

Journal of Educational Study (JoES)

eISSN: 2798-0650 Vol. 4 No. 2. 2024. 56-69 Publisher: English Language Education jurnal.stkipahsingaraja.ac.id/index.php/joes



The Use of Drilling Techniques Integrated with Technology to Improve Students' Vocabulary Mastery

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Abstract

The purpose of this study is to improve students' vocabulary mastery with the use of drilling techniques integrated with technology through English vocabulary videos and to find out students' opinions regarding the implementation of drilling techniques through vocabulary videos. This research is a Classroom Action Research (PTK). The subjects in this study were fourth-grade students of An Elementary School in Bangli Regency, Bali, totaling 25 students. There were two data collection techniques: vocabulary tests and student interviews. The research procedure includes stages: planning, action, observation, and reflection. Based on the study's results, it can be concluded that using drilling techniques integrated with technology through vocabulary videos can improve vocabulary mastery in students. This is evidenced by the results of student scores from the pre-test with a mean score of 57, which increased in cycle I to 74, and in cycle II increased to 86. In addition, students' opinions related to the implementation in class or online said that the use of drilling techniques integrated with technology through vocabulary videos was exciting and fun; besides that, students also felt motivated and more enthusiastic in learning, and of course, it could improve students' vocabulary mastery. Therefore, it can be concluded that using drilling techniques integrated with technology through vocabulary videos can improve vocabulary mastery in students at An Elementary School in Bangli Regency, Bali.

Keywords: Drilling technique: Vocabulary mastery; Vocabulary video; EFL

APA Citation: Merdani, N. L., Dewi, K. S., & Mahendrayana, G. (2024). The use of drilling techniques integrated with technology to improve students' vocabulary mastery. *Journal of Educational Study*, *4*(2), 56-69.

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1. Introduction

In the current era of globalization, learning English is very important in the learning process. English is an international language used in communication and the key to accessing science, technology, and information. In English, vocabulary acquisition is one of the essentials that can improve students' literacy and competence (Harmer, J, 2008). Vocabulary teaching at the primary school level has become an essential foundation for developing language skills in English (Nation, P., 2007). Thornbury (2017) states that "without vocabulary," we cannot convey anything,

and with this statement, students' vocabulary knowledge must be improved. Therefore, students' vocabulary understanding will make it much easier to express their thoughts and feelings, and can also develop their knowledge of science and technology to reach the functional level easily.

Vocabulary mastery is an important factor in learning English. Vocabulary is an essential component in education because it can underlie four skills in English: reading, writing, speaking, and listening (Asyiah, 2017). Students with a good vocabulary will better understand the lesson material, communicate more effectively, and explore the latest information (Schmitt, 2020). Although students have been learning since elementary school, they still experience difficulties in communicating in English (Halimah et al., 2022; Mulyono, 2020; Pratolo et al., 2019) For example, Pratolo et al. (2019) stated that the challenges faced by students in learning mathematics are difficulties in understanding and memorizing mathematics, difficulties in motivating also affect students' difficulty in understanding mathematics. This is a common problem that often occurs when learning languages. Likewise, at An Elementary School in Bangli Regency, Bali, there is a problem: difficulties in mastering vocabulary. This was found from preliminary observations conducted through interviews with grade 4 teachers at An Elementary School in Bangli Regency, Bali. This is evidenced by the results of students' English grades, as many as 55% of students' grades are still below the KKTM. Several factors cause this: First, less than optimal use of facilities, such as technology tools that are still rarely used. Second, students lack motivation because they think learning English is difficult. Third, learning techniques are not appropriate because teachers still use traditional techniques. Fourth, teachers still teach using only the LKS book as open material.

Ideally, to find solutions to the above problems, student characteristics are essential to be a good starting point. Young learners can learn faster using repetitive actions (Lucas et al., 2014). By repeating indirectly, they have learned to memorize. Repetition is one of the characteristics of the drilling technique in language teaching (Ihsanda, 2023). One approach that has gained attention is the drilling technique, which is part of the ALM (Audio Lingual Method). It can be interpreted that the drilling technique is a technique that emphasizes the practice of language teaching, here it involves repetition of words and phrases where students are asked to repeat what vocabulary is said by the teacher (Nurviyani et al., 2022). Fauzia & Lolita (2018) said that using videos and drilling techniques proved effective in helping students, especially in understanding and memorizing new vocabulary. The drilling technique, carried out by continuous repetition, will make students remember more in the long term of new vocabulary because they practice actively. Young learners are active but get bored quickly (Ratminingsih & Budasi, 2018). Therefore, Young learners are more interested in learning using audiovisuals.

The drilling technique is a traditional method that focuses on repeated practice for memory recall, particularly for vocabulary (Santosa et al., 2020). It is widely used in language education, particularly in teaching vocabulary and comprehension, as it helps learners retain knowledge (Thornbury, 2017). However, with the advent of technology, practice techniques have evolved, becoming more interactive and engaging. One of the most significant benefits of integrating technology with practice techniques is the ability to provide immediate feedback. Digital tools offer instant explanations that help learners quickly identify and correct mistakes, making learning more efficient and smoother (Hampel, 2006). This immediate feedback is crucial for effective learning, allowing learners to adjust their understanding directly. Furthermore, using technology in practice techniques, such as interactive video platforms with gamification elements like quizzes, has proven very effective (Santosa et al., 2020). This repetitive practice becomes fun and less monotonous, thus making learning more engaging. In addition, the integration of technology such as YouTube in online learning also has a positive impact on the development of critical thinking in students (Merta et al., 2023). Furthermore, using YouTube-based video media effectively increases vocabulary acquisition in elementary school students (Sorohiti et al., 2024). Therefore, drilling techniques can be combined with technologies such as media platforms, YouTube, and WhatsApp to provide repetitive activities in vocabulary learning that can add new vocabulary to students.

