Teaching Vocabulary to Grade XI Students through Duolingo Application at Senior High School

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Abstract

This study focuses on the effectiveness of using the Duolingo application in teaching vocabulary to grade XI. This study used a quasi-experimental design with two classes: experimental and control. The experimental class received treatment using Duolingo media, while the control class was taught using conventional media. Pre-tests and post-tests were used to assess improvements in students' vocabulary. The results of the study indicate that the use of the Duolingo application is effective and can improve students' vocabulary, as evidenced by the average score of the experimental class increasing from 78.10 to 95.5. The Mann-Whitney test showed a significant difference between the two classes ($p<0.05$), indicating that the use of the Duolingo application is effective in teaching vocabulary. In addition, the findings reveal that students in the experimental class demonstrated higher levels of engagement, motivation, and confidence when learning new vocabulary through the application. The interactive features of Duolingo, such as gamification and immediate feedback, contributed to a more meaningful learning experience. These advantages suggest that mobile-based language learning tools like Duolingo can play a significant role in enhancing language acquisition in formal educational settings. Therefore, it is recommended that teachers consider integrating technology-enhanced instructional media to complement traditional teaching methods in order to maximize students' outcomes in vocabulary mastery.

Keywords: teaching, vocabulary, Duolingo

INTRODUCTION

English is an international language that is essential in many facets of life, such as communication, education, technology, and the workplace. For students to comprehend, communicate, and react to information in a global setting, they must have a solid command of English, particularly vocabulary. The basis of both written and spoken language proficiency is vocabulary. Students will find it difficult to understand texts, form sentences, and communicate clearly if they do not have a strong vocabulary. To prevent pupils from becoming disinterested or overwhelmed throughout the learning process, vocabulary acquisition must be taught in a methodical and interesting manner. In actuality, though, pupils' command of vocabulary is still quite poor. Many children struggle to learn and retain new vocabulary, especially verbs and adjectives, which are essential for building coherent sentences. This problem is frequently brought on by the application of traditional teaching strategies, which are boring, lack media diversity, and don't pique students' attention (Hidayati & Diana 2019). Students become passive participants in the learning process when teachers use traditional teaching strategies like lectures and rote memorization. As a result, students are not sufficiently motivated to utilize terminology in an active and meaningful way, and knowledge transfer is less successful (Larsen- Freeman, 2002; Irawan & Wilson, 2020).

Learning English is crucial in the globalized era due to its widespread use, accessibility, and potential for job opportunities, higher education, and internet access. It also enhances cultural understanding and relationships, making it essential to master a large vocabulary for effective global communication. Acquiring and retaining new vocabulary in English is the process of learning vocabulary. This entails being aware of, comprehending, and applying words appropriately within their context. However there are several difficulties faced by students in learning vocabulary (Wang & Chen, 2025). Vocabulary is everything related to the word you are learning because it is central to a language component. Therefore, the teacher should be able to teach English vocabulary learning to make the student have much vocabulary for mastering four English skills. However, if the teacher does not have a good strategy in teaching, the students exactly have difficulty remembering and memorizing vocabulary.

Learning modules are one of the teaching materials that are interesting and easy for students to understand because they are created using pictures that arouse their curiosity Syukri et. al., (2025). The teachers who implement digital media in the classroom can provide materials more efficiently and it will increase the teaching opportunities as well as the quality of education that create a modern educational atmosphere Damayanti et. al., (2023). According to Tiara and Rahman (2021), students can use technology applications like Duolingo to play and learn English. Duolingo is a free language learning platform developed by Luis Von Ahn and Severin Hacker in 2012. Duolingo offers a fun and non-boring way to learn languages, including English vocabularies. Duolingo has benefit to increase a person's vocabulary to enable more effective and fluent English communication. Based on several studies, it shows the success of implementing Duolingo to improve vocabulary such as the research that focused on vocabulary improvement conducted (Widyastuti & Kusumadewi, 2018).

Education has entered the digital age as a result of technological advancements, and classrooms are incorporating a variety of interactive learning apps. The Duolingo app is one such resource that aims to make learning foreign languages fun and independent. To improve user engagement and learning efficacy, Duolingo uses a gamified method that blends text, audio, images, and challenges. Its reward system and user-friendly interface support learner motivation and retention. In light of this, research

is required to determine how Duolingo can help high school students expand their vocabulary, especially in terms of verb and adjective comprehension and usage. The purpose of this study is to investigate Duolingo as a viable substitute that supports a more active, independent, and significant learning experience while also meeting the objectives of 21st-century education. This study not only seeks to measure the effectiveness of Duolingo in vocabulary acquisition but also to determine whether such digital tools can positively influence students' motivation, engagement, and overall learning experience in the classroom.

