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Short video TikTok in EFL: How does it impact students' vocabulary mastery

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Abstract. While TikTok videos have shown promising effects on vocabulary learning among junior and senior high school students, further research is warranted to assess their impact on vocabulary mastery in twelfth-grade students specifically. This study seeks to evaluate the effectiveness of TikTok videos in enhancing vocabulary mastery among twelfth-grade students in senior high school. Employing a quasi-experimental design, the research involved 70 students divided equally into an experimental group and a control group. The data were collected in both groups through pre-tests and post-tests using multiple-choice items to measure students' vocabulary mastery. The results from the statistical analysis of the paired-sample t-test indicated a significant improvement in vocabulary mastery for students using TikTok videos. This made strong evidence that TikTok videos were significantly effective in enhancing vocabulary acquisition among the twelfth-grade students. Although the study involved only a specific group of words, it offers valuable insights for educators

seeking innovative strategies to improve students' vocabulary acquisition through engaging digital media.

Introduction

Integrating digital media into education has become increasingly significant in line with societal and technological advancements. The advancement of technology offers a variety of benefits aligned with the changing educational requirements in the twenty-first century (Yadav, 2024). However, there are still challenges in its implementation, in addition to unequal internet access in different areas; many teachers lack sufficient training and guidance on how to apply digital media in the classroom effectively. Consequently, the use of digital media may not always enhance the learning process or optimally support students' achievement. Nevertheless, by integrating digital technology into the classroom, educators have a significant opportunity to enhance learning outcomes through more interactive and engaging instructional methods. As Haleem et al. (2022) suggested that digital technology in the form of software and gadgets can be designed to assist students with specific accessibility needs. When effectively implemented, its interactive tools and multimedia resources can capture students' attention from diverse backgrounds and with varying needs, and provide the tools and resources necessary to participate fully in the learning process (Widana & Ratnaya, 2021).

Building on the broader integration of digital technology in education, it is essential to recognize that online platforms are now playing an increasingly central role in students' academic and social lives. In particular, the rapid rise of social media has created new opportunities for teachers to

connect with students through familiar and engaging digital environments. Among these social media platforms, TikTok has become one of the most popular. Firamadhina & Krisnani (2021) noted that TikTok has rapidly become one of the most popular social media platforms among younger audiences due to its engaging short-form video content, and in 2020 alone, its 15- to 60-second video format helped attract over one billion users worldwide, reflecting its explosive global growth. This social media platform has changed the way users engage with content, offering short, engaging videos that can be consumed and shared globally. In other words, TikTok serves as a valuable educational resource as well (Fiallos et al., 2021), drawing students' attention and inspiring them to study through its educational content, which is particularly useful for language learners (Aulia & Andriani, 2024). However, instead of its potential use, careful and directed planning is needed to integrate social media into learning, which can ultimately help teachers deliver material and improve student achievement. This is a valuable opportunity for EFL teachers to create innovative lessons that can motivate students to learn and practice English in a fun and interactive way, as well as enhance their mastery of four language skills and language aspects (Suhardita et al., 2024).

Given these developments in digital technology and social media platforms, there is an urgent need for research that explores practical and effective ways to integrate digital media such as TikTok into classroom instruction. Moreover, the majority of students in senior high school are already familiar with TikTok as a social media platform and have recognized its primary function for entertainment and social media interactions. However, many students may not yet realize that this digital platform can also serve as valuable educational media to enhance their learning experience and improve their academic achievement. Therefore, investigating this issue is crucial to ensure that the integration of digital media not only aligns with the students' digital habits but also supports meaningful learning outcomes. As Greenhow & Lewin (2016) argue that social media has the potential to blur the boundaries between formal and informal learning, offering opportunities for engagement and collaboration when effectively integrated into educational contexts.

