IMPLIFYING VOCABULARY TEACHING THROUGH DUOLINGO IN SENIOR HIGH SCHOOL

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ABSTRACT

This study examines the use of Duolingo as a Mobile-Assisted Language Learning (MALL) tool for teaching vocabulary at a senior high school. Using a qualitative approach through classroom observations and semi-structured interviews, the study involved 35 twelfth-grade students in Cianjur, West Java. The findings show that Duolingo was used as a supporting medium integrated into classroom activities. It increased students' motivation, engagement, and vocabulary practice through interactive and gamified features. However, challenges included limited understanding of English instructions, internet connectivity issues, and the need for teacher guidance. Overall, Duolingo can effectively support vocabulary learning when used with proper instructional assistance.

Keyword: Duolingo; Vocabulary Learning; Mobile-Assisted Language Learning (MALL); English as a Foreign Language (EFL); Qualitative Study

INTRODUCTION

English necessitates four language abilities: listening, speaking, reading, and writing. In addition to language skills, students also need to master four elements. These are vocabulary, pronunciation, and grammar. When learning English, it is crucial for students to acquire vocabulary since it impacts other skills like listening, reading, writing, and speaking. If learners do not grasp vocabulary, they will

struggle to comprehend conversations, texts, and reading materials in English. Furthermore, they will struggle to communicate in English. One of the challenges in vocabulary instruction is the continued reliance on conventional teaching methods, such as memorization and translation, which may limit students' engagement and motivation. In contrast, current students are part of a digital generation that is highly familiar with mobile technology and digital applications. This condition creates a gap between students' learning preferences and the instructional approaches commonly used in vocabulary teaching.

Vocabulary is fundamental to understanding the importance of words in language, which plays an essential role in learning. He states that without grammar, communication becomes very limited (Hatch and Brown, 1995: 1). Without vocabulary, little can be conveyed. By mastering vocabulary, people can effectively express their ideas and understand others more clearly. Vocabulary refers to words or terms that have meaning. Without knowing the meaning of words, speakers cannot understand the information provided. However, many senior high school students still experience difficulties in understanding and using English vocabulary effectively, which affects their ability to comprehend texts, participate in conversations, and express ideas accurately.

The integration of technology, particularly mobile applications, offers potential solutions to these challenges. Duolingo is a widely used language-learning application that incorporates gamified features and interactive exercises to support vocabulary learning. Previous studies have indicated that Duolingo can provide an engaging learning experience and support vocabulary development among EFL learners.

Duolingo has been studied by several researchers regarding its effectiveness in helping students learn languages. A study by Rachels et al. (2017) showed that Duolingo has a positive impact on student language achievement. Additional evidence of Duolingo's positive impact, which found that it helps learners improve their vocabulary and develop a more positive attitude toward language learning thanks to its fun and dynamic nature.

THEORETICAL FRAMEWORKS

Vocabulary learning is a fundamental aspect of English language acquisition, as it directly influences learners' ability to understand and produce language. In EFL contexts, vocabulary mastery is essential because limited exposure to English outside the classroom requires instructional support that facilitates repeated and meaningful encounters with lexical items. Recent studies emphasize that effective vocabulary instruction should promote engagement, contextual understanding, and

learner motivation to support vocabulary retention and use (Aulia et al., 2020). Technology-based learning environments provide opportunities for interactive vocabulary practice, allowing learners to engage with words through multiple modalities such as reading, listening, and writing. These features are particularly beneficial for secondary school learners who require structured yet engaging vocabulary instruction (Iskandar et al., 2024).

Modern vocabulary instruction highlights the importance of meaningful exposure, repetition, and contextualized practice to support long-term retention. Technology-assisted learning environments provide opportunities for repeated encounters with lexical items, which are essential for vocabulary acquisition among secondary school learners (Atiqah Rizwana et al., 2024) Mobile-Assisted Language Learning (MALL) refers to the use of mobile technologies to support language learning processes. In recent educational research, MALL has been recognized as an effective approach for enhancing language learning flexibility, accessibility, and learner autonomy. Mobile applications enable students to practice language skills beyond the classroom and at their own pace, which is especially relevant in vocabulary learning (Helmie et al., 2023).

Duolingo is an example of a MALL application designed to support language learning through mobile devices. Research indicates that mobile applications like Duolingo can positively influence vocabulary learning by providing structured exercises, immediate feedback, and opportunities for repeated practice (Sakkir & Syamsuddin, 2023). These features align with contemporary views of technology-enhanced language learning that emphasize learner engagement and autonomy.