Duolingo application can improve students' vocabulary mastery according to some research, a research from Yuwono (2022) found that the students in the seventh grade can effectively learn vocabulary with the Duolingo application. Research conducted Aisyah & Hidayatullah (2023) also found that the Duolingo application can improve students' vocabulary acquisition due to its supporting elements, which include initial ability analysis, involving students' emotions, repetition, and practice questions (Kurniawati et al., 2021; Wijaya et al., 2020). The research studies presented offer valuable insights into the advantages and disadvantages of utilizing the Duolingo application for vocabulary improvement.

Several studies explain the relationship between effective Duolingo in vocabulary. Duolingo has a good effect on students' language achievement Guaqueta et. al. (2018). The positive impact of Duolingo comes from research reported by, where it was proved to help learners increase their vocabulary and developed a better attitude for language learning due to the fun and dynamic nature. In language learning, among the language skills that any learner needs, vocabulary is the key component (Guaqueta & Castro-Garces, 2018).

According to earlier research, the Duolingo application can help students acquire new words. However, the majority of these studies were carried out at the elementary or junior high school levels and concentrated on either the application's technical features or broad vocabulary outcomes. At the senior high school level, few studies have examined its use in the classroom, particularly at particular institutions like SMA. Additionally, few studies now in existence concentrate on particular word categories, including verbs and adjectives. This study fills these gaps by looking at how Duolingo is really used in a classroom, focusing on certain vocabulary kinds, and addressing regional issues including students' lack of enthusiasm, poor vocabulary mastery, and disinterest in conventional teaching techniques.

METHOD

The purpose of this research is to find out how effective the Duolingo application is in learning vocabulary. The research used a quasi-experimental design with pre-test and post-test. Two groups were assigned as the participants of the study: the experimental and the control group. In the experimental group, a pre-test, treatment, and post-test were given. Meanwhile, the control group were given a pre-test and post-test without any treatment. Both groups were given a pre-test and a post-test. The population of the research was the grade eleven students of, which consisted of two classes divided into two groups. In this study, the researcher used the random sampling technique to select the sample. Based on the sampling technique, F1 was chosen as the experimental group and F2 was chosen as the control group. With 29 students in each class, the total number of students was 58. This research was conducted from April 10, 2025, to May 08, 2025, at SMA Negeri 1 Dampal Selatan.

In data collection, the research used vocabulary tests in the form of multiple-choice and matching tests as its instruments. The test was the main instrument in this research to collect data on students' understanding of vocabulary mastery. This test included pre-tests and post-tests, which was the main instruments in this research. The pretest was used to determine the initial vocabulary knowledge of students, while the posttest was used to measure the vocabulary of students after receiving treatment. Thus, it was known whether the Duolingo application was effective in teaching vocabulary. The researcher analyzed the data using simple statistical analysis. First, the researcher analyzed the individual students' scores through pretests and posttests using the following formula, next, the researcher calculated the average score of the students using the formula, and last, the researcher calculated the variance using the formula. Finally, to determine the significant difference between the experimental group and the control group, the researcher calculated the t-value.

FINDINGS AND DISCUSSION
Findings
In this study, researcher used tests as instruments to collect data. After that, the obtained data will be statistically analyzed by the researcher. Previously, each class was given a pretest and posttest. In the first meeting the pretest was given to determine the initial knowledge of students' vocabulary achievement. Then in the last meeting, students from both classes were given a posttest to determine the improvement of vocabulary mastery after being given the treatment. This study was conducted from April 10, 2025 to May 08, 2025. Furthermore, the results of the two tests are explained below.

Before conducting the treatment, researcher first gave pretest to the experimental class and control class. In addition, the final score was obtained by dividing scores obtained by the students to the maximum score and timing it by one hundred. The pretest results of both class were provided in table 1 and 2.

