The Use of YouTube and TikTok in Improving Students' Vocabulary Achievement

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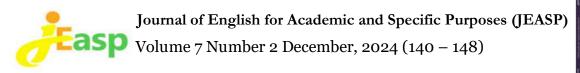**[1, 2, 3]English Applied Linguistics Department, Universitas Negeri Medan**

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Abstract

This study discussed the applications of YouTube and TikTok to students' vocabulary achievement. It was aimed to describe the students' vocabulary achievements when taught using the YouTube application, to elaborate on the student's vocabulary achievements when they are taught using the TikTok application, and to discover the differences in the effect of implementing the YouTube and TikTok applications on the students' vocabulary achievement. This research used experimental research with a quantitative approach. Eighty students were taken as the sample. They were divided into 40 students for the experimental 1 group and 40 students for the experimental 2 group. The data was collected from observation, interviews, and vocabulary tests. Based on the results, it was found that YouTube applications significantly affect the students' vocabulary achievement. It showed an improvement of about 35 % in the experimental 1 pretest group; the students who passed the KKM were nine stuents (22.5%). In experiment 1 post-test group, there was an improvement in students' scores, where 23 students, or 57.5%, passed KKM. This means that YouTube application affects 35% of students' vocabulary achievement. On the other hand, the TikTok application also significantly affects the students' vocabulary achievement. In the pretest results, only four students (10%) who passed the KKM. However, in the posttest results, the students got around 90% improvements. In other words, based on the posttest results in the experimental 2 group, all students passed the KKM (100%). Thus, based on the hypothesis calculation, it can be concluded that TikTok significantly affects students' vocabulary achievement. It is proven from $t_{calculating} > t_{table}$ or $2.469 > 1.683$/. It means that H_0 is rejected and H_a is accepted.

INTRODUCTION

There is a growing body of literature that recognizes the importance of mastering vocabulary, which can help students understand the meaning of words and sentences. It is also one of the essential factors in language learning and develops language skills. Wilkins (2022) states that

vocabulary can increase the students` level of communication and provide a strong basis to develop the four language skills. It will be easy for students to communicate their ideas using their language skills and comprehend what people say if they have a good vocabulary. Vossoughi (2020) states that people use vocabulary as the basic knowledge of learning a language to communicate and interact daily. It means that students' vocabulary is aimed at making it easy for them to think, express ideas and feelings, and learn about the world.

The student's vocabulary is aimed at getting the word's meaning. McKeown and Curtis (2022:2) state that vocabulary is knowledge of the meaning of words. It is more than just citing the definition of a word. It requires that the reader use the word appropriately based on a given context. Stahl (2020) states that vocabulary knowledge is the knowledge of a word that implies a definition and how that word fits into the world. It means that vocabulary is something that can never be fully mastered; it is something that expands and deepens throughout a lifetime. Vocabulary instruction involves far more than looking up words in a dictionary and using the words in a sentence. Vocabulary is acquired incidentally through indirect exposure to words and intentionally through explicit instruction in specific words and word-learning strategies.

The teacher has a significant role in supporting their students in mastering vocabulary. She or he must provide the materials and strategies for teaching learning. Teng (2023) states that vocabulary helps students think and learn. That is why multimedia input (text, images, audio, animation, and captions/subtitles) has been widely adopted to facilitate second language (L2)/foreign language teaching and learning. Teachers have sought to make vocabulary instruction more effective by incorporating glosses into authentic texts and captioned videos to help students master vocabulary. Hadi and Guo (2020) argued that learning and memorizing words in a foreign language is challenging and essential. The students have different opinions about how to understand words. Some of them believe that having knowledge and vocabulary strategies is an effective way to help teachers select the best approaches to vocabulary teaching, which can benefit language learners.