Several advantages strongly support using vocabulary videos in their application to support new language learning (Mayer et al., 2020). Videos used to combine visual and auditory senses can improve students' abilities and skills in using some words according to their forms (Paivio & Clark, 1991). According to Mayer et al. (2020), students are more supported by remembering the video material presented by the media, and with this multimedia, it dramatically supports students with

successive repetitions well and creatively. Research from Paivio & Clark (1991) using audio and visual simultaneously and in collaboration can help students to remember better, meaning that hearing and fast memory are needed in this case. Videos as animated learning media, such as YouTube, are said to increase students' vocabulary and help them pronounce words correctly to be more fluent in speaking English (Wahyuni & Pratiwi, 2021). Sismona (2020) states that using videos can capture the efforts and participation of each institution member at each stage of the vocabulary process, from planning to writing to revision. This implies that the video can help students remember their vocabulary.

A previous study by Yuni (2020) conducted experimental research at Islamic Junior High School An-Nuriyah Benjeng Gresik found significant changes after using drilling techniques to teach vocabulary for 25 VII A students. Similarly, Terasne et al. (2022) conducted an experimental study where the experimental group produced a significant increase of 70.22 above the average. Furthermore, Qalyubi (2023) conducted a quasi-experimental study on grade 7 students consisting of 64 students. The experimental group got superior results with an average of 71.15 compared to the control group, which was only 65.23. It can be explained that the experimental use of drilling here was successful and effective. It can also be seen from Terasne et al. (2022), who conducted experimental research at a senior high school, where 70% of students succeeded in answering vocabulary tests well, which means drilling techniques are effective for improving vocabulary mastery.

Maulidiyah et al. (2023) said that students' discipline in class when watching English vocabulary videos can improve students' ability to understand English vocabulary quickly. Students usually watch up to 20 vocabulary videos on YouTube. This study was conducted in a high school with a random sampling of 45 students. Furthermore, research shows video media can also improve students' vocabulary acquisition. This study was conducted using Junior High School Participants at SMP Muhammadiyah 1 Jember with a total of 36 students in class VII C, and the results were a significant increase in vocabulary mastery and student interest in English learning using videos (Devanti, 2018). So, it can be concluded that from some of the above studies that have conducted previous research, the results obtained are positive. Therefore, previous research proves that researchers can research the use of drilling techniques integrated with technology through vocabulary videos to improve vocabulary mastery in students because several previous studies have supported it.

2. Method

This study used a Classroom Action Research (CAR) design. According to Blanco-Hermida & Úbeda Mansilla (2020), classroom action research is one method to find out what things are used to obtain success that can improve students' abilities in the learning process. There are many teachers who have implemented their personal reflection in teaching (Blanco-Hermida & Úbeda Mansilla, 2020). This design aims to discover the use of drilling techniques using vocabulary videos to improve vocabulary mastery of elementary school students in Bangli City. The research was conducted based on the procedures that have been presented in the previous research design, where the procedure consists of planning, action, observation, and reflection. Before the first stage was carried out, the researcher made initial observations first, there were informal interviews and also pre-observation tests to find out the problems that existed in the school.

This research was conducted at An Elementary School in Bangli Regency, Bali. The object of this research is 4th-grade students of An Elementary School in Bangli Regency, Bali, in the academic year 2024/2025. The total number of students is 25. Students have general English skills because the school has implemented the Merdeka curriculum so that students are familiar with English, but most of them have difficulty in vocabulary mastery based on the results of interviews with teachers. The school also has facilities such as LCD projectors and wifi to implement drilling techniques integrated with technology, but these facilities have not been utilized optimally. In reading, speaking, and especially in understanding texts.

Table I. Blueprint of Vocabulary Test					
evel	Vocabulary Knowledge	Question Indic			

-			
Daily	C1	Word Class	Students can identify words based on
Activities	(Remembering)		their class (noun, verb).
Daily	C2	Word Recognition	Students can match words with pictures
Activities	(Understanding)		or recognize the meaning of words from
			the choices given.
Daily	C1	Spelling	Students can complete words with
Activities	(Remembering)		missing letters, choose the correct
			spelling, or arrange the letters.
Daily	C2	Recall of Meaning	Students can understand the meaning of
Activities	(Understanding)		words in simple contexts or from direct
			definitions.

Muliawan (2018) states that PTK uses two analysis approaches, namely quantitative and qualitative. In this study, quantitative analysis used descriptive statistics to assess students' vocabulary achievement. For example, there are vocabulary outcome tests such as pre-test and post-test which are used to find the mean, median, and mode scores of students, so these are calculated using statistical descriptions. Thus, it can be seen in detail regarding the description of the improvement of students' ability to master vocabulary. As for the qualitative analysis, thematic analysis was used to explore students' opinions regarding their opinions on the use of drilling techniques integrated with technology through vocabulary videos to improve vocabulary mastery in students who have been applied in class or online. To find the qualitative data, there is an interview with students which aims to collect qualitative data from students. Then the data that has been obtained through student interviews is analyzed to identify emerging themes, provide insight into how students experience using the technique, the challenges faced, and the benefits obtained after learning to use the technique.