As the TikTok platform offers not only entertainment but also a variety of valuable educational functions, its potential in language learning has become increasingly recognized by educators and researchers. The videos on this platform can serve as effective teaching and learning media or materials suited to different educational contexts, aligning with specific learning goals and students' prior knowledge (Bernard, 2021). TikTok provides learners with access to authentic, real-world language input through diverse content such as tutorials, language challenges, storytelling, and everyday conversations, which can be especially beneficial for language learners seeking to improve their communication skills and language mastery. Moreover, TikTok's interactive features, such as duet conversations and comment sections, encourage active engagement, enabling students to practice speaking and receive feedback from peers or native speakers, which helps them enhance their confidence and speaking fluency. Furthermore, Fata et al. (2023) noted that content videos on TikTok can increase students' motivation and activeness, which potentially can improve students' four language skills and grammar mastery. Several previous studies have reported that integrating TikTok as a learning medium leads to notable improvements in students' speaking, listening, reading, and writing abilities, as well as vocabulary acquisition and pronunciation.

In English as a Foreign Language (EFL) teaching and learning, vocabulary mastery is a fundamental aspect of language learning. Vocabulary is a key for solving English Language Teaching (ELT) problems, so teaching and learning strategies should focus on vocabulary acquisition (Cahyono & Widiati, 2008). Vocabulary mastery enables students to express themselves effectively and understand spoken and written English (Agazzi, 2022). As the foundational element in building foreign language proficiency for comprehending and communicating in the language, vocabulary mastery plays a critical role in all four language skills-listening, speaking, reading, and writing.

However, in reality, many Indonesian senior high school students still face significant challenges in mastering English vocabulary, which negatively affects their ability to construct sentences and speak fluently (Sabilla & Kaniadewi, 2025). Without sufficient vocabulary mastery, learners often face difficulties in grasping meaning, constructing sentences, and engaging in meaningful communication. Therefore, innovative and effective teaching strategies are necessary to enhance this aspect of language learning, especially for younger learners who are increasingly accustomed to digital media and technology-enhanced environments. Integrating modern tools and interactive media can make vocabulary learning more engaging, relevant, and accessible, helping students gain new words more effectively and use them in real-life communication contexts. The integration of such media not only supports language acquisition but also motivates learners by connecting language learning with their everyday digital experiences, ultimately fostering greater confidence and competence in using English.

Several studies have highlighted the potential of TikTok as a teaching and learning medium that can capture students' participation and provide rich, contextualized language experiences (Nguyen, 2022). With its visually engaging short videos, TikTok offers attractive learning media that can help young learners acquire both receptive and productive vocabulary more effectively (Milosayljevic & Reynolds, 2024). The platform's dynamic and interactive nature encourages learners to engage actively with content rather than passively consuming information, which is crucial for deeper language acquisition. Moreover, students have the autonomy to select TikTok videos based on topics they are interested in or areas they want to improve, allowing for personalized learning paths and quicker mastery of new words (Hastomo et al., 2022). This self-directed approach not only fosters learner motivation but also supports differentiated instruction tailored to individual needs. In particular, the TikTok duet video feature can enhance students' memorization experience of adjective vocabulary by enabling them to practice pronunciation and usage in a collaborative and creative way (Sinta & Zulfitri, 2022). Briefly, this platform's unique video features serve as an effective educational tool, starting from capturing students' attention and facilitating the enrichment of students' vocabulary in language learning. By integrating TikTok into language instruction, educators can tap into students' natural interests and digital habits, making vocabulary learning more engaging, relevant, and sustainable.