Teachers must be creative in their teaching to overcome the students' problems with vocabulary. Most of the students still find it challenging to master vocabulary. Based on the English teacher's interview, Mrs Rusda informed her students that their vocabulary scores could not have given more satisfactory results. Only 20% of students were able to master vocabulary. Students' vocabulary needs to be more familiar with the meaning, expressing idiomatic words, and using suitable words based on contexts. Rohmatillah (2021), in her research, described the students' difficulties in vocabulary, such as (1) pronouncing the words, (2) choosing the appropriate meaning of the words, and (3) confusing to use the word based on the context. This means that the student's difficulties in vocabulary are unknown meanings, pronouncing the words, writing and spelling, different grammatical forms of a word, and expressing the idiomatic words.

The students should have a vocabulary if they want to master vocabulary in learning the English language. Based on the students' interviews, it was found that their difficulties with vocabulary were due to their difficulty memorizing the meaning of words and their lower motivation. Most of them did not show interest in teaching vocabulary because of the lack of stimulation of the teaching medium. Calderon et al. (2023) state that poor vocabulary is a grave issue for English language students. Teachers should make variations in teaching vocabulary and make the teaching-learning process more enjoyable. The students should also be provided with technology such as videos or audio to learn vocabulary. Harmer (2020) states that teachers should see technology as a tool to help them with their chosen techniques and approaches. It

means that teachers can use technology as a teaching medium to stimulate their students in vocabulary.

YouTube makes it easier for students to master their vocabulary with a fun learning process. Listening to and watching the songs on YouTube can improve the students' vocabulary. Nisa et al. (2020) described how YouTube can increase students' vocabulary through video content and song lyrics. Video and song lyrics can attract students' attention and make it easy to memorize some words. Putri and Rustipa (2023) state that videos with song lyrics were effective for teaching English vocabulary to students because they can foster learning motivation so that students can easily remember the words. This means that using YouTube video songs is an alternative teaching medium that can help students improve their vocabulary.
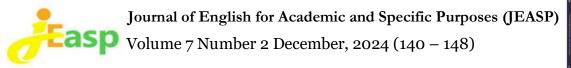
TikTok is another teaching medium that can be used to improve students' vocabulary. Technology and digital media make it easier for students to master their vocabulary with fun and joy during the learning process. This popular social media application allows users to create, watch, and share videos. This application can be used to facilitate the students' learning process. Tran (2023) described TikTok as an excellent medium to improve students' vocabulary through videos, which are used to introduce and reinforce vocabulary, and the platform's algorithm, which can be used to personalize vocabulary learning for the students, and lipsync, which is used to move the mouth, without speaking or singing to memorize the words. This means that TikTok is enjoyable but also helps students learn vocabulary.

TikTok songs are used as a medium to teach vocabulary. Hafisha (2021) states that from TikTok songs, the students will try to memorize the lyrics as the back sound of the video. This means that TikTok songs make it easy for students to process information from the song lyrics. Nabilah et al. (2021) found that in the education arena, the most effective use of TikTok is teacher-made videos that students can repeatedly watch, such as tenses, vocabulary, and pronunciation. This media is widely used since it is beneficial and makes learning simple and enjoyable.

YouTube is a website primarily based on video sharing, commenting, and viewing. Nuraini (2020) defines YouTube as a video-sharing service that allows users to watch videos posted by other users and upload them. YouTube is considered a Web 2.0 site and not merely a collection of information because website members share their work and participate in peer feedback through asynchronous interaction with other users. Then, Bagheri (2018) states that YouTube is one of the mostly consisted of short videos. It provided a venue to share videos among friends and family and to show a case for new and experienced videographers.

YouTube is a popular video-sharing website where users can upload, view, and share video clips. YouTube has become an enormously popular form of web 2,0 new media. A recent article in Wired cites an average of 65.000 uploads and 100 million videos viewed daily on YouTube (Jones & Godwin, 2017). This video can be a powerful educational and motivational tool. However, much of the medium's power lies not in itself but in how it is used. A compelling instructional video is not television-to-student instruction but rather teacher-to-student instruction, with video as a vehicle for discovery. Education is increasingly using YouTube as a pedagogic resource for everything from newsworthy events from around the world to slice-of-life videos used to teach students within an ESL (English as a Second Language) course. From instructional videos to an online space to share student-authored new media.