3. Findings

Before conducting the next stage of Classroom Action Research (CAR), so students are asked to answer the Pre-test which contains 20 multiple choice questions about the vocabulary of daily activities. The result of the Pre-Test are shown in the following table:

Table 2. The Students' Pre-Test Scores

Descriptive	Score
MEAN	57
MEDIAN	50
MODE	50

Based on the pre-test results, it can be seen that the mean score is 57, which indicates that overall vocabulary mastery is below the KKTP of 70. The median score is 50, which indicates that many students scored below this standard, while it can be said that a few students scored above this standard, but still did not meet the required standard. The mode is 50, indicating that most students obtained relatively low scores that are still below the KKTP. For details of the frequency distribution of students' pre-test scores can be seen in Figure 1.

The data results showed that ten students, or 40% of the class, scored higher than the Minimum Mastery Criteria of 70. The remaining fifteen students, or 60% of the class, did not meet

the standard. 85 is the maximum achievement score. 10 was the minimum achievement score. This study revealed that the vocabulary achievement of fifteen students was still below the Minimum Mastery Criteria of 70.

This research identified students struggling with vocabulary achievement, as reflected in low pre-test scores. To address this, a teaching module focused on vocabulary related to daily activities was developed, incorporating engaging YouTube videos. The materials from these videos were integrated into lesson plans, and the researcher's field notes were used for data collection. A post-test was prepared to measure improvement by comparing pre-test and post-test results. The teaching process took place at An Elementary School in Bangli Regency, Bali, where the researcher acted as an English teacher for Grade 4. The first session was held on February 5, 2025, and began with greetings, introductions, and an ice-breaking activity to engage students. The lesson started with questions to spark curiosity about daily activities. Despite responding in Indonesian, students showed enthusiasm and participation. During the core teaching activities, the researcher used a projector to show vocabulary videos in English, pausing frequently to explain and reinforce learning through repetition drills. Students practiced saying words collectively, followed by guided repetition to strengthen memory. The approach emphasized interactive learning and active student involvement.

The researcher conducted both face-to-face and online learning sessions to improve students' vocabulary related to daily activities. Online learning was facilitated through a WhatsApp group, where students were assigned YouTube videos and interactive tasks, including voice notes and Google Form quizzes, to reinforce vocabulary retention. The second and third meetings, held on February 6 and 7, 2025, followed structured activities involving ice-breaking exercises, video-based learning, interactive guessing games, and group discussions. Students gradually became more engaged and active in answering questions, though some struggled with focus and comprehension.

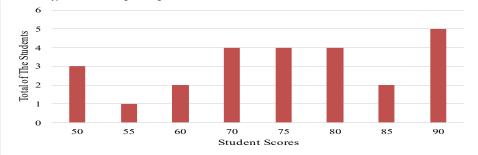
Observations revealed initial classroom distractions, but students showed improvement in participation and enthusiasm by the third meeting. Special attention was given to underperforming students to encourage engagement. A post-test conducted in the fourth meeting demonstrated progress, with 60% of students scoring above KKTP 70, indicating a positive impact of the teaching strategies.

Table 3. The Students' Post-Test 1 Score

Descriptive	Score
MEAN	74
MEDIAN	75
MODE	90

The results showed that of post-test 1 had improved compared to the pre-test results. Based on the results of post-test 1 conducted to measure students' vocabulary mastery, the following data were obtained: The mean (average) score of post-test 1 is 74, the median (middle score) is 75, and the mode (score that often appears) is 90.

Figure 2. Frequency Distribution of Student Score in Post Test 1



Of the 25 students, a total of fifteen, or 60%, got a score above the minimum mastery criteria of KKTP 70. While ten students or 40% of the class still have not met the minimum KKTP standard of 70. The maximum score achievement is 90, while the minimum score achievement is 50. This

shows that although there is an increase in vocabulary mastery in students, some students still have difficulty understanding vocabulary. So it can be said that in this study, there are ten students who are below the minimum mastery criteria of KKTP 70 for vocabulary achievement. So there needs to be further strategies to improve vocabulary understanding in students, especially for students who are still below KKTP 70.

This study aimed to improve students' vocabulary mastery, starting with a pre-test that showed 15 out of 25 students scoring below the KKTP 70 threshold. To address this, vocabulary videos were used in class to introduce and reinforce learning. While some students engaged actively, others were distracted or struggled with comprehension. By the second meeting, students showed increased participation, particularly in online activities via WhatsApp, including Google Forms and voice note assignments. These exercises helped strengthen memory and vocabulary retention. The third meeting saw improvements in student confidence, with hesitant students beginning to ask and answer questions, although some still faced difficulties with pronunciation and sentence formation.

Challenges included classroom management issues, student distractions, fear of asking questions, difficulties in remembering and pronouncing vocabulary, and struggles with forming sentences. Reflections led to corrective actions for the next cycle, including disciplinary measures, closer student engagement, and structured sentence-building exercises. The post-test revealed a positive trend in vocabulary mastery, with 60% of students improving their scores. However, 10 students remained below the passing threshold, prompting further interventions in Cycle 2 to enhance learning outcomes

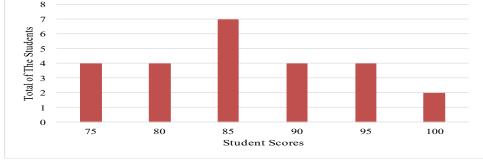
Cycle 2 aimed to improve students' vocabulary mastery (pronunciation and recall) by refining the previous cycle's methods, using the same "Daily Activities" topic and YouTube videos but with richer vocabulary. Before in-person classes, videos were shared via WhatsApp for pre-learning, while classroom sessions included interactive video viewing with pronunciation practice, repetition of past vocabulary, and teacher explanations. The first meeting (Feb 12, 2025) began with greetings, prayer, and warm-up questions, followed by an engaging video with pauses for reinforcement, student participation checks, and a closing quiz to motivate recall. Post-tests and field notes tracked progress, with the goal of making learning more effective, engaging, and impactful for vocabulary retention.

