

## UTILIZING THE DUOLINGO APPLICATION FOR SELF-DIRECTED ENGLISH VOCABULARY LEARNING AT MTS MUHAMMADIYAH 1 SAMARINDA

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### ABSTRACT

This research examines the utilization of the Duolingo application for self-directed learning of English vocabulary at MTS Muhammadiyah 1 Samarinda. English as an International Language and the utilization of digital platforms as learning media is very effective and fun. Duolingo was identified as an effective and popular platform for language learning, which utilizes a gamification approach and enables self-directed learning. This study used a descriptive method with a qualitative approach, involving 10 grade 9 students of MTS Muhammadiyah 1 Samarinda who were selected through purposive sampling based on their experience using Duolingo. Data collection was conducted through direct interviews with 7 questions. The results showed that Duolingo facilitates English vocabulary acquisition for its users, thanks to feedback and repetition features that reinforce understanding. In addition, the ease of use makes Duolingo accessible and usable by individuals of all ages. The app's appeal is also supported by some factors, including an engaging interface, flexibility, straightforward material explanations, content repetition, a gamification approach, and a variety of language options.

**Keywords:** *Duolingo, Self-directed, Vocabulary*

### INTRODUCTION

In ancient times, English was different from old and modern English, with influences from the Germanic and Latin languages. After the Norman conquest in 1066, there were major changes with the inclusion of Norman French vocabulary and the simplification of grammar. Later, British colonialism spread the language throughout the world and made it an international language that has an important role in global communication in various fields. English will continue to evolve and be influenced by culture and technology.

In Indonesia, English has experienced rapid development along with globalization. This language was first recognized during the Dutch colonial period, and during independence, English became an important role as an international language. In the education system, English is a compulsory subject from elementary school to high school. In addition, many universities in Indonesia use English as the language of instruction. However, there are some challenges in learning English, such as teacher quality, limited access to learning resources, and cultural differences. The government continues to strive to improve the quality of English learning so that future generations can compete on a global level.

In Samarinda, the government is delivering on its promise through the “English Day” program in schools, which aims to improve the Human Capital Index (HCI) by emphasizing the use of English in everyday life. Not only at the school level, this program is also carried out at the university level. Thus, English becomes a second language that must be mastered after the mother tongue. Therefore, media is needed to build a fun learning process that can attract interest and improve student learning outcomes (Purba, 2022).

The ability to speak English not only improves language skills in academics but also becomes a career opportunity. With the ability to speak English, one can connect with the world, easily access information globally, and be able to keep up with technological developments. Therefore, with the advancement of technology, artificial intelligence, and digital platforms, learning English is effective, efficient, and fun. In addition, learning English can be done independently or individually. Independent learning makes a person grow and develop with the ability to organize themselves (Khasanah & Lestari, 2021). Learning through the application can customize the lessons needed according to individual interests, in addition, the ability tracking feature helps us monitor the language development that has been obtained, as well as the gamification method in the learning process to be more fun and increase motivation.

Improving English language proficiency has become a major necessity in this day and age. English is a means of communicating with each other and conveying thoughts, ideas, or feelings. It requires the use of words, grammar, and sentence structure. In this case, developing language skills requires mastering four main aspects, namely reading, listening, speaking, and writing. These four aspects are interrelated, both verbally and in writing. To develop these four skills, vocabulary mastery is the initial basis for language learning. Tarigan (2011) states that a person's language proficiency is determined by his/her vocabulary mastery, the more vocabulary they master, the greater the possibility of becoming skilled in language.

The Duolingo app is a widely used language learning platform. This app is an effective learning system for teaching and learning languages, such as English (Rahmattullah, 2024). Being a popular app used for learners to learn a new language, it is up-to-date. In addition, this app uses the “play while learning” method. Duolingo is an effective self-education app, especially for children, and significantly improves learning outcomes and interest in learning English (Rosidah, 2024).

Duolingo app provides a variety of interesting features in learning languages, and also provides more than 40 different languages, such as English, Mandarin, Korean, Japanese, Arabic, German, and other languages. It trains language skills such as reading, writing, listening, speaking, and grammar, as well as increasing vocabulary. This app is an effective application for vocabulary enrichment, as stated by Nugraha et al., n.d. (2023) “Duolingo is a learning application that provides lots of foreign language vocabulary learning materials that are designed in an attractive way to help users develop foreign language vocabulary skills more competently and effectively”.

The use of the Duolingo application plays an important role in the process of developing one's language skills. With a fun learning method and presentation of material that is easy to understand, this application is of interest to many age groups. The learning system through the application makes it easier for each individual to do learning independently. Not only that, but this application has been widely used and researched, and the Duolingo application has a rapid impact on a person's language skills. According to the

results of previous research, Anjani (2024) the results of this study indicate that the use of the educational game-based 'Duolingo' application, which is a medium for learning foreign languages, is considered effective in strengthening students' acquisition of knowledge.