TikTok is a Chinese-origin music video platform that debuted in September 2016. It has gained immense popularity and is among the most frequently downloaded applications. According to Byte Dance Advertising data, the user base for TikTok in Indonesia reached 92.07 million in 2022. While TikTok is popular among school-age children (students) and engages

users interactively, it is essential to note that its suitability as a learning medium, particularly for English Language Learning, might vary. Taubah (2020) states that although it captures attention and is appealing to students due to its interactive nature, Tiktok's primary focus is entertainment and short-form content rather than structured educational materials. While educators could leverage it creatively, it may not fulfill all criteria as a dedicated educational learning tool for language learning purposes.

Digital technology, such as YouTube and TikTok, can be used to overcome students' vocabulary problems. These digital applications can be used as media for teaching vocabulary and enhance the students' motivation and enthusiasm for vocabulary learning. These media will make the students feel enjoyable, fun, and creative in improving their vocabulary achievement. Based on the explanation, it can be stated that three problems of the students are:

1) Does YouTube significantly affect the students' vocabulary achievement?
2) Does the Tiktok significantly affect the students' vocabulary achievement?
3) Do YouTube and TikTok significantly affect the students' vocabulary achievement?

METHOD

This research used experimental research with a quantitative approach. Creswell (2018: 282) states that experimental research aims to test an idea (based on the systematic procedure) to determine whether a significant effect or outcome is caused by an independent variable to dependent variable. This means that the experimental research design enabled the researcher to estimate an experimental treatment's impact from the independent variable to the dependent variable. In addition, Creswell (2018:285) also states that the quantitative approach involves numerical data to gather and analyze information about a particular phenomenon or problem. Therefore, numerical data in this study was used to obtain information about the students' vocabulary achievement.
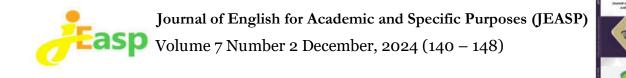
In this study, the instruments used were observation, interviews, and vocabulary tests.
1. Observation
Observation in this study was a primary method for obtaining data and was more than just "hanging out." It is a more global type of observation than the systematic, structured observation used in quantitative research (Ary et al., 2010). Qualitative observation relies on narrative or words to describe the setting, the behaviors, and the interactions. Qualitative research aims to get the complete descriptive behaviors in a specific natural setting rather than a numeric summary of the occurrence or duration of observed behaviors. Besides, the researcher wrote down and recorded the students' behaviours when they were taught vocabulary achievement using YouTube and TikTok during observations. It used a video or audio recorder and made field notes to support the observation.

2. Interviews
The researcher used a semi-structured interview to conduct the research. A set of questions was developed to gain specific information since the researcher brought the general idea to conducting the interview. The questions were arranged based on the purpose of the study. Then, the interview was conducted after the observation was done. Note that the interviewee becomes the teacher who teaches the vocabulary in the class.

3. Vocabulary Test

The vocabulary test aimed to determine whether implementing YouTube and TikTok applications affected the student's vocabulary achievement. Twenty items of the objective test were made.

FINDINGS AND DISCUSSION

Experimental 1 Group

Based on the students' pretest results in the first experimental group, the students' vocabulary achievement scores are described in Table 1.

Table 1. Students' Vocabulary Achievement Categories in the Experimental-1 Group at the Pretest

No	Interval	Frequency	Percentage (%)	Categories
1	40-50	19	47,5	Lower
2	51-60	12	30	Low
3	61-70	9	22,5	Medium
4	71-80	0	0	High
5	81-90	0	0	Higher
Total Number		40	100%	

Table 1 describes 19 (47.5%) students are considered as lower, 12 (30%) students are categorized as low, 9 (22.5%) students are classified as medium, and 0 (0%) or no one students are grouped as high and higher. This means that the students' vocabulary achievement in the pretest control group does not give satisfying results and is far from the teacher's expectations. No students are categorized as high or higher.