Table 1. Pretest Result of the Experimental Class

No	Initials	Kinds of Test		Score	
		Multiple Choice (0-10)	Matching Words (0-10)	Obtained (0-20)	Final (0-100)
1	AFA	7	10	17	85
2	AGN	3	4	7	35
3	ALS	4	4	8	40
4	AGL	7	10	17	85
5	ALN	7	10	17	85
6	ARS	8	10	18	90
7	EBY	7	8	15	75
8	FAI	8	10	18	90
9	HRW	10	7	17	85
10	HJR	6	10	16	80
11	HKR	6	10	16	80
12	MRD	8	10	18	90
13	MLT	6	10	16	80
14	MRN	7	6	13	65
15	MFA	7	10	17	85
16	NNA	8	10	18	90
17	NRI	7	10	17	85
18	PRM	7	10	17	85
19	RHI	9	8	17	85

20	RML	7	10	17	85
21	RSD	8	9	17	85
22	RSI	7	10	17	85
23	RSL	3	6	9	45
24	SFA	6	10	16	80
25	SYA	9	8	17	85
26	SRA	7	10	17	85
27	WRI	6	10	16	80
28	WDS	6	10	16	80
29	ZLA	7	10	17	85
	Sum of Scores				2290
	Mean Scores				78.96

The table reveals the variation in test scores among students, with 24 scoring above 80 and three below 65, indicating that some students need additional help or practice to improve their scores, indicating a need for further support.

After knowing the scores or achievements of the experimental class on the pretest, the researcher then calculated the results of the control class on the pretest. Furthermore, the results can be seen in Table 2.

Table 2. Pretest Result of the Control Class

No	Initials	Kinds of Test		Score	
		Multiple Choice (0-10)	Matching Words (0-10)	Obtained (0-20)	Final (0-100)
1	AN	4	3	7	35
2	ALH	4	6	10	50
3	AFI	7	10	17	85
4	ASA	4	10	14	70
5	AGI	6	2	8	40
6	ANR	7	10	17	85
7	ARM	6	10	16	80
8	DRG	4	7	11	55
9	FTA	8	8	16	80
10	FHL	6	10	16	80
11	HRN	4	6	10	50
12	HA	6	4	10	50
13	LZA	6	10	16	80
14	MRI	6	9	15	75
15	NA	7	10	17	85
16	NAI	4	3	7	35
17	NHA	3	5	8	40
18	NRA	8	7	15	75
19	RS	6	10	16	80
20	RAI	6	10	16	80
21	RSD	6	10	16	80
22	RSA	6	10	16	80
23	SHR	5	2	7	35
24	SHT	5	10	15	75
25	SAN	6	7	13	65
26	SFA	7	10	17	85
27	WFA	6	10	16	80
28	ZKA	7	10	17	85
29	ZKI	6	9	15	75
	Sum of Scores				1970
	Mean Scores				67.93

Table 2 displays 29 students' test scores, with nine students got score below 65 and fourteen students got score above 80, indicating good performance in multiple-choice and word-matching tests, providing insight into class performance.

Furthermore, after the students' individual scores were obtained, the researcher then calculated the average scores of the two classes on the pretest by using the formula proposed by Arikunto (2011).

Experimental Class

$$M_1 = \frac{\Sigma X}{n}$$

$$M_1 = \frac{2290}{29}$$

$$M_1 = 78.10$$

$$M_2 = \frac{\Sigma X}{n}$$

$$M_2 = \frac{1970}{29}$$

$$M_2 = 67.93$$

Control Class

Based on the calculation above, the mean score of the experimental class on the pre test (M_1) is 78.10, and the mean score of the control class on the pretest (M_2) is 67.93.

After giving treatment to the experimental class using the Duolingo application, the researcher then gave a posttest to both classes. The results of the posttest have been tabulated in Tables 3 and 4.

Table 3. Posttest Result of the Experimental Class

No	Initials	Kinds of Test		Score	
		Multiple Choice (0-10)	Matching Words (0-10)	Obtained (0-20)	Final (0-100)
1	AFA	9	10	19	95
2	AGN	8	10	18	90
3	ALS	9	10	19	95
4	AGL	9	10	19	95
5	ALN	10	10	20	100
6	ARS	10	8	18	90
7	EBY	9	10	19	95
8	FAI	9	10	19	95
9	HRW	9	10	19	95
10	HJR	10	10	20	100
11	HKR	9	10	19	95
12	MRD	10	10	20	100
13	MLT	10	10	20	100
14	MRN	7	10	17	85
15	MFA	9	10	19	95
16	NNA	10	10	20	100
17	NRI	10	10	20	100
18	PRM	9	10	19	95
19	RHI	10	10	20	100
20	RML	10	10	20	100
21	RSD	9	10	19	95
22	RSI	9	10	19	95
23	RSL	9	8	17	85
24	SFA	9	8	17	85
25	SYA	9	10	19	95
26	SRA	10	10	20	100
27	WRI	9	10	19	95

28	WDS	10	10	20	100
29	ZLA	10	10	20	100
	Sum of Scores				2770
	Mean Scores				95.51

Table 3 displays test scores for all students, ranging from 85-100, indicating their exceptional performance in multiple choice and matching tests, with none falling below the 85 mark.