Based on the background that has been explained previously, the researcher wants to know about:

1. What is the user experience in using the Duolingo app to improve English vocabulary acquisition independently, and benefits?

Based on the questions above, this study aims to identify the use of the Duolingo application for self-directed learning in improve English vocabulary, the experience of using the Duolingo application, and the benefits obtained.

This study aims to support the use of the Duolingo application in improving students' English language skills, especially in developing vocabulary, as well as providing recommendations for English teachers to incorporate the use of the Duolingo application into learning activities. With the utilization of technology in the Teaching and Learning System (KBM), it is easier for teachers to carry out various learning strategies. In addition, the use of technology in this day and age facilitates the learning process not only as a practical tool but also makes the spirit and ability of individuals to continue to develop and adapt to the changing times that exist (Novaria, 2024). Students will continue to be motivated by a diverse learning system. Growing confidence to continue learning and processing due to easy access to technology and easy-to-understand material.

This research will continue to develop an education system that continues to keep up with the times. Utilization of digital technology and the use of platforms and applications as learning media to facilitate obtaining information and knowledge. Not only that, the next researcher will continue to research how important technology is in the education system in Indonesia. What are the impacts of technology on the learning system, and others. Therefore, this research will be useful for other researchers who will conduct the same research but in a different context.

## **LITERATURE REVIEW**

The first study from Sakina (2024) "Using Duolingo Application in Learning Vocabulary: A Descriptive Qualitative Study at The Fifth Grade of an Elementary School in Sumedang" was conducted at the elementary level in Sumedang, involving 18 students who participated using purposive sampling. The research used descriptive qualitative methods, with instruments of observation, questionnaires, and interviews. Consisting of 15 questionnaire questions with a Likert scale, 7 interview questions, and observation. The results stated that the Duolingo application has a positive impact on vocabulary learning. For example, students are motivated in learning a language through the application, making it easier for students to learn new vocabulary, and vocabulary learning that students can apply in daily conversations.

The second study from Inayah (2020) "Exploring Undergraduate Students: Perception Toward the Use of Duolingo in Learning English" aims to examine students' perceptions of the use of Duolingo as an English learning application. This research focuses on undergraduate students of Syiah Kuala University, as many as 60 students selected through the purposive sampling technique. The research used mixed methods, namely by combining quantitative and qualitative methods. In collecting data, this study used questionnaires and interviews. The questionnaire consisted of 16 closed questions based on a Likert scale, and asked 3

interview questions to 10 students to gain deeper insights into their perceptions of using Duolingo. The results stated that the Duolingo app is positively useful, helpful, and motivates students to learn language skills. Significant technological developments are expanding learning opportunities in the palm of your hand.

The third study from Lahji (2024) "Improving English Learning Motivation With the English App Duolingo." the research was conducted on high school students, grade 11 at SMK Negeri 1 Sawan, in investigating the effects of the Duolingo App in increasing motivation to learn English. Using a qualitative method through an interview and observation approach to generate data. The results of this study show that Duolingo effectively increases motivation to learn English with fun approaches, such as gamification, learning personalization, and social interactive features. The app makes learning more fun, provides immediate feedback, and helps users track their progress, encouraging them to keep learning. With easy access via mobile devices and personalized exercises, learning becomes more flexible and relevant.

The fourth study from Hardiyanto (2023) "Pengaruh Fitur-Fitur Aplikasi Duolingo Terhadap Popularitasnya." this research obtained two different data sources, namely primary data and secondary data. Primary data was obtained from interviews with 10 respondents with 13 questions, while secondary data was obtained from Google Play Store reviews and articles. The results of this study state that the features in the Duolingo application play an important role in the popularity of this application. One of them is the level feature, making users more excited in the learning process. In addition, the results also state that this application is very suitable for beginners or people who are not fluent and want to learn languages. However, at the level of someone who is already fluent or proficient in a language, this application is too basic and will only add a little knowledge.

The last study from Ahmed (2016) "Duolingo as a Bilingual Learning App: A Case Study." this research uses mixed methods, namely qualitative and quantitative methods. The case study was conducted on a 12-year-old child from Saudi Arabia, on simulated learning of English and Spanish for two months. The results of this study show that the Duolingo app is a motivating and useful language learning app for beginners. However, there are some suggestions for improvement, such as increasing vocabulary, grammar, or a deeper understanding of the material. In addition, more varied teaching methods (not only relying on direct translation) are needed.