Other studies reported the effectiveness of TikTok videos in improving students' vocabulary mastery. These TikTok videos effectively improved the eighth-grade students' English vocabulary mastery at Islamic Junior High School (Aida et al., 2023). TikTok was also considered a valuable tool for enhancing the seventh-grade students' vocabulary mastery in junior high school (Usman et al., 2024). Other previous studies have also shown the university students' positive perception of TikTok videos in vocabulary learning (Alshreef & Khadawardi, 2023). The students in senior high school also showed their positive perception of TikTok in improving their English vocabulary (Nety et al., 2023); (Sufi & Ningsih, 2024). Moreover, a positive attitude toward TikTok as teaching media, which can effectively enhance vocabulary mastery, was also identified among the students of secondary school (Alghameeti, 2022); (Rahmawati & Anwar, 2022). While other studies suggested that instead of using traditional language learning to improve grammar, pronunciation, and vocabulary, TikTok can be used together with textbooks and courses for second-semester students (Ibrahim et al., 2023). Taken together, these findings underscore TikTok's significant potential to enhance vocabulary acquisition and overall language proficiency when thoughtfully incorporated into language learning activities.

Previous studies on TikTok videos in teaching and learning activities have demonstrated a positive perception of the platform as an attractive and effective medium for vocabulary acquisition. The visually engaging and interactive nature of TikTok videos creates a stimulating learning experience that enhances quick memorization and makes vocabulary learning more enjoyable. Other previous

studies on TikTok videos in vocabulary learning activity have primarily involved students at the junior high school and university levels. Even if studies have been conducted at the senior high school level, they have not involved twelfth-grade students. Therefore, there is a need for research specifically focusing on the use of TikTok videos in vocabulary learning for twelfth-grade senior high school students to fill this gap and provide a more comprehensive understanding of the effectiveness of these TikTok videos at that educational level.

The beneficial effects of TikTok videos on vocabulary learning have been observed in previous studies, prompting further investigation into their impact on students' vocabulary mastery across various research settings. While previous studies have focused on the influence of TikTok videos on junior and senior high school students, there remains a need to assess their effectiveness in vocabulary learning, specifically among twelfth-grade students. This study aims to answer the research question: How effective are TikTok videos in improving the vocabulary mastery of twelfth-grade students? Thus, the research aims to elucidate the application of TikTok videos in English as a Foreign Language (EFL) learning, providing educators with insights into incorporating TikTok into teaching practices to enhance students' vocabulary acquisition.

Method

Research Design

A quantitative method with a quasi-experimental design was used in this research. A quasi-experimental design is an experimental approach that does not require the researcher to assign participants to different groups randomly (Fraenkel et al., 2012). Quasi-experiments are research designs where the researcher has limited or no control over randomly assigning participants to different levels of a variable being studied (Cresswell & Cresswell, 2018). Specifically, a pretest-posttest nonequivalent control group design was employed, which involves measuring the dependent variable before and after the intervention in both the experimental and control groups without random assignment of participants. This design was chosen because it allows a comparison of the results between two groups of students: an experimental group that learned vocabulary using TikTok videos and a control group that did not. The pre-test assesses the initial level of the dependent variable for both groups, while the post-test evaluates the change of the dependent variable following the intervention.

In this study, the experimental group received vocabulary instruction using TikTok videos (X), while the control group did not have this type of instruction (C). The students' vocabulary mastery was assessed both before (O1) and after (O2) the instructional activity. The experimental group watched six TikTok videos as part of their learning experience. After the instruction, an analysis was conducted to compare the results of the students' pre-test and post-test scores in order to evaluate any improvement in their vocabulary mastery following the TikTok video instruction.

Before the treatment was administered, an equivalence test was conducted to ensure that the experimental and control groups had comparable initial vocabulary mastery levels. This was done by analyzing the pre-test scores using an Independent Samples t-test to check for any statistically significant differences between the two groups. The results showed that both groups of scores were homogeneous, with a significant value of Levene's Test for equality of variance of 0.538 (p>0.05). Furthermore, the significant value of the 2-tailed was 0.532. As the p-value was greater than 0.05, there is no significant difference (p > 0.05), indicating that the two groups were equivalent in terms of their initial vocabulary ability. This step was crucial to validate that any observed differences in the post-test scores could be attributed to the intervention rather than preexisting disparities.

Furthermore, in this study, both the experimental and control groups were taught by the same teacher, ensuring consistency in teaching experience, qualifications, and instructional methods across both groups. This arrangement minimized the potential influence of teacher-related variability on the study's outcomes, allowing the focus to remain on the effect of the intervention vocabulary learning through TikTok videos without interference from differences in instructional quality.