Table 4. The Students' Post-Test 1 Score

Descriptive	Score
Mean	74
Median	75
Mode	90

The results showed that the mean score of post-test 2 was 86. Twenty-five or 100% scored higher than the Minimum Mastery Criterion (KKTP) of 70. No students scored below the minimum mastery criteria (KKTP) of 70.

Figure 3. Frequency Distribution of Post-Test 2 Student Scores



100 is the maximum achievement score, while 75 is the minimum achievement score. From this analysis, all students experienced an increase in scores from the previous post-test. The results of post-test 2 showed very encouraging achievements. A total of 25 students scored above the KKTP 70.

This is an improvement in students' vocabulary mastery related to daily activities after two cycles of drilling process. This shows that learning in cycle 2 both online and offline is more improve because it is able to improve students' abilities both in pronunciation, understanding, and pronunciation of vocabulary in students. The Post-Test results from Cycle 1 to Cycle 2 showed an increase in students' vocabulary mastery, especially in Cycle 2. This success can show that the learning carried out through the drilling technique with vocabulary videos is in accordance with the needs of students so that they can more quickly master the material taught and can increase students' motivation and understanding in learning English vocabulary.

During this reflection after receiving the findings from the post-test 2 and some unstructured researcher field notes, then the researcher analyzes the completion of the cycle 2 action. From the beginning of the implementation of the pre-test to the post-test 2, students' scores have increased, so researchers or teachers are very proud to see an improvement in students' abilities, especially in achieving vocabulary about daily activities. The results showed that there were 100% of students' scores were above the Minimum Mastery Criteria KKTP 70 in post-test 2. The researcher succeeded in achieving the desired goal of improving students' ability in vocabulary. This is evidenced by the results that have been recorded and it can also be seen that students' scores from cycle to cycle always increase and pass the minimum criteria of KKTP 70, so researchers say that students' English vocabulary achievement using learning videos from YouTube has increased. Although students' abilities have been proven to increase, guidance from teachers is still needed in order to achieve maximum improvement in students' vocabulary skills. In addition, in the previous cycles from cycle 1, of course, there were shortcomings, obstacles, and also obstacles faced, but all of them could be handled well and ran smoothly according to the desired plan. Therefore, researchers and teachers decided to end their Classroom Action Research (CAR)

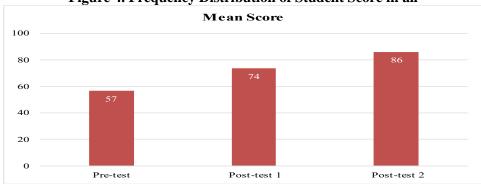


Figure 4. Frequency Distribution of Student Score in all

In the pre-test, the score was still 57, which showed that the average was not in accordance with the KKTP of 70. After the next action in the cycle, I learn, the average score increased to 74. Furthermore, in the action in cycle II, the students' score increased to 86. Based on the reflection, using drilling techniques integrated with technology through vocabulary video media can effectively improve students' vocabulary mastery. Thus, this class action research can be said to be successful.

This study aims to determine students' opinions regarding implementing the drilling technique integrated with technology in English language learning. To achieve this goal, interviews were conducted with all fourth-grade students participating in the learning activities. The interview data were analyzed using a thematic analysis approach. This learning method received positive responses from students. Most students said that by learning vocabulary repeatedly, it can help students improve their ability to master English vocabulary, of course, in daily activities. Most students said that the vocabulary videos were very interesting, especially since there were pictures in the videos that could explain the vocabulary. The pictures in the video can make it easier for students to understand the context in the video. Some students also said that repetition of vocabulary can make it easier for students to remember the vocabulary given. The results of the interviews are presented in more detail below:

Student Learning Interest

Interview Question: How do you feel when you do exercises and learn to pronounce vocabulary together in class?

Students' Answers

P1-P10: "I really enjoy learning because it is not boring."

P11-P20: "I can understand the vocabulary quickly because the learning process is repeated."

P21-P25: "The learning is very fun, in every lesson there are interesting games so that I am not sleepy and eager to learn."

Students showed high enthusiasm for the drilling process in class. The repetitive activities made it easier for them to understand the vocabulary, and the fun game activities increased their interest in learning.

Fun Learning Atmosphere

Interview Question: Do you enjoy learning English in class using vocabulary videos? Students' Answers

P1, P6-P15: "I really enjoy learning vocabulary using the videos, because the videos are very interesting and easy to understand."

P2-P5, P16-P20: "I like learning using vocabulary videos because there are interesting pictures, which can make it easier for me to memorize vocabulary quickly."

P21-P25: "The teacher is very patient in teaching, so I feel comfortable and happy learning in the vocabulary class."

The learning videos succeed in creating a fun and easy-to-understand learning atmosphere. The interesting visuals and the teacher's patient approach make students feel comfortable and motivated.

Effectiveness of Online Learning

Interview Ouestion:

Do you think online learning through a WhatsApp group can make it easier for you to learn vocabulary?

Do the assignments make you more confident?

Students' answers:

P1-P17: "I find it very easy to learn online, because I can learn while lying down and relax my mind."

P18-P25: "With the videos and assignments given through the WhatsApp group, I can understand and remember the vocabulary quickly."

