

# THE USE OF DUOLINGO APPLICATIONS TO IMPROVE ARABIC VOCABULARY LEARNING

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#### **ABSTRACT**

This study aims to determine the effect of using the Duolingo application on the learning independence of Arabic language education students in the seventh semester of Muhammadiyah University of Yogyakarta, to know the advantages and disadvantages of using the Duolingo application, as well as how to use Duolingo application for beginners. This type of research is descriptive quantitative research. The method of collecting data is through the provision of questionnaires, pre-test, and post-test questions. And after getting the results earlier, will pass the next 5 tests. The tests are validity test, reliability test, normality test, linearity test, and hypothesis testing. In this study, the total sample taken was 30 samples from the total 7th semester Arabic Language Education students at Muhammadiyah University of Yogyakarta. There are 15 samples from class A and 15 more samples were taken from class B. The test results obtained were at an average of 82.5% and then increased to 90.8%. The results of the questionnaire obtained were on average 71% and increased to 80%. From these results, there is an influence in the use of the Duolingo application for seventh semester Arabic Language Education students at Muhammadiyah University of Yogyakarta.

**Keywords:** Education, Arabic Language, Vocabulary, Duolingo

### INTRODUCTION

The learning medium includes all equipment, physical, and materials used by lecturers, teachers, coaches or other teachers in carrying out education and facilitating the achievement of learning objectives (Yaumi, 2017). Learning media itself is divided into different types, ranging from audio media, visual media, audio-visual media, and so on. The teacher must be able to choose the applicationropriate media to be used according to the needs of the students. Since it is also difficult to learn the Arabic language to be understood by all students and students who study the subject, students must have creativity or independence in their learning. One of the applications that can make it easier for them to learn the Arabic language is the Duolingo application.

Duolingo is an application used to facilitate the learning of foreign languages. 20 Duolingo was created in 2011 by Severin Hakir and Los Van Angh. This application is based on the concept of playing while learning which is produced directly by the official duolingo.com website. The Duolingo application is designed to help people who want to learn foreign languages flexibly and easily. The Duolingo application can be downloaded on Android, iOS, and Windows Phone and is also available in the web version. What's



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interesting about this Duolingo application is that it is a language learning application that combines audio and visuals. In this application, the learners will learn the language from the lowest level, so that learners do not have to worry about the difficulties of learning a foreign language. Learning ways to use Duolingo to increase our vocabulary include guessing words, phrasing, writing words, translating words, and repetition. Not only that, during listening activities, learners can hone their ability to listen to words or sentences with machine speakers (Maulidinia, 2020).

Based on the results of the observations made by researchers within the scope of the Arabic Language Teaching Study Program at UMM, especially for the class of 2018, there are many students who conducted an independent study without lecturers with a media application in the form for a mobile phone called Duolingo application. After brief interviews with several students who have used Duolingo, it turns out that there are a lot of positive responses from the students. The application is very useful for them in learning the Arabic language, especially in terms of vocabulary. Learning results were slightly better after using Duolingo. Attractive features and easy learning make them happy to use the application. With the spread of the current Covid-19 pandemic, students need to be able to improve their learning independently. Duolingo can be a substitute for their learning when they are at home

As for the studies related to Duolingo that have been done previously and can be used as study material in this research. These studies include the following: A scientific research conducted by Pottery Rayhan entitled "Analysis of Student Learning Independence using Duolingo application in English subjects in the eighth semester of Public Secondary School 1 Sabang". Based on the results of the research conducted, the increase in test results can be seen from the average scores of students based on the results of the preliminary test that reached 53.48 and the post-test with an average value of 72.05. The initial independence questionnaire was rated as good at 61% and the latter as good at 73%. In other words, students at Public Secondary School 1 Sabang experienced an increase in learning outcomes after using the Duolingo application. Similarities between the previous research and the current study is examining students' improvement in learning independence using the Duolingo application.

Scientific research conducted by Rahma Molydiani entitled "The Effectiveness of Duolingo Applications in Improving Daily Korean Vocabulary". Based on the results of these studies, the results of calculating the standard gain 65.. in the category of "effective". Based on the survey results, the researchers also found that learners' responses regarding the use of Duolingo to learn Korean vocabulary were very positive. Including helping learners remember and add Korean vocabulary. Thus, the use of the Duolingo application is very suitable for use by learners of Korean, especially vocabulary mastery. The similarities between the previous research and the current one is the effect of using the Duolingo application on learning foreign languages. While the difference is the thing under study, i.e. between increasing foreign language vocabulary and increasing learning independence.

Scientific research was carried out by Rafdinal, entitled "The Effectiveness of Using Duolingo in Learning English Language Vocabulary". Based on the results of the study, an independent sample test was performed to compare the post-test results of the experimental group and the control group. Sig value. The known (2-tail) is 0570,035...