## **METHOD**

This research uses a descriptive method with a qualitative approach. The research is open-ended and in-depth, making it easier to obtain data. This research analyzes the use of the Duolingo application in learning English and how this application can be useful in developing new vocabulary in learning languages. (Nasution, 2023) states that a qualitative approach is a set of words, sentences, and paragraphs that have meaning for research. The previous statement states that qualitative methods are used to describe data. In addition, this researcher used purposive sampling from the interview results as a research instrument.

The subjects of this study focused on the junior high school level, namely grade 9 students at MTS Muhammadiyah 1 Samarinda, who had been selected by purposive sampling. The students were chosen because they had used the Duolingo application for new vocabulary development in learning English. The participants consisted of 10 students who were selected based on their experience in using the Duolingo application.

This study will provide opportunities for students with two days to use the Duolingo application to increase the vocabulary obtained. With the specified time, the researcher hopes that the Duolingo application will be able to improve the vocabulary development of female students by learning the language independently by using the application as a learning media.

This study used data collection techniques through direct interviews to provide valuable insights into how respondents use the Duolingo app in learning vocabulary. The interviews included 7 questions from A Tahir, F Tafat (2021) which allowed respondents to express their opinions.

This paradigm includes three data analysis activities: data reduction, display data, conclusion, and verification. Data analysis began with data reduction, which involved organizing and simplifying the raw data collected through interviews. Data display techniques are then used to graphically depict the summarized data in a way that is easy to understand. Data conclusion involves interpreting findings to generate an overarching to get the meaning of the data collected by analyzing relationships, similarities, and differences to draw conclusions as answers.

## **FINDINGS AND DISCUSSION**

### **1. Findings**

#### *a. Students' Experiences in Using the Duolingo App*

The Duolingo app makes it easier for users to learn English by starting with basic vocabulary. The app provides a feedback feature that allows users to review incorrect answers and repeat questions, thus reinforcing understanding. Users benefit from frequent repetition of vocabulary and customization of material to their individual ability level. With concise and clear explanations, plus engaging learning features such as games further enhance the ease of learning English.

This was expressed by Student 3, who said that:

*"Easy, because if for example we answer a question incorrectly, the application will review the correct answer."*

This was expressed by Student 4, who said that:

*"Easy, because Duolingo introduces a lot of vocabulary and often repeats the vocabulary we have learned, then before entering Duolingo, we are identified with find out where our abilities are, so we can learn according to our abilities."*

This was expressed by Student 8, who said that:

*"Easy, because we learn vocabulary starting from the basics, so it's easier to understand, and the way of learning is also fun, so it's like playing games."*

The student experience in using the Duolingo application is very easy. By providing explanations for wrong answers, students can relearn the wrong material. The app also repeats the vocabulary that has been learned, making it easy for students to remember the vocabulary that has been acquired. In addition, the identifier technique at the beginning of



each lesson makes it easy to manage information about each user's ability limit, and a fun way to learn like playing a game.

In addition, Duolingo also improves user performance in vocabulary, where repetition of material makes users easily remember the vocabulary learned.

This was said by Student 1:

*"Yes, because from Duolingo I can learn new vocabulary."*

This was said by Student 4:

*"Yes, it improves, because he often repeats the material."*

The use of the Duolingo application in improving vocabulary performance is very helpful. By providing a variety of new vocabulary, users can get new information about the vocabulary they have. And repetition of material can have a very efficient effect on remembering the vocabulary that has been obtained.

#### b. Student's Benefits in Using the Duolingo App

The app is easy to use due to its clear, uncomplicated settings and helpful guides. The simplicity of the app, including the clear guidelines, makes it accessible to people of all ages and useful for exploring languages, especially English.

This was said by Student 1 and 7:

*"It's easy because the settings in Duolingo are clear, not complicated, and the guides are quite clear."*

The same thing was by Student 4:

*"The ease of use of Duolingo compared to other language apps."*

Likewise, what was said by Students 3 and 9:

*"Duolingo is very useful even for parents because of its clear guidelines, and it is useful for schoolchildren to learn English."*

The ease and clear guidance on the use of this application make it easy for users to access the application. Students agree with this statement because the learning application in Duolingo is easier to understand than other language applications, and is suitable for all ages because of its convenience.

Duolingo offers many advantages in language learning, such as helping users speak better and more fluently, and presenting an interesting and not boring learning style, and it is designed like playing a game. The app also allows users to learn different languages and enrich their vocabulary in a fun way.