Population and Sample

This study was conducted at a Senior High School and involved a total population of 272 twelfth-grade students. Two classes were randomly selected from the available population using simple random sampling, and all students within these selected classes were included in the study as the experimental and control groups.

Out of eight classes, two were chosen as samples. The experimental group consisted of class XII F5, which had 35 students, comprised of 19 females and 16 males. Similarly, the control group was class XII F4, also consisting of 35 students, with 24 females and 11 males. During the teaching and learning process, the teacher observed that students struggled with vocabulary. To address this issue, the experimental group was assisted in enhancing their vocabulary mastery by using TikTok videos, while the control group worked to improve their vocabulary independently. All students in both groups were asked for their consent to participate in the research from the beginning to the end of the study.

Data Collection and Instrument

In this study, data collection involved administering a pre-test and a post-test to two distinct groups of students. The pre-test was conducted prior to the intervention, which utilized TikTok videos to enhance engagement, while the post-test followed the intervention phase. The assessments for vocabulary mastery were structured as online multiple-choice tests, optimized for mobile access, comprising 20 items with two response options. This format was deemed appropriate for the senior high school demographic, as they were already accustomed to online testing environments facilitated by their educational institutions.

Participants were tasked with selecting Indonesian equivalents for specified English vocabulary terms, encompassing two categories: verbs and adjectives. Each assessment featured an equal distribution of 10 verbs and 10 adjectives; however, it employed distinct vocabulary sets for each instance. A time limit of 30 seconds was allocated per item, ensuring that the testing conditions remained consistent and adhered to cognitive load considerations.

After conducting a pre-test for both the experimental and control groups, the treatment involving the sharing of TikTok videos commenced. The experimental group received six TikTok videos sent via their class WhatsApp group, while the control group was provided with teaching materials in the form of worksheets. The treatment for the experimental group took place over two weeks, focusing on English vocabulary aimed explicitly at learning verbs and adjectives. The TikTok videos were sourced from the account @dm365days, which specializes in helping users memorize English vocabulary.

During the two weeks, both the experimental and control groups were learning vocabulary learning. The difference between groups lay only in the media used for vocabulary learning. In both groups, the teacher introduced a list of target words (verbs and adjectives) along with their Indonesian equivalents. In the experimental group, students learned the vocabulary through TikTok videos that were specifically created and shared for this purpose. The learning syntax in these groups was as follows: 1) The teacher introduced the learning objectives and explained the vocabulary list. 2)

In the experimental group, the students watched the assigned TikTok videos containing the target vocabulary and their Indonesian meanings. While in the control group, Students read and completed the worksheets, which included matching, fill-in-the-blank, and translation exercises related to the target vocabulary. 3) Students discussed the content of the videos and practiced pronouncing and using the vocabulary in context, guided by the teacher. 4) The teacher provided feedback and clarification as needed. At the end of the two weeks, both groups took a post-test on verbs and adjectives to evaluate the effectiveness of the different vocabulary learning instructions.

Data Analysis

The collected data were analyzed using both descriptive and inferential statistical methods. Prior to conducting the inferential statistics, tests for normality and homogeneity were performed. The analyses were carried out using SPSS software for Windows. The normality test assessed whether the data originated from a normally distributed population, while the homogeneity test determined if the data had identical or homogeneous variances. The Kolmogorov-Smirnov Test was used to evaluate normality, assessing whether the data originated from a normally distributed population. Levene's Test of Equality of Variances was employed to assess homogeneity, determining if the data had equal variances across groups. If the p-value was greater than 0.05, the data were regarded as normally distributed and homogeneous.

