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The Effect Of Duolingo Application In Learning English Vocabulary At First Grade Of SMP Nusantara Lubuk Pakam

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Abstrak

Penelitian ini fokus untuk mengetahui pengaruh penerapan aplikasi Duolingo dalam pembelajaran kosakata bahasa Inggris. Tujuan dari penelitian ini adalah untuk mengetahui apakah penerapan Duolingo mempengaruhi prestasi siswa dalam kosakata. Penelitian ini dilakukan dengan menerapkan penelitian quasi eksperimen. Subyek penelitiannya adalah siswa kelas I SMP Nusantara Lubuk Pakam. Peneliti mengambil kelas VII A yang terdiri dari 29 siswa sebagai kelas eksperimen menggunakan aplikasi Duolingo dan VII B yang terdiri dari 30 siswa sebagai kelas kontrol menggunakan metode konvensional. Populasi penelitian ini adalah 59 siswa. Peneliti mengambil dua kelas untuk mengetahui pengaruh aplikasi Duolingo terhadap pembelajaran kosakata. Data diambil dengan memberikan tes kosakata yang terdiri dari pilihan ganda. Tes dibagi menjadi dua tes yaitu pre-test dan post-test untuk kelas eksperimen dan kontrol. Nilai rata-rata pre-test pada kelas eksperimen adalah 47 dan post-test adalah 83. Nilai rata-rata pre-test pada kelas kontrol adalah 43 dan post-test adalah 42. Hal ini menunjukkan bahwa nilai rata-rata pre-test pada kelas kontrol adalah 43 dan post-test adalah 42. Hal ini menunjukkan bahwa nilai rata-rata pre-test pada kelas eksperimen adalah 47 dan post-test adalah 83. kelas eksperimen lebih tinggi dibandingkan kelas kontrol. Hasil uji t dihitung uji t signifikan dengan nilai uji t Sig. (2-ekor) < 0,05 (0,000 > 0,05).

Kata Kunci: *Aplikasi Duolingo, Pembelajaran Bahasa Inggris, dan Kosakata*

Abstract

This research focused on finding out the effect of applying Duolingo application in learning English vocabulary. The objective of this research is to find out whether or not Duolingo application affecting students' achievement in vocabulary. This research was conducted by applying quasi experimental research. The subject of the research was the first grade of SMP Nusantara Lubuk Pakam. The researcher took VII A which consists of 29 students as the experimental class used the Duolingo application and VII B which consists of 30 students as the control class used the conventional method. The population of this research was 59 students. The researcher took two classes to find out the effect of the Duolingo application on learning vocabulary. The data were taken by giving a vocabulary test which consists of multiple choice. The tests were divided into two tests that are pre-test and post-test for both the experimental and control classes. The mean score of the pre-test in the experimental class is 47 and the post-test is 83. The mean score pre-test in the control class is 43 and the post-test is 42. It is showed that the mean score of the experimental class is higher than the control class. The result of the t-test was calculated that the t-test is significant with the value of the t-test being Sig. (2-tailed) < 0.05 ($0.000 > 0.05$).

Keywords: *Duolingo application, English learning, and vocabulary*

INTRODUCTION

English has long been an integral part of the Indonesian education system at low and higher levels. English is one of the foreign languages taught at school. This subject should be studied by formal education level students and tested in national exams. In English, writing, reading, listening, and speaking are all abilities that must be mastered. However, before students can master these four skills, they must first master English. Vocabulary development is the most crucial aspect of learning a foreign language because new terms should be accentuated in class and books (Alqahtani, 2015: 21). Learning and teaching English vocabulary are crucial for Indonesian students to learn English as a second language. Thornbury (2002: 35) recognizes the importance of vocabulary through language learning. If students cannot master grammar, then only a tiny part of the language can be understood. The definition of vocabulary, according to Puspita (2017: 308), is vocabulary essential for students to learn to master a foreign language. Students who have adequate vocabulary will make it easier for them to learn other language skills and components.