After finding the achievement of the experimental class on the posttest, the researcher then calculated the value of the control class on the posttest. Furthermore, the results can be seen in Table 4.

Table 4. Posttest Result of the Control Class

| No | Initials | Kinds of Test | | Score | |
		Multiple Choice (0-10)	Matching Words (0-10)	Obtained (0-20)	Final (0-100)
1	AN	7	6	13	65
2	ALH	6	8	14	70
3	AFI	9	10	19	95
4	ASA	6	10	16	80
5	AGI	2	3	5	25
6	ANR	9	10	19	95
7	ARM	7	10	17	85
8	DRG	5	8	13	65
9	FTA	6	10	16	80
10	FHL	6	8	14	70
11	HRN	6	10	16	80
12	HA	6	10	16	80
13	LZA	6	8	14	70
14	MRI	6	8	14	70
15	NA	9	10	19	95
16	NAI	2	3	5	25
17	NHA	6	8	14	70
18	NRA	6	10	16	80
19	RS	7	10	17	85
20	RAI	7	10	17	85
21	RSD	7	10	17	85
22	RSA	7	10	17	85
23	SHR	2	3	5	25
24	SHT	6	10	16	80
25	SAN	6	8	14	70
26	SFA	8	8	16	80
27	WFA	7	10	17	85
28	ZKA	7	10	17	85
29	ZKI	6	10	16	80
	Sum of Scores				2075
	Mean Scores				71.55

Table 4 shows 18 students scored above 80, indicating good performance in both test components, while five scored below 65, indicating lower achievement.

Furthermore, as the individual scores of the students obtained, the researcher then calculated the mean scores of both groups on the posttest by using the formula proposed by Arikunto (2011).

Experimental Class

$$M_x = \frac{\Sigma X}{n}$$

$$M_x = \frac{2770}{29}$$

$$M_x = 95.5$$

Control Class

$$M_y = \frac{\Sigma X}{n}$$

$$M_y = \frac{2075}{29}$$

$$M_y = 71.6$$

Based on the calculation above, the mean score of the experimental class on the posttest (M_x) is 95.5, and the mean score of the control group on the posttest (M_y) is 71.6.

After calculating the pretest and posttest scores, the researcher then calculated the deviation and square of the deviation of the scores obtained by the students. The results can be seen in the following tables.

Table 5. Deviation Scores of the Experimental Class

No	Initials	Scores Pretest (X1)	Posttest (X2)	Deviation (X2-X1)	Squared Deviation (d2)
1	AFA	85	95	10	100
2	AGN	35	90	55	3025
3	ALS	40	95	55	3025
4	AGL	85	95	10	100
5	ALN	85	100	15	225
6	ARS	90	90	0	0
7	EBY	75	95	20	400
8	FAI	90	95	5	25
9	HRW	85	95	10	100
10	HJR	80	100	20	400
11	HKR	80	95	15	225
12	MRD	90	100	10	100
13	MLT	80	100	20	400
14	MRN	65	85	20	400
15	MFA	85	95	10	100
16	NNA	90	100	10	100
17	NRI	85	100	15	225
18	PRM	85	95	10	100
19	RHI	85	100	15	225
20	RML	85	100	15	225
21	RSD	85	95	10	100
22	RSI	85	95	10	100
23	RSL	45	85	40	1600
24	SFA	80	85	5	25
25	SYA	85	95	10	100
26	SRA	85	100	15	225
27	WRI	80	95	15	225
28	WDS	80	100	20	400
29	ZLA	85	100	15	225

| | | Σd = 480 | Σd^2 =12500 |

After calculating the data, the results obtained from the number of experimental class deviation scores amounted to 480 and the number of experimental class square deviation scores amounted to 12500.

Furthermore, researchers calculated the deviation score and the square deviation of the control class. The results can be seen in Table 6.