A paired-sample t-test was conducted to evaluate the significance of vocabulary mastery differences between the two groups: students who learned vocabulary using TikTok videos (experimental group) and those who learned through worksheets (control group). The paired-sample t-test was chosen because it is appropriate for comparing the means of two related groups or matched pairs. In this study, the same students were tested before and after the intervention (pre-test and post-test), so their scores are paired observations. This test assesses whether the mean difference in vocabulary mastery scores within each group before and after the treatment is statistically significant (Pallant, 2005).

In this study, the null hypothesis (H0) posited that there would be no significant difference in vocabulary mastery between students who learned English vocabulary using TikTok videos and those who did not. Conversely, the alternative hypothesis (Ha) stated that there would be a significant difference in vocabulary mastery between the two groups.

Results and Discussion

The results of this study include the students' pre-test and post-test scores, along with the significance test results.

Descriptive Statistics of Students' Vocabulary Scores

Before the treatment, the student's vocabulary mastery was assessed to gather initial data for the control and experiment groups. The table below displays the results of the students' pre-test scores.

Control Group Experiment Group No Score Pre-test Pre-test Post-test Post-test 1 Mean 83.29 86.00 81.71 86.43 2 Std. Deviation 11.044 11.807 9.848 8.452 3 Minimum 60 60 60 60 4 Maximum 100 100 100 100

Table 1. The Pre-test and Post-test Scores

The table above indicates that the control group achieved a higher mean score of 83.29 than the experimental group, which had a mean score of 81.71. This suggests that students in the control group outperformed those in the experimental group in vocabulary mastery before implementing any treatments. The standard deviation for the control group was 11.044, indicating more variation in scores compared to the experimental group, which had a standard deviation of 9.848. This greater variability suggests that while some students in the control group performed very well, others scored lower, reflecting a wider distribution of vocabulary mastery levels. Both groups recorded a minimum score of 60 and a maximum score of 100, indicating that all students could attain scores throughout the complete range of the assessment. This range demonstrates that the assessment was appropriately challenging for the participants, capturing a broad spectrum of vocabulary proficiency. These results clearly illustrate students' vocabulary mastery before any instructional changes were made in learning, providing a baseline against which the effectiveness of subsequent interventions can be measured.

Following the treatment, a post-test was administered to evaluate vocabulary improvement in both groups. The post-test results showed a change in vocabulary scores for both the control and experimental groups. The experimental group achieved a higher mean score of 86.43, whereas the control group had a mean score of 86.00. This suggests that the intervention in learning may have helped the experimental group improve their vocabulary mastery more effectively, potentially indicating the success of the instructional design or media applied during the treatment. The standard deviation for the control group was 11.807, suggesting a comparable level of score variation to that observed in the pre-test, which implies that the range of individual performance within the group remained relatively stable. In contrast, the experimental group had a lower standard deviation of 8.452, indicating that their scores were more consistent and clustered closer to the mean, reflecting a steadier improvement among students. Both groups maintained a minimum score of 60 and a maximum score of 100, demonstrating that all students continued to perform across the entire range of the assessment. These findings highlight not only overall improvement but also suggest that the experimental treatment may have contributed to reducing variations in vocabulary mastery within the group.

These results indicated that the vocabulary improvement in the experimental group was more remarkable, increasing from a mean score of 81.71 to 86.43, compared to the control group, which improved from 82.29 to 86.00. This suggests that the intervention applied to the experimental group had a positive impact on enhancing vocabulary mastery beyond the gains observed in the control group. Additionally, the lower standard deviation in the experimental group's post-test scores implies that the treatment not only improved average performance but also helped to create a more consistent level of vocabulary proficiency among students. In contrast, the control group's relatively stable variability suggests that traditional instructional methods maintained a wider gap between higher- and lower-performing students. Despite these encouraging trends, it is important to conduct further statistical analysis, such as hypothesis testing, to determine whether the observed differences in post-test scores between the two groups are statistically significant. Such analysis will provide more robust evidence regarding the effectiveness of the experimental treatment and its potential as a viable instructional strategy for vocabulary learning.