Vocabulary is essential knowledge that facilitates students' acquisition of various abilities, which include writing, speaking, listening, and reading. As a result, vocabulary is one of the primary aspects of English and is quite significant in a language. In learning, the teacher must use various teaching strategies and media to make students like learning English, significantly increasing the development of students' vocabulary. Teachers can use

the media that is the Duolingo application in teaching vocabulary. The Duolingo application is an application that helps students learn English more easily. In 2012, Luis Von Ahn and Severin Hacker launched Duolingo as a free language learning application.

a. Types of Vocabulary

According to Elfrieda H. Hiebert and Michael L. Kamil (2005: 3), vocabulary consists of three parts, that is:

- Oral Vocabulary
- Print vocabulary
- Productive vocabulary

Nation (2001: 38) explains that vocabulary consists of two types, receptive and productive. Furthermore, about the types of vocabulary, Nation states that there are four types of vocabulary in the text, including:

- High-frequency words
- Academic word
- Technical words
- Low-frequency word

b. The Importance of Vocabulary

According to Chanturia (2016: 39), a limited vocabulary could hinder good communication, so understanding a large vocabulary is crucial for students. Learning a language entails preparing language information and teaching students how to utilize that language in both spoken, written, and form. Students who master foreign languages are frequently classified as intelligent achievers. This makes vocabulary a critical knowledge to be learned by every student in learning a language.

c. Learning Vocabulary

Teaching is the practice of guiding and assisting students in their learning. For students, the goal of learning vocabulary is to receive a response. Teachers must motivate students and understand what they need to focus on learning. Motivation is crucial for students who need more motivation to learn English vocabulary. The teacher must have a good concept for proper vocabulary assessment with the aim of assessing students learning English vocabulary. In this study, the researcher used a rating scale to assess or evaluate student vocabulary abilities.

No.	Score	Classification
1.	96 – 100	Excellent
2.	86 – 95	Very Good
3.	76 – 85	Good
4.	66 – 75	Fairly Good
5.	56 – 65	Fairly
6.	36 – 55	Poor
7.	0 – 35	Very Poor

Table 1 The Classification of Students Score

d. Problems in Learning Vocabulary

According to Azar (2012: 252), many students are scared to take opportunities to apply what they have learned. Students may identify a term in written or spoken form and believe they already know it, but they may need help to use or pronounce it correctly in a new context. According to Azar (2012: 252), many students are scared to take opportunities to apply what they have learned. Students may identify a term in written or spoken form and believe they already know it, but they may need help to use or pronounce it correctly in a new context. In addition, other factors often make it difficult for students to learn vocabulary. According to Thornbury (2002: 27-28), the problem is:

- Pronunciation
- Lengths and complexities
- Spelling
- Meaning
- Grammar

e. The Definition of Duolingo Application

According to Munday (2016: 83), Duolingo is a free application launched in November 2011 by Luis Von Ahn and Severin Hacker to make learning various languages easier. The Duolingo application functions as a private language tutor, offering customized teaching and motivating students through activities like games to boost language acquisition. The Duolingo application also provides individual training and an English test to evaluate the user's skill level. The Duolingo application contains four skills in the learning process, including reading, writing, listening, and speaking, through the collaboration of short texts, questions, negative and positive sentences, and quotes to be heard, and it helps students record their pronunciation to evaluate their communication performance.

1. Duolingo Task Types

Wagner & Kunnan (2015: 322) states that the Duolingo application has four distinct tasks: vocabulary, listening and transcription, sentence completion, and speaking. The following are examples of Duolingo application tasks:

- Vocabulary
- Listening and Transcription
- Sentence completion
- Speak

2. Purpose of the Duolingo Application

The Duolingo application aims to help users understand a language, and be able to use that language. One of the ideas for using the Duolingo application is to assist students in mastering new vocabulary through games. So that, students will not have difficulty and feel bored while studying. The Duolingo application provides numerous elements that might help students learn the language quickly, such as daily word lists, discussions with other users to share knowledge, and greater immersion for more advanced learners.

3. The Advantages of the Duolingo Application

- The Duolingo application can improve student interest in language learning and the teaching process. Learning will be fun because the Duolingo application provides features such as playing games, so students feel energized in learning a language.
- The Duolingo application can create homework, so besides learning in class, the Duolingo application will help students improve their vocabulary at home.
- The Duolingo application is available at all times and from any location. Language learning media will significantly facilitate the teacher's use of it inside and outside the classroom.