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This could indicate that there is a significant effect on both the experiment implementing Duolingo and the control class that implies the traditional method of vocabulary learning. The similarities between the previous research and the current one are the analysis of learning outcomes for students after using the Duolingo application to learn foreign languages. While the difference is the thing under study, i.e. between increased vocabulary and increased learning independence of students. The difference is the foreign language that is learned.

A scientific paper by Adanshah Nurali, entitled "The relationship between the use of Duolingo applications as educational media and the independence of learning with students' ability to communicate in English". Based on the results of this study, there are positive and significant results with the use of the Duolingo application in the ability to communicate in English for students of class eleven 1 and 2 at Vocational School 2 Semarang. The strength of the relationship is shown through the correlation coefficient 455.. The coefficient of determination 207. or the variance in English communication skills of 20.7 can be explained by the variable using the Duolingo application. The similarities between the previous research and the current study are examining student learning outcomes after using Duolingo and increasing student learning independence in learning foreign languages. The difference is that previous researchers also examined communication skills.

Scientific research carried out by Muhammad Rajib Salmi, entitled "Students' Perceptions of Duolingo as a means of learning English" in the research journal. Based on the results of these studies. Most students or learners, up to 81.6%, use Duolingo to learn English with specific goals such as learning vocabulary and improving their listening, writing and speaking skills. The similarities between the previous research and the current one is the use of Duolingo as a way to learn foreign languages. Whereas the difference is that the previous researcher conducted research to determine student perceptions of Duolingo and researchers are now conducting research to determine the increase in student learning independence.

Therefore, in general, the similarities from the numerous researches above discuss the application Duolingo. The difference is the thing under study such as cognition, vocabulary increase, and improving communication methods, etc. Based on the background of the problem described above, the researcher is interested in conducting a study entitled " The Use of Duolingo Applications to Improve Arabic Vocabulary Learning".

#### **METHODS**

In this paper, the type of research used is one in order to concern ourselves with quantitative methods in the objective measurement of social phenomena. Each variable is measured (identified) by giving different numerical symbols according to the category of information related to the variable. Using these numerical symbols, quantitative mathematical computation techniques can be implemented to obtain the results of the generally accepted conclusion in the parameter (Sumanto, 2020). Examining the quantitative method used in the population or sample and is based on fact, measuring student learning independence using Duolingo.

Research tools are tools or facilities used when research is data collection so that



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the work is easier and the results are better, so that they can be processed (Alhamid,2019). The tool that the researcher will use in collecting data in this study is as follows. Selection is a measurement tool typically used to measure student learning outcomes after a particular unit of a learning program, and then a selection procedure to obtain preselection data to measure a learner's ability to increase learning independence before using Duolingo and a subsequent test to measure the teacher's ability after peace. The researcher will use it in the form of a written selection on a topic, namely verbs, names of things and names of places. A questionnaire is one of the research data collection tools provided to respondents. In this study, the author will ask questions about opinions, and researchers will ask questions about the opinions and experiences of respondents before and after learning to use mobile-based learning media, specifically the Duolingo application

The data source in this research was the active students in the seventh level of teaching Arabic, University of Muhammadiyah Yukiya Karna. The research variables are divided into two types, which are the independent variable and the dependent variable, meaning the independent variables in the variables that affect the dependent variable. While what is meant by the dependent variable is the variable that is affected by the independent variable, the independent variable (x) is used in this study using the Duolingo application. Meanwhile, the dependent variable (7) in this study is an increase in student learning independence.

In this research, the researcher used two methods of data collection, namely choices and questionnaires. The researchers conducted choices to determine the increase in student learning independence before and after using the Duolingo application. The researchers conducted a questionnaire to find out the views and experiences of students before and after using the Duolingo application. Samples are taken from this research using the random sampling technique, which is random sampling. The researcher will take 15 samples from each class with a total of two classes. Therefore, the samples taken were 30 samples from the total seventh-level students of Arabic language education at the University of Muhammadiyah Yogyakarta.

### FINDINGS AND DISCUSSION

In pre-test and post-test, the learners were asked to complete some questions related to learners' proficiency in Arabic vocabulary. The result of pre-test and post-test can be seen in the Figure 1.



Figure 1. Pre-test and Post-test scores



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Based on the graphic above, the pre-test rate is 82.5% and the post-test is 90.8%. It can be concluded that there is an impact on the use of the Duolingo application for students of Arabic language education at the University of Muhammadiyah Yogyakarta. Based on the results of the data that has been obtained through tests, observations and interviews in the two cycles, it shows that the application of learning using Duolingo is proven to improve students' vocabulary and speaking skills. Djamarah (2014) mentions that one of the efforts to attract students' attention is to use media that stimulate students to think. One of the media that can stimulate students' attention is learning media with the Duolingo application.