P1-P15: "Yes, I started to gain confidence with the tasks given, such as sending voice notes, which can train my ability to pronounce vocabulary correctly."

P16-P25: "I felt scared at the beginning because I was embarrassed by my wrong pronunciation, but in the next meeting I started to feel confident because I saw the teacher's response, which was very kind, and appreciated the process."

Online learning provides flexibility and a relaxed atmosphere. Tasks such as voice notes increase students' courage to practice vocabulary pronunciation, and the teacher's positive response also boosts confidence.

Vocabulary Media Engagement

Interview Question:

Do you watch vocabulary videos together?

Do you also watch other vocabulary videos?

Have you ever learned English using YouTube?

Students' Answers:

P1-P25: "Yes, I watch the vocabulary videos given through the WhatsApp group." P5-P20: "Yes, I watch other vocabulary videos, because when I open the link of the given video, there are some other vocabulary videos that appear below it, so I click and watch them."

P3, P5, P10-P15: "I learn vocabulary using YouTube."

P1, P2, P4, P6-P9: "I never use YouTube because I mostly use TikTok, so the English content is already through on TikTok."

P16-P25: "I never learn English using YouTube because I am not given the opportunity to hold my phone every day."

The majority of students follow vocabulary videos shared through WhatsApp groups. Some also explored additional videos on YouTube independently. TikTok has become an alternative learning medium for some students. However, limited access to devices is an obstacle for others.

Students' Self-Confidence Growth

Interview Question: Did the assignment make you more confident? Student Answer

P1-P15: "Yes, sending voice notes helped me practice pronunciation and made me more confident."

P16-P25: "At first I was shy, but then I felt brave because the teacher appreciated our efforts."

Learning that involves active practice and a teacher approach that values the process has a positive impact on students' confidence development. Students who were initially shy became more courageous in asking and answering questions.

Parental Support and Accessibility

Interview Question:

Are you accompanied by your parents when learning at home using vocabulary videos? Do you have your own phone, and can use it well?

Student Answers:

P1-P18: "Yes, I am accompanied by my parents."

P19-P25: "No, I study independently."

P1-P19: "I have my own phone and can use it well."

P20-P25: "I do not have my own phone, but I can use it well."

Most students have parental support when studying at home and have access to personal devices. However, others study independently and have to share devices.

Learning Obstacles

Interview Question: What obstacles do you feel during the online learning process at home? Student Answers:

P1, P5, P10, P15-P20: "The connection was bad when watching YouTube videos, so I had to wait."

P2-P4, P6-P9: "I must wait for my parents to come home to borrow the phone." P21-P25: "There are no obstacles, but sometimes I get sleepy because I watch videos late at night."

Technical constraints such as internet connection and device limitations are challenges in online learning. However, some students can still get around it even though they have to study at night.

Based on the results of the interviews, it can be concluded that learning conducted online or offline using the drill technique is very helpful for students in understanding vocabulary. This also has a positive impact on students because students have improved from cycle to cycle. By learning online, students can memorize and understand vocabulary quickly, and with the tasks given, students can practice pronunciation in English vocabulary. In addition, students can also increase their self-confidence, which was initially shy, but has now become brave; the proof is that students are more active in the next meeting. So, with this learning that uses teaching media such as vocabulary videos, students can understand and remember vocabulary well. These results show that the practice method combined with vocabulary video media effectively improves students' ability to master vocabulary.

4. Discussions

The study examined the impact of using drill techniques combined with vocabulary videos to improve students' mastery of English vocabulary. Drawing on Thornbury's (2017) theory, vocabulary mastery was assessed through understanding, pronunciation, meaning, spelling, and frequency of use. Results showed a clear improvement across cycles. Initially, the fourth-grade teacher noted that students had limited vocabulary knowledge due to infrequent English lessons. The pre-test confirmed this, with a mean score of 57, highlighting weak vocabulary retention.

Following Cycle 1, students engaged with vocabulary videos using the drill technique, leading to an increase in scores. The post-test 1 mean score rose to 74, with 60% of students passing the Minimum Completeness Criteria (KKTP) of 70. However, since some students still scored below 70, further interventions were implemented. Cycle 2 saw additional improvements. Post-test 2 results indicated a mean score of 86, with all 25 students achieving scores above 70, demonstrating the effectiveness of the drilling method. The findings align with Siahaan Wawan's (2024) conclusion that students who received instruction using drill techniques performed better academically, reinforcing the strategy's effectiveness in enhancing vocabulary acquisition.

Students responded positively to the use of drilling techniques integrated with technology through vocabulary videos. Many students stated that this technique really helped them in remembering and understanding vocabulary quickly because the technique is done repeatedly. The learning media used such as vocabulary videos are also very diverse and interactive, so that when delivering material it is not boring because students watch videos that contain interesting images. With videos that contain interesting visuals and audio, students become interested and more enthusiastic about vocabulary learning. (Santosa et al., 2022). Students' interest in learning increases because multimodal learning - combining text, images and sound - triggers students' attention and memory. This is supported by Moreno & Mayer (2002) Cognitive Theory of Multimedia Learning, which states that students learn more effectively when information is presented verbally and visually simultaneously.