4. Disadvantages of the Duolingo Application

The Duolingo application has some advantages but also some disadvantages as a medium for learning vocabulary, such as:

- The Duolingo application, as an online-based medium, will be challenging to use in class if there is no internet connection.
- If the Duolingo application is used in class, the teacher must prepare a projector so that students can be more active in the teaching and learning process.
- When teachers are to be held in regular courses, teachers must prepare numerous items such as loudspeakers and notebooks.

RESEARCH METHOD

This research is quantitative. The research design applied in this research is quasi-experimental. According to Creswell (2018: 241), quantitative research employs investigative procedures such as experimental data collection on preset instruments, resulting in statistical data. The design of this research is to investigate whether the effect of Duolingo application is effective in learning English vocabulary or not. This research used two classes, the experimental and control classes, which were given different treatments. In this research, the population is class VII SMP Nusantara Lubuk Pakam students. The first grade student is chosen as the sample in this study. The two classes are class VII A as the experimental class VII B as the control class, each class consists of 29 and 30 students. In this study, the instrument used was based on the first grade students' skill indicators found in the Kurikulum Merdeka syllabus at SMP Nusantara Lubuk Pakam. Techniques collecting data is done by using the test method. In this study, two tests is conducted, that is pre-test and post-test which is carried out at the beginning and the end of the study with the aim of finding out and measuring student learning outcomes about vocabulary. The homogeneity test is used to test whether the data from both groups have the same variance or not so that the hypothesis can be tested by the t-test.

FINDINGS AND DISCUSSION

FINDINGS

The results of the t-test in the experimental class and control class, where the experimental class uses the Duolingo application and the control class does not use the Duolingo application have a significant effect. It can be seen from the value of Sig. (2-tailed) < 0.05 ($0.000 > 0.05$), which means the null hypothesis is accepted. It can be concluded that there is a significant effect of using the Duolingo application in learning English vocabulary in the experimental class at first grade of SMP Nusantara Lubuk Pakam. This research proved effective using the Duolingo application in Learning English Vocabulary at First Grade of SMP Nusantara Lubuk Pakam. The writer successfully collected the data using tests and treatments to answer the research question. Besides, the treatment strongly affects learning English vocabulary using the Duolingo application. Hopefully, students could be more motivated to increase their vocabulary and get more understanding by using the Duolingo application. Students enjoy learning English vocabulary and can practice their English daily. In this research, the writer found that many students got better post-test scores than pre-test. The pre-test score showed that there was no improvement in students' scores. The result shows that the mean score of the pre-test was 47.07 in the experimental class and

43.33 in the control class. At the same time, the post-test score indicated an improvement in students' scores. The mean of post-test 83.28 in the experimental class is higher than post-test 41.67 in the control group which means that students' vocabulary has been improved. That result showed that there was a significant effect on students' scores before and after giving the treatment.

DISCUSSION

In learning English vocabulary using the Duolingo application, the hypothesis was accepted because there were significant differences between the experimental and control classes. Based on the above analysis, the t-test results in the experimental class have a significant effect, and the control class that does not use the Duolingo application has no significant effect. It can be seen from the table of t-test that the value of the pre-test score sig. (2-tailed) > 0.05 means ($0.257 > 0.05$), so the alternative hypothesis is rejected. Meanwhile, the t-test results in the experimental class and control class, where the experimental class used the Duolingo application and the control class did not use the Duolingo application, did not have a significant effect. It can be seen from the value of the post-test score Sig. (2-tailed) < 0.05 means ($0.000 < 0.05$), which means the null hypothesis is accepted.

The result of this research, supported by Ajisoko (2020: 149), stated that the Duolingo application can be one of the most successful applications to improve English learning, especially in learning vocabulary. Moreover, the study conducted by Botero et al. (2019: 71) stated that students can quickly learn languages such as English, Korean, Spanish, Japanese, and others by using the Duolingo application. Students who want to improve their vocabulary can use the Duolingo application as an easy and pleasurable language learning medium. Vocabulary training allows students to learn, test, and expand their vocabulary.

Based on the discussion above, Duolingo's application significantly affects learning English vocabulary in the first grade of SMP Nusantara Lubuk Pakam. It was because the Duolingo application was an exciting media that could be used to learn beginner-level English vocabulary. Duolingo application can help students learn more quickly because they easily acquire new words with interesting picture features to understand the meaning of words.

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