Duolingo is designed to support vocabulary learning through interactive exercises that integrate reading, listening, and writing activities. The application provides immediate feedback, which helps learners recognize errors and improve their understanding of vocabulary usage. In addition, progress indicators such as points and learning streaks allow students to monitor their learning development and maintain motivation.

Recent research highlights that Duolingo is perceived as an effective medium for vocabulary learning due to its accessibility, user-friendly interface, and engaging learning environment (Aulia et al., 2020) These characteristics support the use of Duolingo as a supplementary instructional tool in formal classroom settings, particularly for senior high school students.

In the realm of language education, modern technology encompasses a diverse array of resources, including the internet, applications, digital dictionaries, and e-books, all of which are readily accessible in digital formats (Devi, 2022). A variety of applications designed for English language learning have been

developed, catering to learners from beginner to advanced levels with user-friendly interfaces (Atiqah Rizwana et al., 2024). Among these, Duolingo stands out as a prominent language-learning application due to its innovative platform that delivers comprehensive English vocabulary learning instruction effectively and engagingly. Additionally, Duolingo provides users with performance metrics, including points earned, learning streaks, and time invested, to track progress and encourage sustained engagement (Helmie & Susilawati, 2018).

Research also highlights positive student perceptions of Duolingo, reinforcing its role as an effective vocabulary learning medium ((Aulia et al., 2020). A study conducted by Aulia et al., (2020) produced findings that Duolingo is very helpful in improving students' vocabulary mastery. This study adopts a qualitative approach using classroom observation and interviews to explore the implementation of Duolingo in vocabulary teaching. Observation allows the researcher to examine how Duolingo is integrated into classroom activities and how students interact with the application during learning sessions. Interviews provide insights into students' perceptions, challenges, and perceived benefits of using Duolingo for vocabulary learning. Qualitative methods are suitable for this study because they enable an in-depth understanding of students' learning experiences rather than merely measuring learning outcomes. By combining observation and interviews, this study seeks to capture a comprehensive picture of how Duolingo supports vocabulary learning in a real classroom context.

Many researchers have discussed the Duolingo application for vocabulary teaching, one of which (Septiani, 2023) conducted research also on vocabulary improvement using the duolingo application entitled *The Implementation of Duolingo Application For Improving Students English Vocabulary at The Seventh Grade of SMP Negeri 08 Muaro Jambi* this research used a quantitative approach with pre-experimental design. Here are the results: There is a significant difference in the students mastery on vocabulary before and after taught by using Duolingo application.

Research on the use of duolingo application to teaching vocabulary is also discussed by (Suci, 2022) a research entitle *The Perceptions of Using Duolingo Application in Learning English for Student's Vocabulary Mastery* the present study used a quantitative research methodology. Based on the results of the study, according to majority of students, learning vocabulary using Duolingo application was very enjoyable and it became easier for them to understand the material presented.

In addition, (Rahman et al., 2024) conducted a research entitled *Using The Duolingo Application In Developing Students Vocabulary Mastery* the present study used a quantitative method with an experimental approach. Based on the result of the study, students who were taught using Duolingo showed better results

compared to students who were taught conventionally in terms of vocabulary mastery.

Moreover, (Anandra & Salmiah, 2024) conducted a research entitled *Students' Perception of Duolingo Application on Mastering Vocabulary.* The methodology applied in this study is qualitative. To collect data, interview and questionnaire methods were used. Based on the results of the questionnaire and interviews conducted by the researchers, the students believed that the Duolingo application provided many benefits in their language learning.

And the last, (Himmah et al., 2024) conducted a research entitled *The Effectiveness of Using Duolingo to Mastery Students' Vocabulary in English Teaching.* This research design uses pre-experimental research. This research was conducted through a three-stage process: pretest-treatment-post-test. The result this data shows that using Doulingo which combines learning games can make it easier for students to master vocabulary in English. The data also shows that the Duolingo application significantly increases students' vocabulary mastery at SMAN 1 Sungai Raya.

METHODS

This classroom activity was conducted using a qualitative approach, as the research focuses on observing the teaching and learning process, classroom interaction, and students' experiences in learning vocabulary through the use of the Duolingo application.

Participants & Setting (Respondents and Location)

1. Student respondents: 1 Senior High School class (35 students) in grade XII to ensure sufficient basic language skills.
2. Location: Ar-Riyadl Senior High School in Cipanas, Cianjur, West Java.
3. Observation duration: 2 conversation learning session (60 minutes each), to capture variations in implementation.