Table 6. Deviation Score of the Control Class

| No | Initials | Scores | | Deviation | Squared |
		Pretest (X1)	Posttest (X2)	(X2-X1)	Deviation (d2)
1	AN	35	65	30	900
2	ALH	50	70	20	400
3	AFI	85	95	10	100
4	ASA	70	80	10	100
5	AGI	40	25	-15	225
6	ANR	85	95	10	100
7	ARM	80	85	5	25
8	DRG	55	65	10	100
9	FTA	80	80	0	0
10	FHL	80	70	-10	100
11	HRN	50	80	30	900
12	HA	50	80	30	900
13	LZA	80	70	-10	100
14	MRI	75	70	-5	25
15	NA	85	95	10	100
16	NAI	35	25	-10	100
17	NHA	40	70	30	900
18	NRA	75	80	5	25
19	RS	80	85	5	25
20	RAI	80	85	5	25
21	RSD	80	85	5	25
22	RSA	80	85	5	25
23	SHR	35	25	-10	100
24	SHT	75	80	5	25
25	SAN	65	70	5	25
26	SFA	85	80	-5	25
27	WFA	80	85	5	25
28	ZKA	85	85	0	0
29	ZKI	75	80	5	25
				Σd = 175	Σd²= 5425

Based on the above calculations, the number of deviation scores obtained by the control class was 175 and the number of squared deviation scores was 5425. After all the scores were calculated, the researcher then calculated the average deviation using the formula proposed by Arikunto (2011).

Experimental Class

$$Md_x = \frac{\Sigma d}{N}$$

$$Md_x = \frac{480}{29}$$

$$Md_x = 16.6$$

$$Md_y = \frac{175}{29}$$

Control Class

$$Md_y = 6.1$$

$$Md_y = \frac{\Sigma d}{N}$$

After calculating the mean deviation of the two classes, the mean deviation of the experimental class was 16.6 and the mean deviation of the control class was 6.1. By obtaining the mean deviation of the two classes, the researcher then calculates the score variance using the formula proposed by Arikunto (2011).

Experimental Class

$$\Sigma x^2 = \Sigma x^2 - \frac{(\Sigma x)^2}{N}$$

$$\Sigma x^2 = 12500 - \frac{(480)^2}{29}$$

$$\Sigma x^2 = 12500 - \frac{230400}{29}$$

$$\Sigma x^2 = 12500 - 7945$$

$$\Sigma x^2 = 4555$$

Control Class

$$\Sigma y^2 = \Sigma Y^2 - \frac{(\Sigma Y)^2}{N}$$

$$\Sigma y^2 = 5425 - \frac{(175)^2}{29}$$

$$\Sigma y^2 = 5425 - \frac{30625}{29}$$

$$\Sigma y^2 = 5425 - 1056.1$$

$$\Sigma y^2 = 4369$$

The result of the variance of the experimental class was 4555 and the variance of the control class was 4369.

Furthermore, researcher calculated the t-counted or the significant difference between the mean posttest scores of the two classes using the formula proposed by Arikunto (2011).

$$t = \frac{Mx - My}{\sqrt{\left(\frac{\Sigma x^2 + \Sigma y^2}{Nx + Ny - 2}\right)\left(\frac{1}{Nx} + \frac{1}{Ny}\right)}}$$

$$t = \frac{95.5 - 71.6}{\sqrt{\left(\frac{4555 + 4369}{29 + 29 - 2}\right)\left(\frac{1}{29} + \frac{1}{29}\right)}}$$

$$t = \frac{23.9}{\sqrt{\left(\frac{8924}{56}\right)\left(\frac{2}{58}\right)}}$$

$$t = \frac{23.9}{\sqrt{(159.3)(0.03)}}$$

$$t = \frac{23.9}{\sqrt{4.7}}$$

$$t = \frac{23.9}{2.1}$$

$$t = 11.3$$

Based on the calculation, it was obtained that the value of the research was 11.3. After getting the t-count value, the researcher then determined the t-table value with df 56 (29+29-2). By using the 0.05 significance technique on a one-sided test, it was found that the t-table value for df 56 was 1.7. Therefore, the research hypothesis was accepted

because the t-count value (11.3) was higher than the t-table (1.7). In conclusion, the use of Duolingo application can improve the vocabulary to XI (eleventh) grade students at senior high school.

Discussion

The results of this study indicate that the Duolingo Application is effective to teaching vocabulary of grade XI student at SMA, this can be seen from the results of the study the findings of this research shows that t-value (11.3) is higher than the t-table value (1.7), which means that Duolingo Application effective to teaching vocabulary of grade XI students at SMA. Duolingo has benefit to increase a person's vocabulary to enable more effective and fluent English communication (Ajisoko, 2020; Azizah et al., 2023). Based on several studies, it shows the success of implementing Duolingo to improve vocabulary such as the research that focused on vocabulary improvement conducted (Widyastuti & Kusumadewi, 2018). Duolingo application can improve students' vocabulary mastery according to some research. A research from Yuwono (2022) found that the students in the seventh grade can effectively learn vocabulary with the Duolingo application at MTs. Gondang Wonopringgo Pekalongan, in the 2018–2019 academic year. Research conducted Aisyah & Hidayatullah (2023) also found that the Duolingo application can improve students' vocabulary acquisition due to its supporting elements, which include initial ability analysis, involving students' emotions, repetition, and practice questions.

