

THE EFFECT OF UTILIZING ENGLISH LEARNING CONTENT ON TIKTOK TOWARD STUDENTS VOCABULARY MASTERY: AN EXPERIMENTAL STUDY AT ELEVENTH-GRADE STUDENTS OF SMAN 3 CILEGON

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ABSTRACT

This study examined the effect of using English learning content on TikTok toward the vocabulary mastery of eleventh-grade students at SMAN 3 Cilegon. A quantitative approach with a true experimental design, employing a pre-test and post-test control group structure, was applied. Through cluster random sampling, 72 students were selected and divided into an experimental group and a control group, with 36 students in each. A vocabulary test served as the research instrument, and the resulting data were analyzed using the Shapiro-Wilk normality test, Levene's homogeneity test, and the Independent Sample t-test in IBM SPSS Statistics Version 25. The results showed that the experimental group experienced a greater gain in vocabulary mastery, with its mean score increasing from 59.08 to 81.83, whereas the control group improved from 56.14 to 75.19. The data satisfied the assumptions of normality and homogeneity, and the Independent Sample t-test produced a significance value of 0.025 ($p < 0.05$), indicating that the alternative hypothesis (H_1) was accepted. It can therefore be concluded that English learning content on TikTok has a significant effect on the vocabulary mastery of eleventh-grade students at SMAN 3 Cilegon.

Keywords: *Eleventh-Grade Students, English Learning Content, Experimental Research, TikTok, Vocabulary Mastery*

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1. INTRODUCTION

English, as an international language, occupies a vital position in education and global communication. Within Indonesia, English functions as a foreign language (EFL), a circumstance that reduces students' opportunities to use the language in daily situations, so learners rely heavily on classroom instruction to obtain sufficient exposure (Nunan, 2003; Maria & Sujarwati, 2025). Vocabulary mastery is one of the crucial elements of English learning, since vocabulary serves as the primary basis for comprehending and producing the language (Schmitt, 2000). Insufficient vocabulary mastery may hinder overall language comprehension, affecting reading, writing, speaking, and listening abilities alike (Nation, 2001; Dorasa et al., 2025).

Field observations gathered by the researcher during the Pengenalan Lingkungan Persekolahan (PLP) program at SMAN 3 Cilegon revealed that eleventh-grade students still had limited English vocabulary mastery. This was reflected in their difficulty understanding English reading texts, limited vocabulary when completing assignments, and low confidence when speaking or writing in English. Students tended to memorize vocabulary without fully understanding its meaning and usage in context, which caused the vocabulary they learned to be quickly forgotten (Alqahtani, 2015; Aida et al., 2023). Observations also indicated that English teaching at the school had not made optimal use of technology, as teachers continued to rely mainly on

textbooks and in-class explanation, despite the view that language teaching should evolve alongside technological advances (Richards, 2015; Ruth et al., 2023).

Social media has become an integral part of students' daily lives, and TikTok, as one of the most widely used platforms, offers short videos that merge visual, auditory, and textual elements. This multimedia format is considered more effective for learning because it stimulates multiple sensory channels (Mayer, 2009). Several studies have shown that TikTok positively affects students' vocabulary mastery: it has been associated with improved learning outcomes (Maria & Sujarwati, 2025), heightened learning motivation and engagement due to its brief and interactive presentation (Ruth et al., 2023), and stronger vocabulary retention through repeated audio-visual exposure (Dorasa et al., 2025).

Nevertheless, previous studies mainly focused on general vocabulary improvement and students' motivation without specifically examining structured English learning content aligned with a school curriculum, and few specifically targeted eleventh-grade senior high school students. This gap indicated the need to investigate the effectiveness of English learning content on TikTok that is more structured and contextually relevant to students' academic needs within the Indonesian EFL context. The present study addressed this gap by employing TikTok content specifically focused on cause-and-effect material aligned with the eleventh-grade curriculum, curated from various content creators to provide diverse examples and richer contextual exposure, and by applying a true experimental design at SMAN 3 Cilegon to measure the effect more accurately.

Based on this background, the research question addressed in this study was: "Is there a significant effect of utilizing English Learning Content on TikTok toward the vocabulary mastery of eleventh-grade students at SMAN 3 Cilegon?" Accordingly, this study aimed to determine whether there is a significant effect of utilizing English learning content on TikTok toward the vocabulary mastery of eleventh-grade students at SMAN 3 Cilegon.