With online learning through WhatsApp group, students feel more free to learn. This makes it easier for them to understand the material because they can study flexibly at home. They said that online learning makes the learning process feel more relaxed, such as being able to watch videos while lying down. They also stated that online assignments felt more fun because they were presented through Google Forms with pictures explaining the meaning of vocabulary. This opinion is reinforced by the theory from Padmadewi & Dewi (2024), which states that students' vocabulary and grammar can be improved through online learning via WhatsApp. Widiastuti et al. (2021) also added that WhatsApp can be used anytime and anywhere as long as there is an internet connection, thus providing flexibility in learning time for students. Combining drilling techniques with video media has been proven effective in improving students' ability to master vocabulary. Dynamic and interactive video content can attract students' attention more than traditional techniques such as reading textbooks, which tend to be boring. Visual and audio media in videos help students to understand and focus on learning (Febriana Merdianti et al., 2023). In this regard, Lin & Tseng (2012) state that videos are more effective than using only textual definitions or images. In addition, videos can also provide proper pronunciation with clear intonation, making it easier for students to understand the vocabulary taught. Heriyanto (2015) also states that YouTube technology is considered a useful resource by students and teachers in deepening English comprehension, especially vocabulary.

Students' confidence increased after following this lesson. Based on the interview results, many students who initially felt shy or afraid now have the courage to come forward, answer questions, and even convey their incomprehension of the video content. This happens because the approach taken by the teacher makes students feel more cared for and comfortable. This proves that teachers not only play a role in teaching, but also must be able to understand the character of students and approach them personally in order to build confidence and openness in learning. The increase in student confidence is in line with Chen (2020) theory of Self-Efficacy, which states that confidence in one's abilities is influenced by previous experiences of success and support from the environment, including teachers.

Although there are many benefits for students, some obstacles also arise in online learning. Some students experience an unstable internet connection, making watching videos difficult. Some have to wait for their parents to come home from work so they can borrow a cell phone. In addition, there are students who watch videos too late at night so they feel sleepy. In practice, the drilling technique through WhatsApp also caused problems because too many messages piled up, making students have to scroll through the conversation far enough to find the material, so the learning process became less effective. This is consistent with Anderson and Elloumi's (2004) findings that online learning requires adequate infrastructure to be effective. When access to devices and networks is limited, the potential for learning disruption increases and the effectiveness of learning can decrease.

Interesting and interactive learning media play an important role in creating an active and fun learning atmosphere. Videos containing visuals, actions, or scenarios can help students better understand the meaning of vocabulary in a contextualized way. This aligns with Lin & Tseng (2012) who stated that videos are much more effective than textual definitions. Students admitted that they enjoy learning with videos because it can increase their enthusiasm, make them more active in answering questions, and focus on the material provided. So, enjoyment in learning is an important indicator in increasing students' learning enthusiasm and maximizing their vocabulary comprehension.

5. Conclusion and Suggestion

The study demonstrated that using the drill technique alongside vocabulary videos effectively enhanced students' mastery of English vocabulary. Initially, pre-test results showed a low mean score of 57, indicating a significant gap in vocabulary comprehension. After implementing the drill method in Cycle 1, post-test 1 results improved to a mean score of 74, marking a 29.82% increase. Although this showed progress, some students still struggled, leading to further intervention in Cycle 2, where targeted exercises helped those with lower scores. The post-test 2 results showed an even greater improvement, reaching a mean score of 86, reflecting a 16.22% increase from post-test 1. This consistent growth confirmed that repetitive exposure through vocabulary videos significantly strengthened students' ability to understand, recall, and correctly use new vocabulary.

Students expressed highly positive opinions about the method, noting that learning with vocabulary videos made lessons interactive and enjoyable. Many appreciated the ability to watch videos at their own pace in online sessions, which allowed them to practice pronunciation freely and without pressure. They also felt more motivated to learn due to engaging teaching techniques that included clear explanations and structured exercises. Additionally, students found the assignments manageable and beneficial in reinforcing vocabulary retention. Overall, the combination of drill techniques and digital media proved to be an effective and engaging strategy for improving vocabulary mastery.

The importance of drill techniques combined with vocabulary videos enhances vocabulary mastery and offers recommendations for different stakeholders. Students are encouraged to utilize technology, such as YouTube vocabulary videos and WhatsApp-based learning, while consistently practicing and actively engaging in both online and offline lessons. Teachers should integrate vocabulary videos into their teaching methods, apply repetitive learning strategies, foster classroom discussions, provide feedback, and combine traditional and digital approaches to enhance effectiveness. Schools are urged to adopt this method as a guide to improve vocabulary education nationwide, aiming to elevate students' vocabulary proficiency beyond standard benchmarks. For

future researchers, the study suggests exploring the long-term impact of technology-enhanced vocabulary learning and investigating additional strategies to refine instructional techniques. Researchers could compare different approaches, incorporate other interactive media, and further develop the drilling method to create engaging and effective vocabulary instruction.