Analysis of Normality Test of Students' Pre-test and Post-test

Statistical comparisons were made between the scores of the experimental and control groups. Before performing this comparison, it was necessary to conduct tests for normality to ensure the data came from a normally distributed population and homogeneity tests to confirm whether the data possessed identical or homogeneous variations. The Kolmogorov-Smirnov Test indicated that the data for both groups did not significantly deviate from a normal distribution, satisfying one of the key assumptions for parametric testing. Similarly, Levene's Test showed that the variances

between the two groups were equal, confirming homogeneity of variance. These preliminary tests validated the appropriateness of using parametric statistical methods, such as the independent samples t-test, to compare the mean vocabulary scores of the experimental and control groups. Conducting these assumption checks is crucial to ensure the reliability and validity of subsequent inferential analyses. Utilizing SPSS for Windows, the outcomes of the Kolmogorov-Smirnov Test and Levene's Test of Equality of Variance revealed the following results.

Table 2. The Result of Normality and Homogeneity Data Testing

	77 .	Kolmogo:	Levene			
Group	Test	Statistic	Df	Sig.	Statistic	
Control	Pre-test	0.114	35	0.200	0.720	
	Post-test	0.147	35	0.054	 0.729	
Experimental	Pre-test	0.143	35	0.068	0.246	
	Post-test	0.130	35	0.139	0.246	

In the control group, the significant values from the normality test were 0.200 for the pre-test and 0.054 for the post-test, indicating that both the pre-test and post-test data followed a normal distribution. For the experimental group, the significant value for the pre-test was 0.068, while the post-test value was 0.139, suggesting that the post-test data in this group were normally distributed as well. These results confirm that the assumption of normality was met for all data sets, which is essential for the validity of parametric statistical tests. The homogeneity test results also showed that both groups had homogeneous distributions, as their significant values were greater than 0.05: 0.729 for the control group and 0.246 for the experimental group. Therefore, it can be concluded that both classes, those taught with TikTok videos and those without, exhibited identical or homogeneous variances.

To summarize, the statistical analyses performed under the assumptions of normal distribution and homogeneous variances lend credibility and consistency to the data in this research. These preliminary tests ensure that the data meet the necessary conditions for applying parametric tests, which are more powerful and reliable for detecting true differences between groups. The findings suggest that any changes observed between the groups can be attributed to the instructional intervention of using TikTok videos for vocabulary learning, rather than to random variation or data irregularities. This strengthens the validity of the study's conclusions regarding the effectiveness of the treatment. By confirming these assumptions, further paired-sample t-tests could be conducted to deepen the analysis. These subsequent analyses will provide a more comprehensive understanding of how TikTok videos influence vocabulary mastery and support evidence-based recommendations for integrating digital media into language instruction.

Paired-Sample T-Test Result

The next step involves performing the paired-sample t-test, which assessed the significance of vocabulary mastery between the classes that utilized TikTok videos and those that did not. Specifically, this statistical method helps determine whether the observed differences in vocabulary scores between the two groups are statistically meaningful. The table below presents the results of the paired-sample t-test calculations.

Table 3. The Result of Paired-samples Test

		Paired Differences						
	Mean	Std. Devia	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		uon		Lower	Upper			
Pre-Post	-4.714	6.295	1.064	-6.877	-2.552	-4.431	34	0.000

According to the table above, the p-value was found to be 0.000, indicating strong evidence against the null hypothesis, which claims no significant difference in vocabulary mastery between students who learned English vocabulary using TikTok videos and those who did not. This statistically significant result confirms that the observed improvement in vocabulary scores is unlikely to have occurred by chance. The t-value of -4.431 indicates that the difference in scores is quite significant relative to the variability in the data, further supporting the effectiveness of the intervention. The mean difference of -4.714 suggests that, on average, students performed better on vocabulary tests when exposed to TikTok video learning compared to those who were not. This indicates that incorporating TikTok videos positively impacts students' learning outcomes by providing engaging and context-rich language input. Furthermore, the standard deviation of 6.295 reveals a wide range of student performance, meaning that while some students benefited greatly from the TikTok videos, others showed less improvement, which may be influenced by individual differences such as learning styles, motivation, or prior knowledge. The standard error mean of 1.064 estimates how much the average difference in scores might vary if we were to conduct this study repeatedly with different groups of students, suggesting that the result is reliable and generalizable within the studied population. Overall, these findings strongly indicate that using TikTok videos significantly improves vocabulary learning outcomes for students, highlighting the effectiveness of integrating digital media into teaching practices and encouraging educators to adopt innovative tools that align with today's learners.