2. LITERATURE REVIEW

2.1 The Concept of Vocabulary Mastery

Vocabulary is one of the most essential elements in acquiring English as a foreign language, since students require a substantial stock of words to comprehend information, convey ideas, and communicate effectively. Vocabulary mastery is not simply a supplementary component of language learning but a foundational factor that shapes students' overall achievement in English (Syafrizal et al., 2021). Within the context of EFL learning in Indonesia, students frequently lack sufficient exposure to English beyond the classroom, and their low vocabulary mastery is generally linked to insufficient learning motivation, monotonous instructional approaches, and restricted exposure to English in everyday situations (Hakim, 2025).

2.1.1 Definition of Vocabulary Mastery

Vocabulary mastery can be defined as students' capacity to identify, comprehend, and appropriately apply words within communicative contexts; it involves more than recognizing word meaning, but also pronunciation, spelling, and correct usage in sentences (Octaviani et al., 2019). Vocabulary may further be described as a collection of words along with their meanings that functions as an essential foundation in foreign language acquisition, implying that rather than merely memorizing words, students ought to grasp their meanings so they can

employ them effectively in communication (Afini et al., 2023). Nation (2001) explains that vocabulary mastery comprises three principal dimensions – form, meaning, and use – which together determine students' ability to recognize a word's form, comprehend its meaning, and apply it appropriately within context. This definition is particularly relevant given that many students tend to memorize vocabulary without grasping how to use it in sentences, so the vocabulary they acquire is quickly forgotten and difficult to apply in authentic communication.

2.1.2 Types and Aspects of Vocabulary Mastery

Vocabulary may be separated into two principal categories: receptive vocabulary, consisting of words students can comprehend while reading or listening, and productive vocabulary, consisting of words students can actively employ while speaking or writing (Nation, 2001). As a rule, students possess a larger receptive vocabulary than productive vocabulary, given that comprehending words is simpler than actively applying them in sentences, a pattern frequently observed among EFL learners, especially during the initial phases of English learning (Thornbury, 2002). This suggests that students require learning media capable of helping them build productive vocabulary rather than merely comprehending words passively, and that engaging, contextual media can deliver more active learning experiences.

Beyond this classification, vocabulary mastery consists of three interrelated aspects that indicate how well students truly master vocabulary: form, meaning, and use (Nation, 2001). Form refers to students' ability to recognize the written form and spelling of a word and to pronounce it correctly; many students still experience difficulties with pronunciation and spelling, which may cause the vocabulary they learn to be used inaccurately (Thornbury, 2002). Meaning relates to students' ability to understand the meaning of a word, both literally and within particular contexts, since students may know a word but not fully understand how to use it appropriately (Syafrizal et al., 2021). Use refers to students' ability to apply vocabulary correctly in sentences according to grammatical rules and communication situations, an aspect that can be especially challenging for EFL students who have limited opportunities to actively practice newly learned vocabulary (Nation, 2001). Students need repeated exposure and practice so that the vocabulary they learn can develop from receptive into productive vocabulary (Hakim, 2025).

2.1.3 The Importance of Vocabulary Mastery

Vocabulary mastery occupies a vital position in English learning, given that vocabulary constitutes an indispensable element for conveying meaning; a person with insufficient vocabulary may struggle to deliver messages effectively, even when grammatical rules are understood (Thornbury, 2002). A limited vocabulary frequently accounts for students' difficulties in grasping English materials, which in turn can influence their speaking, reading, and writing abilities, demonstrating that vocabulary mastery does not operate in isolation but exerts considerable influence over the entire language learning process (Syafrizal et al., 2021). In today's digital era, when students regularly encounter diverse English-language content, sufficient vocabulary mastery allows them to comprehend information more easily, strengthen their self-confidence, and use English more effectively (Afini et al., 2023).

2.2 The Concept of TikTok as a Learning Medium

2.2.1 Technology and Education

Technological advancement has exerted a profound influence on education, particularly on teaching and learning processes. Through technology, learning activities can become more adaptive, interactive, and reachable for students, and employing technology can heighten student engagement and foster a more captivating learning environment, especially within English language instruction (Ferstephanie & Pratiwi, 2021). Digital media, including videos and online platforms, present learning materials in visual and auditory formats that are simpler for students to grasp, amplifying their motivation and interest because the materials correspond with contemporary developments (Suwanda et al., 2024). Technology also promotes a shift in the roles of teachers and students, with teachers functioning increasingly as facilitators who guide students toward using technology constructively, thereby fostering more student-centered, active, and autonomous learning.