Based on interviews conducted on 3 June 2024 with students, it is known that the lower scores for their vocabulary are due to students' difficulties in memorizing some words and understanding their meanings. This means that students have difficulty remembering the song lyrics from YouTube, so they do not know the song's meaning. To overcome these difficulties, it is better to use YouTube with the text to be read by the students when they listen the song. Song Text help them to remember the song lyrics.

Based on the result of the students' test in experimental 1 group of the post-test, the students' vocabulary achievement scores can be described in Table 2.

Table 2. Students' Vocabulary Achievement Categories in the Experimental-1 Group at Post-Test

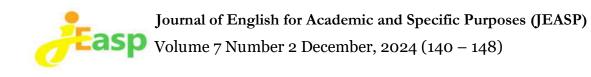| No	Interval	Frequency	Percentage (%)	Categories
1	40-50	2	5	Lower
2	51-60	9	22,5	Low
3	61-70	17	42,5	Medium
4	71-80	7	17,5	High
5	81-90	5	12,5	Higher
Total Number		40	100%	

Table 2 describes 2 (5%) students are categorized as lower, 9 (22.5%) students are categorized as low, 17 (42.5%) students are characterized as medium, 7 (17.5%) students are classified as high, and 5 (12.5%) students are categorized as higher. It means that the students' post-test results in the control group still do not give satisfactory vocabulary achievement because there are still lower and low scores.

Based on interviews on 8 June 2024 with students, it is known that the lower scores for their vocabulary are due to students' difficulties in memorizing some words. They cannot identify word form, meaning, and word use in YouTube songs. Consequently, they still cannot answer the vocabulary test well.

Experimental 2 Group

Based on the students' pretest results in the experimental group, the students' vocabulary achievement scores can be described in Table 3.

Table 3. Students' Vocabulary Achievement Categories in the Experimental-2 Group at Pretest

No	Interval	Frequency	Percentage (%)	Categories
1	40-50	15	37,5	Lower
2	51-60	19	47,5	Low
3	61-70	5	12,5	Medium
4	71-80	1	2,5	High
5	81-90	0	0	Higher
Total Number		40	100%	

Table 3 describes 15 (37.5%) students are categorized as lower, 19 (47.5%) students are categorized as low, 5 (12.5%) students are classified as medium, and 1 (2.5%) students are categorized as high, and no one students (0%) students is considered higher. It means that the students' vocabulary achievement in the experimental group of pretests does not yield satisfying results, and the results are far from the teacher's expectations.

Based on interviews on 4 June 2024 with students, it is known that the lower scores for their vocabulary are due to students' difficulties in memorizing words, including word form, word meaning, and word use. This means that students have difficulty in remembering some words. To overcome these difficulties, using TikTok (Tan et al., 2022) to help them remember the song lyrics is much better.

Based on the students' post-test result in the experimental group, the students' vocabulary achievement scores can be described in Table 4.

Table 4. Students' Vocabulary Achievement Categories in the Experimental 2 Group at Post-Test

No	Interval	Frequency	Percentage (%)	Categories
1	40-50	0	0	Lower
2	51-60	0	0	Low
3	61-70	12	30	Medium

4	71-80	11	27.5	High
5	81-90	17	42.5	Higher
Total Number		40	100%	

Table 4 describes 12 (37.5%) students are categorized as high and 20 (62,5%) students are categorized as higher. It means that the students' vocabulary achievement in the experimental group of the post-test satisfies the results and is enough to meet the teacher's expectations.

Based on interviews on 8 June 2024 with students, it is known that the students' success in getting their vocabulary achievement because they felt comfortable with TikTok, which led them to remember some words by lip-sync. When the students show the TikTok song, they can do the lip-sync to pretend they are an artist who sings or says at precisely the same time with recorded sound. Lip-synch makes the students practice their pronunciation, memorize the words, and understand the meaning. In other words, TikTok is influential in students' vocabulary achievement.

The Testing of Data Instrument

Validity of the Test

The 20-item test is considered valid because all of the items tests show that the r-value is higher than r_{table}= 0,304. This means that 20 test items used for testing in experimental -1 and experimental -2 groups were categorized as valid.

Reliability of the Test

The reliability test result is 0.708, with a variable value bigger than 0,60. It means the test used is reliable.