RESULT & DISCUSSION

Activity in the class

1. Implementation of Duolingo in Teaching Vocabulary in Senior High School (RQ1)

Based on classroom observations, the implementation of Duolingo in teaching vocabulary was conducted in a structured and systematic manner throughout the learning process. The learning activities began with a brainstorming session in which the teacher asked students several questions

related to vocabulary learning and the use of technology in English learning. This activity aimed to activate students' prior knowledge and prepare them for the lesson. The teacher then explained the learning objectives clearly so that students understood the purpose of using Duolingo in learning vocabulary.

In the main activity, the teacher introduced the Duolingo application using a PowerPoint presentation. The explanation included the definition of Duolingo, its functions, and its benefits in supporting vocabulary learning. After the explanation, the teacher guided students to open the Duolingo application and explained how to use its features. Students were divided into small groups, and each group sent one representative to practice using Duolingo in front of the class under the teacher's guidance, while the other students observed. Through this activity, students learned new vocabulary through interactive exercises provided by the application. The lesson ended with a reflection session and a short vocabulary-related game, indicating that Duolingo was integrated into the lesson as a supporting learning medium rather than the only learning source.

2. Students' Challenges in Using Duolingo (RQ2)

Based on classroom observations and interviews, several challenges were found during the implementation of Duolingo in teaching vocabulary. Some students experienced difficulties in understanding English instructions provided in the application, especially students with lower English proficiency. They required additional explanations from the teacher to understand how to complete the tasks in Duolingo.

Another challenge was related to students' familiarity with the application. Although most students showed enthusiasm, some students needed more time to adapt to the features of Duolingo. Technical issues such as limited internet access and unfamiliarity with certain application features also affected the learning process. These challenges indicated that the teacher's guidance and support were essential to ensure that all students could follow the learning activities effectively.

3. Students' Benefits in Using Duolingo (RQ3)

Despite the challenges, the use of Duolingo provided several benefits for students in learning vocabulary. Based on observations and interview results, students felt that learning vocabulary through Duolingo was more interesting and enjoyable compared to conventional learning methods. The interactive features, such as quizzes, images, and immediate feedback, helped students remember vocabulary more easily.

Students also showed higher motivation and participation during the learning process. The group activities and practice sessions encouraged collaboration and active involvement. Furthermore, students felt more confident in learning English vocabulary because Duolingo allowed them to practice independently while still receiving guidance from the teacher. These benefits indicated that Duolingo supported students' vocabulary learning by making the learning process more engaging, motivating, and meaningful.

The results show that Duolingo was applied as a supplementary learning tool in vocabulary teaching. Students' responses and classroom observations highlight how the application was used, the challenges encountered, and the learning experiences perceived by students during the implementation.

No	Theme	Key Interview Findings	Classroom Observation Findings
1	Vocabulary Learning Support Tool	Students described Duolingo as a tool that helped them access and practice vocabulary through interactive activities.	Duolingo was applied as a supporting tool within classroom activities rather than as the main instructional source.
2	Student Engagement and Motivation	Students shared that learning vocabulary with Duolingo felt more enjoyable and different from conventional lessons.	Students appeared attentive and actively involved during Duolingo-based classroom activities.
3	Students' Perceived Experience	Students explained that Duolingo assisted them in understanding vocabulary tasks, although teacher guidance was still needed.	Students followed vocabulary exercises provided by Duolingo, with teachers frequently clarifying instructions.
4	Challenges in Using Duolingo	Students reported difficulties understanding English instructions and experiencing internet connectivity problems.	Technical issues and varying levels of familiarity with the application were observed during lessons.

CONCLUSION

This study explored the implementation of Duolingo in teaching vocabulary at the senior high school level through a qualitative approach involving classroom observation and interviews. The findings indicate that Duolingo can be effectively integrated into vocabulary instruction as a supplementary learning tool to support classroom activities. The application facilitated interactive and engaging

vocabulary practice, which contributed to increased student motivation, participation, and confidence in learning English vocabulary.

Despite its benefits, the study also identified several challenges in the use of Duolingo, particularly related to students' varying levels of English proficiency, difficulties in understanding application instructions, and technical constraints such as limited internet access. These challenges highlight the importance of the teacher's role in guiding students and providing clear instructions to ensure effective use of the application.

In conclusion, Duolingo offers significant potential to simplify vocabulary teaching in senior high school contexts by providing a flexible, engaging, and technology-enhanced learning environment. However, its successful implementation depends on appropriate pedagogical integration, sufficient technical support, and active teacher involvement. This study is expected to contribute to the development of technology-assisted vocabulary instruction and provide insights for English teachers who intend to integrate mobile applications into their classroom practices.

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