2.2.2 Definition and Use of TikTok in Vocabulary Learning

TikTok is a short-video-based social media application, first launched by the Chinese technology company ByteDance, that allows users to create, edit, and share short videos combined with music, text, filters, and visual effects. While it was originally recognized primarily as an entertainment platform popular among young people due to its simple interface, TikTok has evolved into a platform offering a wide range of educational content, including vocabulary learning materials (Putri et al., 2024). Within vocabulary learning specifically, TikTok provides authentic language exposure by merging audio, visual, and textual elements, helping students grasp word meanings and their application in genuine contexts; exposure to vocabulary via direct examples in videos helps students not only memorize words but also comprehend how to use them in everyday communication (Subekti, 2023). TikTok also facilitates self-directed learning, since students can reach content at any time and in any place and replay videos according to their own needs, allowing them to learn at their own pace and rendering vocabulary mastery more adaptive and personalized (Ruth et al., 2023).

2.2.3 Advantages of Using TikTok in Vocabulary Learning

A key benefit of employing TikTok for vocabulary learning lies in the way it presents materials in an engaging and readily comprehensible manner; through short videos merging visual, auditory, and textual components, TikTok can heighten students' attention and interest in learning, and students have demonstrated favorable attitudes toward its use because the content is conveniently accessible and enjoyable to watch (Putri et al., 2024; Subekti, 2023). A further benefit concerns TikTok's flexibility as a learning medium usable at any time and place; by replaying videos as needed, students can learn vocabulary independently, choosing content aligned with their interests and proficiency levels. Such flexibility is especially advantageous for EFL students, since it permits repeated exposure to English vocabulary beyond the classroom, rendering vocabulary mastery more effective and sustainable (Ruth et al., 2023; Fabián & Rosario, 2023).

2.3 Review of Previous Studies

Several previous studies have explored TikTok's use as a medium for enhancing vocabulary mastery, and broadly speaking, their results suggest that TikTok holds considerable potential as a learning medium because it delivers materials through short, captivating, contextual, and conveniently accessible videos. Aida et al. (2023) found that TikTok videos from educational accounts produced a beneficial impact on students' vocabulary mastery, as reflected in improved post-test scores after treatment, suggesting that brief audio-visual content can help students comprehend and retain vocabulary more effectively. From the standpoint of university students as English learners, Subekti (2023) found that most students responded favorably to using TikTok in vocabulary learning, since the platform was perceived as interesting, readily accessible, and conducive to independent learning, contributing not only to better learning outcomes but also to heightened learning motivation. Maria and Sujarwati (2025) and Dorasa et al. (2025) further found that incorporating TikTok videos into English learning markedly enhanced students' vocabulary mastery, stressing that TikTok's brief, visual, and contextual nature renders students more interested and active throughout the learning process. In a similar vein, Irwansyah et al. (2025) discovered that short TikTok videos strengthened students' vocabulary mastery while also elevating their motivation and engagement in learning.

Based on these previous studies, similarities can be identified with the present study, particularly in the use of TikTok as a learning medium and the focus on improving students' vocabulary mastery. However, several differences can also be identified. Most previous studies used TikTok content in a general and less structured manner, in which students accessed materials freely without specific selection or curricular alignment, and the studies were rarely directed specifically at eleventh-grade senior high school students. In contrast, the present study uses TikTok content that has been carefully selected and aligned with the learning objectives, focusing specifically on cause-and-effect material in accordance with the eleventh-grade curriculum, and curated from various content creators rather than a single account to provide richer contextual exposure. This structured approach is expected to provide a clearer picture of the effect of selected TikTok content on students' vocabulary mastery.

2.4 Research Hypothesis

Based on the theoretical review above, the following hypotheses were formulated:

H₀ (Null Hypothesis): There is no significant effect of utilizing English Learning Content on TikTok toward the vocabulary mastery of eleventh-grade students at SMAN 3 Cilegon.

H₁ (Alternative Hypothesis): There is a significant effect of utilizing English Learning Content on TikTok toward the vocabulary mastery of eleventh-grade students at SMAN 3 Cilegon.

3. RESEARCH METHOD

This study used a quantitative approach with a true experimental design, applying a pre-test and post-test control group structure. The independent variable was the use of English learning content on TikTok, and the dependent variable was students' vocabulary mastery. Participants were randomly assigned to an experimental group, which received treatment using selected and structured TikTok content, and a control group, which received conventional learning through PowerPoint explanation. Random assignment was intended to ensure group equivalence at the outset and to strengthen the internal validity of the causal conclusions drawn (Creswell, 2012; Fraenkel & Wallen, 2012). The research design formula used is presented in Table 1.