Based on the pre-test results from the experimental class, there were several students who received low scores; however, 24 students achieved scores above 80, which can be considered a fairly good score. Meanwhile, three students got scores below 65, which can be viewed as a poor score. The low scores obtained by students were caused by several factors outside of student motivation itself. First, students may have difficulty understanding the content of the test. Secondly, the emotional level of students and their attitudes during the teaching and learning process is still uncontrollable. In addition, there were differences in the way students responded to the test format, which can also play a role. For example, students who struggle to think quickly and feel under pressure may struggle with multiple-choice tests, while others may struggle with word matching. Additionally, the anxiety experienced when facing the exam is another factor that can hinder students from performing optimally on the test. The problems that cause low student scores are lack of vocabulary mastery, lack of confidence among students, students quickly lose interest in learning activities, especially if educators only focus on using textbooks, and lack of interest or involvement in the methods or media provided by teachers at school.

Based on research conducted by Larsen-Freeman (2020), the difficulty of mastering vocabulary is the choice of inappropriate methods given by teachers to students, whether in terms of media selection or strategy. According to Irawan and Wilson (2020), there are other problems, including the lack of teachers' motivation to develop teaching vocabulary and the lack of students' vocabulary mastery; the teacher only takes vocabulary material from books; English is not a required subject, so the availability time is just 2 (two) hours a week; and there is a greater tendency for students to play.

The limitation of this research was the relatively small sample size, which only used 2 classes with a sample size of 58 students, which may not fully represent the wider population. Due to time constraints, this study was only conducted in a relatively short period of time, namely 1 month with 4 meetings. And because it uses media that requires internet access, there are several obstacles to this when trying to access the

media. There are several obstacles in accessing media, namely poor Wi-Fi network access, difficulties in accessing student Google accounts, limited computer space due to final exams for third-year students at SMA, so students use their mobile phones, and a problem commonly experienced by students, namely limited storage space on their mobile phones.

CONCLUSION

In conclusion, the study's findings provide an answer to the researcher's query regarding vocabulary improvement using the Duolingo app. The pre-test and post-test, which included ten multiple-choice and matching items each, were used to assess vocabulary. The results of this study demonstrate that the Duolingo application is successful in teaching vocabulary at SMA because the t-value (11.3) is greater than the t-table value (1.7). Additionally, this study's results are consistent with earlier studies that demonstrate how the Duolingo application improves students' vocabulary. The study's findings suggest that integrating Duolingo with language instruction can be a useful tool for improving students' vocabulary acquisition.

Based on the research findings, the researcher would like to provide some recommendations to teachers, students, and other researchers. The focus for English teachers should be on investigating and implementing a variety of teaching strategies that suit different learning preferences. By including engaging elements in the program, such interactive exercises and real-world language problems, they can improve user engagement. Teachers can use Duolingo as part of their classroom teaching strategy. By using Duolingo, teachers can use the media to improve students' vocabulary or English language skills independently or in a structured manner. Teacher can combine direct teaching in class and independent practice through Duolingo. Gamification features such as XP points, daily streaks, and leaderboards can be used to create fun competitions and increase student learning motivation. Teachers can also set weekly targets in the form of the number of XP or lessons to be completed, and monitor student progress through the Duolingo for Schools platform. Students should take an active approach to their Duolingo learning process. To promote greater comprehension and involvement, they are urged to take part in group activities and use discussion boards more frequently.

Lastly, additional research is advised for scholars in the topic by other researchers. It is crucial to investigate other teaching tactics for vocabulary growth in addition to Duolingo's present resources. Comparative research conducted in various educational contexts can provide valuable insights into the most successful approaches. To make the results of the study more representative, for future researchers, they may expand the scope of their research by involving a larger and more diverse sample size. Future researchers can also look at how well Duolingo improves vocabulary and other language skills, such as writing, listening, and speaking. In addition, the study can be conducted over a longer period of time to determine the impact of using the application in the long term. In addition, it would be interesting if future researchers could compare Duolingo with other language learning applications to determine the advantages and disadvantages of each.

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