Discussion

An analysis of vocabulary test scores from pre- and post-tests indicated marked differences between control and experimental groups. This improvement can be rationally explained by the learning model applied in both groups. Initially, the control group outperformed the experimental group prior to any interventions, reflecting a baseline advantage in vocabulary mastery. However, post-intervention data revealed that the experimental group achieved a higher mean score than the control group, demonstrating the positive impact of the instructional treatment. Moreover, the results from the paired-sample t-test indicate a statistically significant difference in vocabulary mastery between the two groups in the study. The experimental group, which utilized TikTok videos in their learning process, exhibited an improvement in vocabulary acquisition. In contrast, the control group, which did not use TikTok as a learning tool, demonstrated less advancement in their vocabulary skills. This outcome suggests that integrating TikTok videos into vocabulary instruction may enhance students' ability to acquire and master new vocabulary, likely as a result of increased engagement and exposure to authentic language use in context.

Accordingly, recent research has demonstrated that TikTok functions as a highly engaging and impactful platform for vocabulary acquisition. Many students have reported noticeable improvements in their ability to retain and recall new English words after regularly watching and interacting with TikTok videos designed for language learning. The short, engaging videos encouraged repeated exposure and interaction, which are essential components of vocabulary retention. This combination of the learning activity and TikTok media facilitated deeper cognitive

processing and better memorization of vocabulary, resulting in better post-test performance observed in the experimental group. This suggests that the combination of visual, auditory, and contextual cues provided by TikTok content helps reinforce vocabulary retention more effectively than standard methods or single-focused media. Moreover, the platform's short-form, dynamic videos capture learners' attention and encourage repeated exposure, which are critical factors in successful language acquisition. The lower variability in post-test scores within the experimental group further indicates that the intervention not only improved average performance but also promoted more consistent learning outcomes among students. These findings align with the statistical evidence showing a significant difference in vocabulary mastery favoring the TikTok-based learning activity. Briefly, this outcome suggests that the intervention effectively enhanced the experimental group's vocabulary skills, highlighting the potential of integrating digital media tools like TikTok into EFL teaching practices to foster more engaging and compelling learning experiences.

While previous studies, such as those conducted by Alshreef & Khadawardi (2023) highlighted the efficacy of using TikTok videos as a pedagogical tool for vocabulary acquisition in English as a Foreign Language (EFL) context, this study emphasize the advantage of TikTok integration as a viable alternative for educators aiming to enhance students' vocabulary learning and contribute new insight to the application of TikTok videos as media in teaching vocabulary, especially to the twelfth grade students of senior high school. Moreover, the integration of TikTok videos into vocabulary learning not only enhances students' engagement but also provides diverse contextual examples that aid in better retention of new words. This multimedia approach addresses various learning styles, including visual and auditory learners, making vocabulary acquisition more accessible and enjoyable (Rianyansa & Maisarah, 2024). Furthermore, the findings suggest that students who engaged with TikTok content achieved higher performance levels on vocabulary assessments than those without this interactive learning experience. This improvement may be attributed to the dynamic and visually stimulating nature of TikTok videos, which can make vocabulary learning more memorable and enjoyable for students. Additionally, the short, focused format of TikTok videos allows for repeated exposure to target vocabulary, which is known to support retention and recall. These results are consistent with the research conducted by Usman et al. (2024) and Rahmawati & Anwar (2022), which also noted significant improvements in vocabulary mastery associated with using TikTok videos as an educational resource.