Table 1. Research Design

Group	Pre-test	Treatment	Post-test
G1 (Experimental)	T1	X	T2
G2 (Control)	T1	O	T2

Note: T1 = pre-test; T2 = post-test; X = treatment (TikTok-based content); O = non-treatment (conventional learning) (Creswell, 2012).

3.1 Population and Sample

The population of this study consisted of all eleventh-grade students of SMAN 3 Cilegon in the 2025/2026 academic year, totaling 270 students. Using cluster random sampling, two classes were randomly selected as the sample: class XI-4 (36 students) as the experimental group and class XI-2 (36 students) as the control group, resulting in a total sample of 72 students.

3.2 Research Instrument

A vocabulary test was used as the research instrument, focusing on cause-and-effect material aligned with the eleventh-grade curriculum. From a pool of 60 multiple-choice items administered in an instrument try-out to class XI-6 (33 students, excluded from the sample), 45 items were found valid using the Pearson Product Moment correlation ($r\text{-table} = 0.344$ at $df = 31$, $\alpha = 0.05$). From these, 40 valid items were used in both the pre-test and post-test, with the sequence of items and answer options rearranged between the two administrations to reduce memorization effects. Reliability, assessed using Cronbach's Alpha via IBM SPSS Statistics Version 25, yielded a coefficient of 0.747, exceeding the 0.50 threshold and confirming the instrument's reliability.

3.3 Research Procedure

The research procedure was carried out through several systematic stages. In the preparation stage, the researcher conducted a preliminary observation at SMAN 3 Cilegon, formulated the research problem, developed the vocabulary test instrument based on cause-and-effect material, and selected and curated appropriate English learning videos from various TikTok content creators to be used as treatment material for the experimental group. In the try-out stage, the 60-item instrument was administered to class XI-6, which was not included in the sample, in order to determine the validity and reliability of the test items prior to their use in the pre-test and post-test.

In the pre-test stage, both the experimental and control groups were given the same vocabulary test to measure their initial vocabulary mastery before treatment, ensuring that any differences observed after treatment could be more confidently attributed to the intervention rather than pre-existing group differences. In the treatment stage, the experimental group received instruction using selected English learning content on TikTok focusing on cause-and-effect material over several meetings, while the control group received conventional instruction on the same material using PowerPoint-based explanation without TikTok content. In the post-test stage, both groups were given a vocabulary test using the same 40 valid items

as the pre-test, with the order of items and answer choices rearranged to minimize the possibility of students merely recalling previous answers. Finally, in the data analysis stage, the pre-test and post-test scores from both groups were analyzed using descriptive statistics, normality and homogeneity tests, and the Independent Sample t-test to determine whether the difference between the two groups was statistically significant.

3.4 Data Analysis Technique

Data were analyzed using IBM SPSS Statistics Version 25 through several steps: (1) calculation of mean scores for the pre-test and post-test of both groups; (2) a normality test using Shapiro-Wilk, appropriate for groups smaller than 50 students; (3) a homogeneity test using Levene's Test; and (4) hypothesis testing using the Independent Sample t-test, with the decision criterion that H_0 is rejected and H_1 accepted if the Sig. (2-tailed) value is below 0.05 (Sugiyono, 2017; Usmadi, 2020; Kim, 2015).

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

The pre-test and post-test results of the experimental and control groups are summarized in Table 2.

Table 2. Descriptive Statistics of Pre-test and Post-test Scores

Group	Test	Mean	Min	Max	SD
Experimental (n=36)	Pre-test	59.08	23	88	16.932
	Post-test	81.83	50	98	12.008
Control (n=36)	Pre-test	56.14	28	78	11.359
	Post-test	75.19	50	95	12.547

As shown in Table 2, the experimental group's mean score increased from 59.08 in the pre-test to 81.83 in the post-test, while its standard deviation decreased from 16.932 to 12.008, indicating both an improvement in vocabulary mastery and greater consistency among students' scores after treatment. The control group's mean score increased from 56.14 to 75.19. Although both groups improved, the experimental group achieved a higher post-test mean and a larger gain than the control group, suggesting that students exposed to TikTok-based English learning content attained stronger vocabulary mastery than those taught through conventional methods.