Duolingo really attracts students to learn Arabic because they enjoy learning it and it's not boring. Duolingo's application is so attractive that it makes students happy to pay attention to the application. Munday (2016) stated that Duolingo is preferred over regular assignments and media because of the convenience it provides, based on his research. This means that Duolingo is easy to use and friendly media used in the teaching and learning process. Based on the data obtained in both cycles there is an increase in student learning outcomes in each cycle. The ability of students' speaking skills experienced a significant increase with the percentage of the class, namely pre-test 82.5% and post-test 90.8%. There was an increase in their vocabulary mastery and speaking ability and the responses indicated that they had motivation in learning to speak. Their enthusiasm was high when the researchers chose a simple topic from the descriptive text they made. Students are more interested in learning by using the Duolingo application. This is supported by previous research by Nursyamsiah (2001) on the Use of Duolingo Application Media in Improving Arabic Vocabulary Mastery which proves that the use of Duolingo application has improved students' speaking skills and Arabic vocabulary mastery.

It can be concluded that the initial independence assessment has a mean score of 103.4 with a score of 71% or rated as good. After using Duolingo on the eye, the independence rating in the final questionnaire increased by an average score of 120.1 by 80% and rated very good. Therefore, it can be concluded that using the Duolingo application can increase the independence of learning for students.

### CONCLUSIONS AND SUGGESTIONS

Based on the results of the research and data analysis about the Duolingo application for students of Arabic language teaching, there is a positive impact on students' learning outcomes using the Duolingo application. This can be demonstrated by the results of comparing the initial test with the post-test. The increase in test scores can be seen from the average student score based on pre-test scores up to 82.5 and post-test scores up to 90.8. The initial independence survey was rated as good at 71% and the latter as very good at 80%. In other words, the seventh class of Arabic language students at the University of Muhammadiyah experienced an increase in independence after using the Duolingo application.



# Seminar Nasional Bahasa, Sastra, Seni, dan Pendidikan Dasar 2 (SENSASEDA) 2

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### LIST OF REFERENCES

- Alhamid, T. (2019). *Instrumen pengumpulan data*. 1–20. <a href="mailto:file:///C:/Users/USER/Downloads/INSTRUMEN">file:///C:/Users/USER/Downloads/INSTRUMEN</a> <a href="mailto:PENGUMPULAN">PENGUMPULAN</a> <a href="mailto:DATA.pdf">DATA.pdf</a>
- Haryanto. (2019). *Pengertian pendidikan. Universal pendidikan*, april 2017, 8–22. https://unpendidikan.blogspot.com/2019/02/pengertian-pendidikan.html
- Iswati, S. (2009). *Metodologi penelitian kuantitatif*: Edisi 1 Google Books. Https://www.google.co.id/books/edition/Metodologi\_Penelitian\_Kuantitatif
- Maulidinia, R. (2020). Efektivitas aplikasi دوولينجو dalam meningkatkan perbendaharaan kosakata bahasa Korea sehari-hari. Universitas Pendidikan Indonesia | Repository.Upi.Edu | Perpustakaan.Upi.Edu
- Nuralie, A. (2019). دوولينجو sebagai media pembelajaran. Program Studi Pendidikan, Teknologi Kurikulum, Jurusan Teknologi, D A N Pendidikan, Fakultas Ilmu Semarang, Universitas Negeri.
- Putri, W. N. (2017). Pengaruh media pembelajaran terhadap motivasi belajar Bahasa Arab siswa Madrasah Tsanawiyah. *LISANIA: Journal of Arabic Education and Literature*, 1(1), 1. https://doi.org/10.18326/lisania.v1i1.1-16
- Rifdinal. (2021). Keefektifan penggunaan دوولينجو dalam pembelajaran kosakata Bahasa Inggris. 2(2), 697–704.
- Yahya, H. (2020). Evaluasi dan penilaian dalam belajar. hlm. 60. https://www.google.co.id/books/edition/Evaluasi\_Dan\_Penilaian\_Dalam\_Pen belajara/GLTqDwAAQBAJ?hl=id&gbpv=1&dq=arti+pembelajaran&printsec =fro ntcover
- Yaumi, M. (2017). *Media pembelajaran: Pengertian, fungsi, dan urgensinya bagi anak milenial*. http://repositori.uin-alauddin.ac.id/11788/1/MEDIA PEMBELAJARAN Pengertian%2C Fungsi%2C dan Urgensinya bagi Anak Milenial.pdf
- Yaumi, M. (2018). *Media & Teknologi pembelaran*. https://www.google.co.id/books/edition/Media\_dan\_Teknologi\_Pembelajaran /2uZeDwAAQBAJ?hl=id&gbpv=