References

- Alam, R. (2019). Comparative analysis between pre-test/post-test model and post-test-only model in achieving the learning outcomes. *Pakistan Journal of Ophthalmology*, 35(1). https://doi.org/10.36351/pjo.v35i1.855
- Asyiah, D. N. (2017). The Vocabulary Teaching and Vocabulary Learning: Perception, Strategies, And Influences On Students' Vocabulary Mastery. *Jurnal Bahasa Lingua Scientia*, 9(2). https://doi.org/10.21274/ls.2017.9.2.293-318
- Berry, T. (2008). Pre-test assessment. *American Journal of Business Education-Third Quarter*, 1(1). https://doi.org/10.19030/ajbe.v1i1.4633
- Blanco-Hermida, M., & Úbeda Mansilla, P. (2020). An Action Research Project: Students' Responses to And Perceptions Of Training To Develop Effective Vocabulary Learning Strategies. *Pupil: International Journal of Teaching, Education and Learning*, 4(2), 369–389. https://doi.org/10.20319/pijtel.2020.42.369389
- Cahyono, B. Y., & Widiati, U. (2015). The Teaching Of Efl Vocabulary In The Indonesian Context: The State Of The Art. *TEFLIN Journal A Publication on the Teaching and Learning of English*, 19(1), 1. https://doi.org/10.15639/teflinjournal.v19i1/1-17
- Febriana Merdianti, K., Hery Santosa, M., & Sintya Dewi, K. (2023). The Effectiveness Of Ted-Ed As Video-Based Media Towards High School Students' Listening Skill. *Journal of English Language and Language Teaching*, 7(1), 63–71. https://doi.org/10.36597/jellt.v7i1.14316
- Fauzia, N., & Lolita, Y. (2018). The Use Of Drill, Vocabulous (Vocabulary Various) And Computer Assisted Language Learning (Call) In Learning Vocabulary. *In Journal of English Teaching Adi Buana* (Vol. 03, Issue 01).
- Freeman, L. D., & Marti, A. (2013). Techniques and principles in language teaching. (3rd edition-oxford).
- Gezegin, B. B. (2014). An investigation of using video vs. audio for teaching vocabulary. *Procedia Social and Behavioral Sciences*, 143, 450–457. https://doi.org/10.1016/j.sbspro.2014.07.516
- Halimah, Nurviyani, V., & Saepulah, A. (2022). Virtual reality-supported drilling strategy in teaching English vocabulary to young learners. *Acitya: Journal of Teaching & Education*, 4(1), 2022. http://journals.umkt.ac.id/index.php/acitya
- Hamad, M. M. (2017). Using WhatsApp to enhance students' learning of English language "Experience to share." Higher Education Studies, 7(4), 74. https://doi.org/10.5539/hes.v7n4p74
- Hampel, R. (2006). Rethinking task design for the digital age: A framework for language teaching and learning in a synchronous online environment. *ReCALL*, 18(1), 105–121. https://doi.org/10.1017/S0958344006000711
- Hamzah, M. I., Ismail, A., & Embi, M. A. (2010). The importance of student's views regarding educational change. *Procedia Social and Behavioral Sciences*, 7, 738–744. https://doi.org/10.1016/j.sbspro.2010.10.100
- Terasne et al. (2022). The Use of Drilling Technique in Teaching English Vocabulary to the Seventh Grade Students of SMP Negeri 2 Tanggulangin.
- Kabooha, R., & Elyas, T. (2018). The effects of YouTube in multimedia instruction for vocabulary learning: Perceptions of EFL students and teachers. *English Language Teaching*, 11(2), 72. https://doi.org/10.5539/elt.v11n2p72
- Kawulich, B. B. (2012). Collecting data through observation. Doing Social Research: A Global Context.
 - $https://www.researchgate.net/publication/257944783_Collecting_data_through_observation$

- Kukulska-Hulme, A., & Shield, L. (2008). An Overview of Mobile Assisted Language Learning: from content delivery to supported collaboration and interaction (Vol. 20, Issue 3).
- Lolita, Y. (2018). Investigating the effectiveness of Computer-Assisted Language Learning (CALL) using drill in enhancing vocabulary: a study on Junior High School. *Science, Engineering, Education, and Development Studies (SEEDs)*, 2, 2615–4382. https://doi.org/10.20961/seeds.v2i1.24650
- Lucas, C. G., Bridgers, S., Griffiths, T. L., & Gopnik, A. (2014). When children are better learners than adults: Developmental differences in learning the forms of causal relationships. *Journal Cognition*, 131(2), 284–299. https://doi.org/10.1016/j.cognition.2013.12.010
- Mayer, R. E., Fiorella, L., & Stull, A. (2020). Five ways to increase the effectiveness of instructional video. *Educational Technology Research and Development*, 68(3), 837–852. https://doi.org/10.1007/s11423-020-09749-6
- Mehrgan, K. K. M. K. (2012). Achieving Critical Thinking Skills through Reading Short Stories Achieving Critical Thinking Skills through Reading Short Stories 1. 1(3), 166. www.worldsciencepublisher.org
- Mendrofa, M., & Wijaya, M. (2022). Benefits of drilling repetition in enhancing second language learners' speaking ability. *International Journal of English and Applied Linguistics (IJEAL)*, 2(2), 263–270. https://doi.org/10.47709/ijeal.v2i2.1583
- Merta, L. W. S., Ratminingsih, N. M., & Budasi, I. G. (2023). The integration of technology in English language teaching to stimulate students' critical thinking. *Language Circle: Journal of Language and Literature*, 17(2), 333–341. https://doi.org/10.15294/lc.v17i2.39097
- Moreno, R., & Mayer, R. E. (2002). Verbal redundancy in multimedia learning: When reading helps listening. *Journal of Educational Psychology*, 94(1), 156–163. https://doi.org/10.1037/0022-0663.94.1.156
- Muliawan, J. U. (2018). Penelitian Tindakan Kelas (Classroom Action Research). http://103.78.106.29:8123/inlislite3/opac/detail-opac?id=12652
- Mulyono, N. (2020). Drilling technique to improve the young learners' English vocabulary mastery. *Journal of Applied Linguistics*, 1(1), 75–91. https://doi.org/10.36423/altics.v5i1.1367
- Nation P. (2007). Other existing tests. www.vuw.ac.nz/lals/staff/paul-nation/nation.
- Nation, P. (2017). How vocabulary is learned. *Oxford University Press*. https://books.google.co.id/books?hl=id&lr=&id=KEsrDwAAQBAJ&oi=fnd&pg=PT14&d q=Without+vocabulary,+communication+is+impossible,+which+shows+how+vital+maste ry+of+words+is+in+language+(Nation,+2001).+&ots=6ThExU9HM2&sig=ukhAlQ2TOF TMIeqBYGhdS1Vse-s&redir_esc=y#v=onepage&q&f=false
- Nurviyani, V., Saepulah, A., & Helmie, J. (2022). Virtual reality-supported drilling strategy in teaching English vocabulary to young learners. *In Acitya: Journal of Teaching & Education* (Vol. 4, Issue 1). http://journals.umkt.ac.id/index.php/acitya
- Oktarina. (2021). Universitas Mahasaraswati Denpasar (2) heni@stkipahsingaraja.ac.id (1). *In STKIP Agama Hindu* (Issue 1).
- Olli, H., & Erlita. (2011). Opini publik edisi kedua (2nd ed.). https://onesearch.id/Record/IOS17064.22318
- Padmadewi, N., & Dewi, N. (2024). The Students' Perception on Online Learning Through Whatsapp During Covid-19 Pandemic at SMA Negeri 1 Tejakula. *In Jurnal Penelitian Mahasiswa Indonesia* (Vol. 4, Issue 3).
- Paivio, A., & Clark, J. M. (1991). Dual coding theory and education. *Educational Psychology Review*, 3(3), 149–210. https://doi.org/10.1007/BF01320076
- Pellicer-Sanchez and Schmitt. (2010). The Correlation Between The Students' Vocabulary Mastery And Their Writing Skill Of The Tenth Grade Students Of Sma Negeri 1 Kerajaan In The Academic Year Of 2020/2021. *In Kairos Elt Journal* (Vol. 2, Issue 2020).
- Pratolo, B., Habibie, A., & Setiawan, A. (2019). Speaking skill challenges encountered by Indonesian EFL learners'. *Proceedings of the International Conference Series on Education & Learning, Social Science & Humanities*. https://doi.org/10.2991/adics-elssh-19.2019.7
- Putri, H. R. (2022a). The effectiveness of teaching speaking by using drilling method through YouTube. *Journal of English Teaching, Literature, and Applied Linguistics*, 6(2), 70. https://doi.org/10.30587/jetlal.v6i2.4069