4.2 Validity, Reliability, Normality, and Homogeneity

Of the 60 try-out items, 45 (75%) were found valid using the Pearson Product Moment correlation, and the instrument's reliability, computed with Cronbach's Alpha, was 0.747, indicating strong internal consistency. The Shapiro-Wilk normality test produced significance

values of 0.707 (control pre-test), 0.150 (experimental pre-test), 0.050 (control post-test), and 0.064 (experimental post-test) – all at or above the 0.05 threshold, indicating that the data for both groups were normally distributed. Levene's homogeneity test produced a significance value of 0.843 ($p > 0.05$), confirming that the variances of the two groups were homogeneous. As both assumptions were satisfied, the data were suitable for parametric hypothesis testing using the Independent Sample t-test.

4.3 Hypothesis Testing

Table 3. Result of Independent Sample t-test

Sig. (2-tailed)	α	Decision
0.025	0.05	H_0 rejected, H_1 accepted

The Independent Sample t-test produced a Sig. (2-tailed) value of 0.025, which is below the alpha level of 0.05. Based on the decision criteria, H_0 was rejected and H_1 was accepted, indicating that there is a significant effect of utilizing English Learning Content on TikTok toward the vocabulary mastery of eleventh-grade students at SMAN 3 Cilegon.

4.4 Discussion

The findings demonstrate that English learning content on TikTok significantly affected the vocabulary mastery of eleventh-grade students at SMAN 3 Cilegon. The experimental group, taught with TikTok-based content, showed a larger and more consistent improvement than the control group, which received conventional PowerPoint-based instruction. These results align with Nation's (2001) view that vocabulary mastery is foundational to language learning, since the short videos used in this study delivered vocabulary exposure through word meanings, example sentences, and related terms within the cause-and-effect context, enabling students to comprehend and retain vocabulary more easily.

These findings also correspond with several earlier studies. Aida et al. (2023) found that educational TikTok videos positively affected students' vocabulary mastery, while Ruth et al. (2023) reported that TikTok boosted learning motivation and independent learning. Similarly, Maria and Sujarwati (2025), Dorasa et al. (2025), and Irwansyah et al. (2025) found that TikTok strengthened both vocabulary mastery and engagement in English learning activities. By demonstrating a comparable effect among senior high school students, the present study extends these earlier findings to a new educational level and a more curriculum-aligned content design.

The improvement observed in the experimental group can be attributed to TikTok's characteristics as an interactive, engaging, and easily accessible learning platform. Its short-video format allowed students to grasp material efficiently without the burden of lengthy explanations, while the ability to access and replay videos supported independent review beyond the classroom. Because the content used in this study was carefully curated to align with the eleventh-grade curriculum and cause-and-effect material, students received relevant and meaningful vocabulary input, reinforcing TikTok's potential as an alternative medium for vocabulary instruction.

Beyond its statistical significance, the effect observed in this study also has practical relevance for English language teaching in the digital era. Students today are increasingly accustomed to consuming information through short, visually rich, and easily shareable content, and instructional media that fail to accommodate this preference risk becoming less engaging regardless of their pedagogical soundness. By packaging cause-and-effect vocabulary within short TikTok videos curated from multiple creators, the treatment in this study offered varied linguistic input – different speakers, intonations, and example sentences – which likely helped students generalize word meanings beyond a single fixed context, a benefit less readily achieved through static PowerPoint slides. This variety may also explain why the experimental group's standard deviation decreased more sharply after treatment, suggesting that TikTok exposure not only raised average scores but also helped narrow the gap between higher- and lower-achieving students.

Nonetheless, the present findings should be interpreted within the boundaries of the study's scope. The treatment period, sample size, and single research location mean that the results cannot be generalized to all senior high school contexts in Indonesia without further verification. Additionally, since the instrument measured vocabulary mastery through a written multiple-choice test, it does not capture whether students could actively produce the vocabulary in spontaneous spoken or written communication. These considerations point toward avenues for further research, particularly studies that combine TikTok-based treatment with productive-skill assessments or that track vocabulary retention over a longer period after treatment ends.

5. CONCLUSION

This study concludes that the use of English learning content on TikTok has a significant effect on the vocabulary mastery of eleventh-grade students at SMAN 3 Cilegon. The experimental group's mean score rose from 59.08 to 81.83, a larger gain than the control group's increase from 56.14 to 75.19, and the Independent Sample t-test produced a significance value of 0.025 ($p < 0.05$), leading to the rejection of H_0 and the acceptance of H_1 . These results indicate that TikTok, through its short, engaging, and easily accessible educational content, can serve as an effective supplementary medium for vocabulary instruction, capable of enhancing both learning outcomes and student motivation.

