedures”.

This study used experimental design. Especially, in this research the writer used the pre-experimental design, with one group pre-test post-test design. The writer conducted an experiment that consisted of pre-test, treatment, and post-test. This research was intended to investigate the effectiveness of teaching vocabulary through *Duolingo* application for the seventh grade students of junior high school. The aim of this research was to find out differences between students’ score on vocabulary before and after taught by using *Duolingo* application. The platform that the writer chose to improve students vocabulary building was *Duolingo* application on web browser.

Table 1. Research Design (Suharsimi Arikunto, 2010: 125)

| Group | Pre-test | Treatment      | Post-test |
|-------|----------|----------------|-----------|
| EC    | O1       | X <sub>1</sub> | O2        |
| CC    | O1       | X <sub>2</sub> | O2        |

## 3. Findings and Discussion

### 3.1 Normality Test

As stated earlier that one of condition needed to conduct T-test is a normal distribution data. In order to tested the data, the writer used Lilliefors method  $L = \max |F(z_i) - S(z_i)|$ .

Table 2. Lilliefors Method Pre-Test Table Experimental Class

| Lilliefors Normality Test |        |
|---------------------------|--------|
| Lilliefors Stat           | 0.227  |
| Confidence Intervals      | 0.050  |
| Lilliefors                | 0.805  |
| Lilliefors Crit           | 0.161  |
| Result                    | Normal |

Table 3. Lilliefors Method Post-Test Table Experimental Class

| Lilliefors Normality Test |       |
|---------------------------|-------|
| Lilliefors Stat           | 0.165 |
| Confidence Intervals      | 0.050 |
| Lilliefors                | 0.886 |
| Lilliefors Crit           | 0.177 |

| Result                                                  | Normal |
|---------------------------------------------------------|--------|
| Table 4. Lilliefors Method Pre-Test Table Control Class |        |
| Lilliefors Normality Test                               |        |
| Lilliefors Stat                                         | 0.177  |
| Confidence Intervals                                    | 0.050  |
| Lilliefors                                              | 0.886  |
| Lilliefors Crit                                         | 0.187  |
| Result                                                  | Normal |

| Result                                                   | Normal |
|----------------------------------------------------------|--------|
| Table 5. Lilliefors Method Post-Test Table Control Class |        |
| Lilliefors Normality Test                                |        |
| Lilliefors Stat                                          | 0.177  |
| Confidence Intervals                                     | 0.050  |
| Lilliefors                                               | 0.886  |
| Lilliefors Crit                                          | 0.187  |
| Result                                                   | Normal |

Based on above table showed that  $L_{stat} < L_{crit}$  therefore  $H_0$  was accepted. This mean, the data came from normal distribution sample.

### 3.2 Homogeneity Test

In testing the homogeneity of pre-test and post-test data, the writer used Anova single factor in the form of Excel formula.

Table 6. Anova : Single Factor

| ANOVA               |                  |    |       |        |         |        |
|---------------------|------------------|----|-------|--------|---------|--------|
| Source of Variation | SS               | df | MS    | F      | P-value | F crit |
| Between Groups      | 1058             | 1  | 1058  | 15.820 | 1.0002  | 4.0426 |
| Within Groups       | 3210             | 4  | 66.87 | 56     | 34      | 52     |
| Total               | 4268             | 49 |       |        |         |        |
| Total               | 254317559283.333 | 23 |       |        |         |        |

Based on the table 4.9 it can be seen that P-value is 1.000234. it means that P-value  $> 0,05$ . So  $H_0$  was accepted and  $H_a$  was rejected. Both of pre-test and post-test scores data can be interpreted as homogeneous data.

Since the data came from normal distribution sample and in homogenous form, therefore the T-test condition may be fulfilled.

### 3.3 Hypothesis

The hypothesis of this research is as follows:

- a. The Null Hypothesis ( $H_0$ )  
There is no difference in the students' mastery on vocabulary before and after taught by using Duolingo application.
- b. The Alternative Hypothesis ( $H_a$ )  
There is significant difference in the students' mastery on vocabulary before and after taught by using Duolingo application.

Since P-value  $< 0,05$ , therefore the writer reject the null hypothesis. It means that there were any significant different between score of pre-test and post-test. It can be concluded that the students get good achievement in teaching vocabulary after taught by using Duolingo application. The students' vocabulary mastery showed significant progress, so teaching vocabulary by using Duolingo application. is effective to improve students' mastery on vocabulary.

## 4 Conclusion

The Implementation of Duolingo Application in Teaching Vocabulary : 1) The student must open their browser tab and typed [www.duolingo.com](http://www.duolingo.com). 2) After redirection, the students had to chose the language they wanted to learn (in this research they chose English). 3) The students had to fill the account using their name and email address. Facebook and google account can be used as well to sign up if they already have one. 4) complete the task given by Duolingo starts from basic 1 until test phase. This task involving reading, typing, listening, and speaking section. 5) Assess students comprehension through the test which can be accessed through <https://englishtest.duolingo.com>. In the implementation process of Duolingo, The writer observed that the students were enthusiastic to complete the tasks given in Duolingo application. When teaching and learning process using Duolingo application was done, the students were very happy and got new spirit to learn English. The students were enjoy and interested because Duolingo application could be easily accessed even by young learners. Therefore, Duolingo application can be implemented to the seventh grade students of Mts. Gondang Wonopringgo Pekalongan.

The result of the research showed that the students' score were improving significantly. The result showed that P-value  $< 0,05$ , it means that there were any significant influences between score of pre-test and post-test. It can be concluded

that Duolingo application is considered effective in teaching vocabulary at the Seventh Grade Students of Junior High School, specifically in Mts. Gondang Wonopringgo Pekalongan. Therefore it can be one of alternative media to learn English for young learners.

Based on the above conclusion, The writer would like to offer some suggestions to be considered by the Headmaster, English teacher, students and the next researcher.

The headmaster should give enough facilities, so teaching and learning English will run smoothly. Facilities help the teacher easier to teach and help the students easier to understand. Hopefully, the students get good achievement if any media is used.

English teacher should be able to create new situation during the teaching learning process in the classroom, so that the students will be interested in learning English. They should use various visual aids like picture, chart, board game et cetera, so that the students will not get bored during the teaching learning process. English should be used as a means of communication in class, so that the students get used to hearing and spelling the English words. This will help the students' in learning English vocabulary easily and quickly.

The students have to improve their knowledge, especially in enriching their vocabulary, from the other sources like English magazine, English story books, etc. They also have to practice their English in daily conversation because it can help them enrich their vocabulary.

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