- Putri, H. R. (2022b). The Effectiveness of Teaching Speaking by Using Drilling Method through YouTube. *Journal of English Teaching, Literature, and Applied Linguistics*, 6(2), 70. https://doi.org/10.30587/jetlal.v6i2.4069
- Ratminingsih, N. M., & Budasi, I. G. (2018). Local culture-based picture storybooks for teaching English for young learners. *SHS Web of Conferences*, 42, 00016. https://doi.org/10.1051/shsconf/20184200016
- Retnawati, H. (2016). Proving content validity of the self-regulated learning scale (The comparison of the Aiken index and the expanded Gregory index). *REID* (*Research and Evaluation in Education*), 2(2), 155–164. https://doi.org/10.21831/reid.v2i2.11029
- Santosa, M. H., Pratama, I. P. S., & Putra, I. N. A. J. (2020). Developing Android-based English vocabulary learning materials for primary school students. *JEELS (Journal of English Education and Linguistics Studies)*, 7(1), 161–185. https://doi.org/10.30762/jeels.v7i1.1467
- Schmitt, N. (2014). Size and Depth of Vocabulary Knowledge: What the Research Shows. Language Learning, 64(4), 913–951. https://doi.org/10.1111/lang.12077
- Sorohiti, M., Hidayah, A. R., & Murtiningsih, S. R. (2024). Elementary school students' vocabulary enhancement through YouTube video-based learning. *Journal of English Language Studies*, 9(1), 87. https://doi.org/10.30870/jels.v9i1.23166
- Swanto, S., & Din, W. A. (2014). Employing the drilling technique in teaching English writing skills to a group of rural Malaysian students. 4(14). https://www.iiste.org/Journals/index.php/DCS/article/view/14061/14369
- Tahmina, T. (2023). Students' perception of the use of YouTube in English language learning. *Journal of Languages and Language Teaching*, 11(1), 151. https://doi.org/10.33394/jollt.v11i1.6883
- Thornbury, S. (2017). Scott Thornbury's 30 Language Teaching Methods Google eBook. https://books.google.co.id/books?hl=id&lr=&id=vUxaDwAAQBAJ&oi=fnd&pg=PP1&dq=language+effectively+(Thornbury,+2002)&ots=tNSC5Qx3NV&sig=zncT6QTcb0RglJhg 3WqpxPmN6Po&redir_esc=y#v=onepage&q&f=false
- Wahyuni, L. G. E., & Pratiwi, N. P. A. (2021). Enhancing EFL students' speaking competency through animated learning video. https://doi.org/10.2991/assehr.k.211222.029
- Widiastuti, I. A. M. S., Mantra, I. B. N., Sukoco, H., & Santosa, M. H. (2021). Online assessment strategies to enhance students' competence and their implementational challenges. *JEES (Journal of English Educators Society)*, 6(2). https://doi.org/10.21070/jees.v6i2.1378
- Yawiloeng, R. (2020). Second language vocabulary learning from viewing video in an EFL classroom. *English Language Teaching*, 13(7), 76. https://doi.org/10.5539/elt.v13n7p76
- Yuni. (2020). The effectiveness of the drilling method on enriching students' vocabulary (A Study at Seventh Grade of Islamic Junior High School An-Nuriyah Benjeng Gresik). *Journal Of English Education and Technology*, 01(02), 78–91. http://jeet.fkdp.or.id/index.php/jeet/issue/current