Based on these findings, English teachers are encouraged to use English learning content on TikTok as a supplementary medium in vocabulary instruction, given its alignment with the characteristics of digital-era learners. Students are encouraged to use TikTok judiciously by accessing educational content that supports vocabulary development and independent learning. Future researchers are recommended to examine the use of TikTok in other English language skills, such as speaking, listening, reading, and writing, and to employ larger samples or longer treatment periods to obtain more comprehensive findings.

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REFERENCES

- Afini, V., Kumalasari, C., Novia, F., & Bambang, M. (2023). Language learning approaches: A meta-analysis study of vocabulary mastery in EFL learners. *Journal of Language Development and Linguistics*, 2(2), 111-126. <https://doi.org/10.55927/jldl.v2i2.5805>
- Aida, N., Muin, A., & Rohbiah, T. S. (2023). Students' English vocabulary through "Kate Kulp" TikTok videos. *Journal of English Language Teaching and Cultural Studies*, 6(2). <https://doi.org/10.48181/jelts.v6i2.20395>
- Alqahtani, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education*, 3(3), 21-34.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.
- Dorasa, P., Suriaman, A., Dewi, A. K., & Anggreni, A. (2025). Utilising TikTok as a digital learning tool to improve vocabulary mastery. *Journal of General Education and Humanities*, 4(4), 2187-2196. <https://doi.org/10.58421/gehu.v4i4.816>
- Fabián, Z., & Rosario, F. A. (2023). The use of digital tools to improve students' vocabulary. *Revista Científica Multidisciplinaria Arbitrada YACHASUN*, 7(12), 18-34. <https://doi.org/10.46296/yc.v7i12edespmayo.0312>
- Fraenkel, J. R., & Wallen, N. E. (2012). *How to design and evaluate research in education* (8th ed.). McGraw-Hill.
- Irwansyah, I., Desryananda, F., & Akbar, A. M. (2025). The effect of TikTok short videos toward students' vocabulary mastery: A quantitative research approach. *Panyonara: Journal of English Education*, 7(1). <https://doi.org/10.19105/panyonara.v7i1.16670>
- Kim, T. K. (2015). T test as a parametric statistic. *Korean Journal of Anesthesiology*, 68(6), 540-546.
- Maria, L., & Sujarwati, I. (2025). Short video TikTok in EFL: How does it impact students' vocabulary mastery. *Indonesian Journal of Educational Development (IJED)*, 6(2), 367-379. <https://doi.org/10.59672/ijed.v6i2.4721>
- Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- Nunan, D. (2003). *Practical English language teaching*. McGraw-Hill.

- Octaviani, R., Handayani, I., & Hamer, W. (2019). Applying board race game to increase students' vocabulary mastery in Uttayan Suksa Krabi School, Thailand. *Journal of English Education Studies*, 2(2), 101-110. <https://doi.org/10.30653/005.201922.40>
- Putri, A., Billaizah, A., Alizah, A. R., & Prastiwi, A. E. (2024). Benefit of TikTok usage and its effectiveness in teaching English: A systematic review. *Formosa Journal of Sustainable Research (FJSR)*, 3(6), 1147-1164. <https://doi.org/10.55927/fjsr.v3i6.9007>
- Richards, J. C. (2015). *Key issues in language teaching*. Cambridge University Press.
- Ruth, J., Simanungkalit, M., & Katemba, C. V. (2023). Utilizing English TikTok as a media in learning vocabulary. *Journal of English Education and Development*, 6(2), 137-150. <https://doi.org/10.31605/eduvelop.v6i2.2331>
- Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge University Press.
- Subekti, A. S. (2023). TikTok and vocabulary learning: A survey study. *Pedagogy: Journal of English Language Teaching*, 11(2), 202-216. <https://doi.org/10.32332/joelt.v11i2.7866>
- Sugiyono. (2017). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Syafrizal, S., Muhajir, M., Pahamzah, J., & Furqon, F. (2021). The effects of using whiteboard animation toward Indonesian students' vocabulary and grammar mastery. *Journal of Language and Linguistic Studies*, 17(2), 783-793. <https://doi.org/10.52462/jlls.55>
- Thornbury, S. (2002). *How to teach vocabulary*. Pearson Education.
- Usmadi, U. (2020). Pengujian persyaratan analisis (uji homogenitas dan uji normalitas). *Inovasi Pendidikan*, 7(1), 50-56.