This was said by Students 1 and 2:

*"Duolingo helps them speak the language they are learning better, correctly, and fluently, in an engaging style."*

This was said by Student 9, highlighted:

*"The gamification approach, diverse and structured materials, and personalized learning."*

This was said by Student 10 added that:

*"Duolingo helps to expand vocabulary in various languages in a fun way."*

The four student statements above are the benefits of learning languages in Duolingo with an engaging way of learning, a gamification approach, diverse and structured materials, and personalized learning. The app also helps expand vocabulary in various languages in a fun way, thus helping users speak better and fluently.

Overall, the app is appealing due to various advantages, such as ease of access, visual appeal, flexibility, clear explanation of material, repetition of material, gamification approach, and availability of various language options.

This was said by Student 5 highlights:

*"Attractive appearance and ease of learning with clear explanations and repetition of material."*

This was said by Student 7 emphasized:

*"How the gamification approach makes learning English easier to understand."*

This was said by Student 9 stated that:

*"Duolingo is appealing because of gamification, flexibility, ease of access, and the large selection of languages."*

Duolingo received positive reviews from students for its visually appealing design. Students also appreciated the clear explanations and effective repetition of the material, and the gamification approach makes it easier to understand the material. Furthermore, flexibility, accessibility, and a variety of language options are additional features that make Duolingo very attractive to users.

## **2. Discussion**

Based on the data analysis that the researchers have done, it can be concluded that all participants agree that the Duolingo application can be an independent learning media in improving vocabulary. The utilization of this application in English learning shows that this application makes it easier for users to learn English, especially in terms of vocabulary mastery. According to Agustina (2024) Duolingo is considered capable of increasing students' vocabulary. This point of view is reinforced by Nursyamsiah (2021) in her research which states that the use of the Duolingo application can improve the mastery of English vocabulary, in various aspects such as interpreting words, reading and writing.

Duolingo starts with the introduction of basic vocabulary and provides a feedback feature, thus reinforcing understanding of the material. This digital platform also provides benefits such as vocabulary repetition, helping users to speak English better and more fluently, and diverse and structured materials. Firdaus (2024) stated that Duolingo presents structured and well-organized material. Meanwhile, researcher Herlina (2021) argues that the Duolingo application is effective in improving students' speaking skills, as well as easy

understanding of the material. In his research, Hardiyanto (2023) also stated that using Duolingo to learn vocabulary, to improve speaking, writing, and listening skills.

In addition to focusing on vocabulary, researchers also highlighted the ease of use of the Duolingo app in general. The clear and uncomplicated application settings, as well as the existence of a guide, make Duolingo easy to access and use in various age groups. This perspective is supported by Anggraini (2024) who stated that Duolingo offers ease of use so that students are excited when trying it individually. Researcher Luthfi (2021) also argues that Duolingo is designed to be very easy for users to recognize in terms of appearance. This ease is considered as one of the main factors that make Duolingo very useful in language learning, especially English. Duolingo also offers various other advantages, such as material adjustment to the user's ability level, personalized learning, and allowing users to learn multiple languages. Rahmawati (2024) argues that Duolingo adapts lessons to the needs and abilities of users, and Duolingo has multilingual support that allows users to learn more than one language at the same time.

Therefore, this app is interesting because of the gamification approach that increases motivation and ease of learning English. The attractive design of the app makes learning fun and not boring. This perspective is supported by Kharismawan (2025) that the gamification approach in Duolingo is proven to increase student engagement in the learning process with a success percentage of up to 70%-80%. This perspective is also supported by other researchers such as Adawiyahi, (2022) who stated that gamification-based Duolingo is very varied and innovative, students are very enthusiastic and interested in participating in language learning.

Overall, Duolingo is rated as an interesting and effective app for learning English. Advantages such as ease of use, visual appeal, flexibility, clear explanation of material, repetition of material, gamification approach, and availability of various language options are factors that make users like this application.

## **CONCLUSION**

Based on the data obtained during the research at MTS Muhammadiyah 1 Samarinda, it can be concluded that the utilization of digital platforms in independent learning can help improve vocabulary performance. It can be seen from the research results that 8 out of 10 students agree that the Duolingo application can improve vocabulary performance in independent learning. They conveyed this experience in the interview session, agreeing that the app can improve the performance of new vocabulary from basic to more difficult levels. With a clear presentation of the material and repetition of the material that can make users can understand and remember the material that has been learned.

English proficiency increases with the breadth of new vocabulary provided and learning that starts from the basics makes this application easier for novice users to learn new vocabulary. The app measures each user's ability at the beginning of learning and provides various advantages, such as an attractive appearance, fun learning with a gamification approach, easy access, clear guidelines, and being suitable for all groups. The ease of use and fun way of learning make this app popular in language learning, especially English.

Therefore, the researcher suggests that utilizing digital platforms in self-learning is the best way to improve vocabulary. In addition, with the availability of various interesting features in the application, increasing motivation and making learning fun using a gamification approach.





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