Additionally, Alghameeti (2022) posits that integrating TikTok into language learning frameworks can significantly bolster student motivation, thereby facilitating improved vocabulary mastery. The consistency was also observed in this study, as the increased scores within the experimental group indicated that TikTok videos foster a supportive and engaging learning environment that is conducive to vocabulary development. The interactive nature of TikTok allows learners to participate actively by creating their content, which reinforces their understanding and usage of vocabulary in real-life contexts. Educators are encouraged to explore such innovative tools to complement traditional teaching methods, thereby fostering a more dynamic and effective learning environment. Taken together, these findings reinforce the potential value of incorporating social media platforms, such as TikTok, into language instruction and highlight the need for educators to carefully consider and adapt innovative, technology-enhanced learning media, not only for vocabulary enrichment in EFL contexts but also for teaching other language skills and aspects.

In summary, this study revealed that using TikTok videos in educational settings has positively impacted student performance, particularly in vocabulary acquisition. While most students showed improvement, it is important to note that there was a variation in individual responses to these learning activities, reflecting differences in learning styles, motivation levels, and prior language proficiency. The notable gains in vocabulary scores among those who engaged with TikTok

content suggest that incorporating engaging multimedia resources can enhance learning outcomes by providing rich, contextualized input that supports both retention and recall. Furthermore, the platform's short, dynamic videos encourage repeated exposure and active participation, which are critical factors in effective vocabulary acquisition. These results highlight the potential of modern platforms like TikTok to effectively contribute to language learning and advocate for their inclusion in contemporary teaching practices.

Conclusion

Overall, this study revealed that TikTok videos as a learning resource were significantly effective in enhancing vocabulary mastery among twelfth-grade students of senior high school. This answers the research question by confirming the effectiveness of TikTok videos in improving vocabulary mastery and provides insights into the application of TikTok in EFL learning, especially for the twelfth-grade students of senior high school. The findings of this study support the integration of innovative digital media as complementary resources that can make EFL learning more interactive, motivating, and accessible for optimal achievement. Statistical analyses provide strong evidence that incorporating engaging multimedia content, such as TikTok videos, into English as a Foreign Language (EFL) instruction leads to significant differences in vocabulary mastery between students who used TikTok videos and those who did not. This positive effect of TikTok videos on vocabulary acquisition suggests that educators should consider integrating these modern platforms into their teaching methods. Using TikTok videos, teachers can create a fun and interactive learning environment that encourages students to participate more actively, enhancing their vocabulary skills. This approach aligns well with today's educational practices that emphasize digital integration and multimedia resources in EFL learning. However, to maximize the benefits, educators should consider combining TikTok-based activities with contemporary instructional methods and a guide to help students critically engage with the content. Despite these encouraging results, the study has several limitations that should be acknowledged. The sample size was relatively small, which may restrict the generalizability of the findings to a broader population. Furthermore, the research focused only on a specific group of words for vocabulary mastery, and it did not assess other language skills, such as speaking or writing, which could provide a more comprehensive perspective on TikTok's impact on EFL learning. Future studies could build on these findings by incorporating larger samples and examining additional language skills to gain deeper insights into the effectiveness of multimedia tools in education. Future research could also explore the long-term effects of using TikTok videos on vocabulary retention and the potential for expanding this approach to other language skills, such as grammar and pronunciation. Overall, these findings underscore the importance of embracing technology in education to meet the evolving needs of learners in the digital age.

Finally, several recommendations are proposed. First, schools should support the integration of TikTok and other digital platforms into language learning by providing necessary resources and adequate teacher training. Second, teachers are encouraged to adopt TikTok videos within suitable learning models that promote active engagement and contextual learning, while guiding students to interact critically with the content. Third, researchers are advised to conduct further studies with larger, more diverse samples and explore TikTok's effects on other language competencies and long-term retention.

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