Normality of the Test
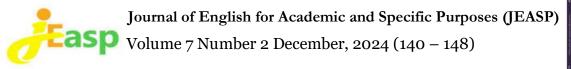
The result of the normality test can be seen in Table 5.

Table 5. The result of the normality test

	Groups	Kolmogorov-Smirnov[a]		
		Statistic	df	Sig
Students' Vocabulary Achievement	Pretest Experimental-2	.196	40	.212
	Post-Test Experiment-2	.219	40	.300
	Pretest Experimental-1	.146	40	.131
	Post-Test Experimental-1	.194	40	.201

Table 5 describes the normality test by using Kolmogorov-Smirnov, where it is found that Sig. Asymp. Value (2-tailed) > 0.05. So, it can be described as:
a) 1). Pre-Test Experimental-2 > 0,05 (0.212 > 0.05) is normally distributed.
b) 2). Post-Test Experimental-2 > 0,05 (0.300 > 0.05) is normally distributed.
c) 3). Pre-Test Experimental-2 > 0,05 (0.131 > 0.05) is normally distributed.
d) 4). Pre-Test Experimental-2 > 0,05 (0.201 > 0.05) is normally distributed.

The Hypothesis Test Result

In this current research, the t-test was used to prove the hypothesis result. The purpose of the t-test was to verify whether YouTube and TikTok significantly impacted students' vocabulary achievement. Based on the calculating t-test, it can be found that $t_{calculating}$ is 2.469, and the t_{table} is 1,683. In other words, $t_{calculating} > t_{table}$ or $2.469 > 1.683$ means H_0 is rejected, and H_a is accepted. Thus, it can be concluded that the TikTok application affected vocabulary achievement significantly for the eleventh-grade students of SMAN 17 Medan.

CONCLUSION AND IMPLICATION(S) (500 – 1000 words)

This current study aimed to determine whether YouTube and TikTok applications improved students' vocabulary achievement. Based on the results of the study, the most prominent finding to emerge from this study is that: The YouTube application significantly affects the students' vocabulary achievement. It improved by about 35 % in the experimental pretest group; the students who passed the KKM were nine, or 22.5%. In experiment 1 group of post-test, there was an improvement in students' scores where 23 students, or 57.5%, passed KKM. This means that YouTube application affects 35% on students' vocabulary achievement. In addition, the TikTok application significantly influences the students' vocabulary achievement. It improves around 90%, where in the experimental 2 group of pretest, the students pass the KKM are four students or 10%. In the experimental 2 group of post-test, there is an improvement of students' scores where 40 students, or 100%, passed KKM. This means that the TikTok application affects 90% of students vocabulary achievement. Based on the hypothesis calculation, it can be concluded that TikTok significantly impacts students' vocabulary achievement. It was found that $t_{calculating} > t_{table}$ or $2.469 > 1.683$. Thus, it means that H_0 is rejected and H_a is accepted.

This study explored the perception and use of YouTube as a learning tool by students in a public school in North Sumatera, Indonesia, with a specific focus on English language learning. The findings revealed that YouTube is widely perceived as an engaging and accessible platform that enhances English learning through a variety of content formats, such as instructional videos, real-life language use, and interactive lessons. The visual and auditory learning opportunities provided by YouTube have shown to complement traditional classroom methods, allowing students to improve their listening, speaking, and comprehension skills in a more flexible and self-directed manner. However, the study also identified challenges, including the potential for distraction, the overwhelming amount of content, and the lack of structured guidance in selecting appropriate videos. Despite these obstacles, students generally view YouTube as a valuable resource for improving their English proficiency, particularly in listening and speaking skills. The implications of these findings suggest that incorporating YouTube into formal English education, with proper guidance from teachers, could maximize its effectiveness as a learning tool. Teachers should curate and recommend specific channels or videos that align with the curriculum, while also fostering critical media literacy to help students navigate the vast content responsibly. Future studies could explore the long-term impact of YouTube-assisted learning on overall language acquisition and how it compares to other digital learning tools.

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