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

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# **Abstract**

This study aims to improve vocabulary mastery through drilling techniques integrated with technology at An Elementary School in Bali through vocabulary videos and to find out students' opinions about its application. This study used the Classroom Action Research (CAR) method. The subjects in this study were the fifth-grade class, totalling 19 students. Data were collected through vocabulary tests, observations, and interviews. Based on the results of the study, it can be concluded that the use of drilling techniques integrated with technology through vocabulary videos can improve students' vocabulary mastery. In addition, all students said that the drilling technique integrated with technology can motivate the spirit of learning and make the classroom atmosphere comfortable. Thus, it can be concluded that the use of drilling techniques integrated with technology can improve the vocabulary mastery of fifth-grade students at An Elementary School in Bali.

Keywords: Drilling technique; English; Vocabulary; Technology; Video,

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# 1. Introduction

English is a foreign language in Indonesia. As a non-native Indonesian learner, learning English as a foreign language is not easy. Teaching English as a foreign language is different from teaching English as a first language, which deals with teaching individuals, such as Indonesian students, whose primary language is not English (Arwila, 2022). Haycraft (1978) states that there are various skills in language acquisition: listening (understanding spoken language), reading (understanding written language), speaking, and writing. Moreover, Richard and Renandya (2002) state that vocabulary provides much of the basis for students to be able to speak, listen, write, and read well. Therefore, vocabulary is a core component of language skills. So, vocabulary mastery is essential to becoming proficient in English language skills. There are problems at An Elementary School in Bali, Bangli Regency, Bali, Indonesia. As many as 70% of students did not achieve the Minimum Completion Criteria (KKTP) of 70. This percentage shows that most students have difficulty achieving the expected grades in English learning. As the first step to learn English is to enrich the vocabulary, this study aims to find a learning method to improve students' vocabulary

mastery. According to Vitasmoro (2019), vocabulary mastery involves understanding the meaning of words, the ability to associate words with relevant concepts or objects, and skills in using these words in conversation, reading, writing, and listening.

Drilling technique is one of the methods used to strengthen the material and make students remember the material better, especially new vocabulary. Asrivah (2021) stated that the drilling method can help students learn and become more creative. Megawati (2014) stated that the purpose of the drilling method, for example, is to stimulate motor skills and develop intellectual speed. Several studies have proven that drilling techniques are effective for vocabulary (Faidah Yusuf et al. 2023, Terasne, Hairori Sahrul Hafiz 2022, Mulyono et al. 2023). In addition, young learners are active, imaginative, and bored quickly (Ratminingsih & Budasi, 2018). However, Freeman and Marti (2013) mention that drilling is one of the techniques used in the Audio-Lingual Method (ALM) to teach English vocabulary and speaking in a foreign language. Drilling has a significant effect on students' English vocabulary acquisition (Fidah Yusuf et al., 2023; Mulyono et al., 2023). Considering the characteristics of elementary school students who are more interested in visual and audio-based learning, one potential media is the use of vocabulary videos (Gezegin, 2014). Vocabulary videos are one of the media that have a major influence on vocabulary learning (Alhamami, 2014; Yawiloeng, 2020; Munawir et al., 2022; Yusriyyah & Mafulah, 2024). Juwitawati and Pratiwi (2018) added that the drilling technique is one way to obtain accuracy, agility, opportunities, and skills. To teach people to have good habits and maintain them, the drilling method is the right way to implement.

Furthermore, previous studies investigated the combined effects of drilling techniques and technology that have a positive influence on students' English vocabulary. For example, Halimah et al. (2022) used a qualitative method where teachers used drilling strategies supported by Virtual Reality (VR) media in teaching English vocabulary. Based on the observation results, students experienced an increase in vocabulary mastery. Putri (2022) used a quasi-experiment and found that drilling with YouTube had a positive effect on students' vocabulary and pronunciation. However, how drilling techniques inside and outside the classroom integrated with technology are applied to improve vocabulary mastery, especially for elementary school students, is still unclear. In addition to improving vocabulary mastery, this study also aims to find out students' opinions about the use of drilling techniques integrated with technology through vocabulary videos in vocabulary learning. Elementary school students need a smartphone application that is complete with audio-visual vocabulary materials equipped with game-based exercises or quizzes, as well as entertainment on relevant topics in learning English vocabulary (Santosa et al., 2020).

Technology makes classroom learning more engaging as it uses multimedia elements such as video, audio, and interactive applications, which enhance the presentation of the material (Kukulska-Hulme & Shield, 2008). The integration of technology such as YouTube combined with online learning in English language teaching has a positive impact on students' critical thinking development (Merta et al., 2023). The use of technology in training techniques, such as interactive video platforms that include gamification elements like quizzes, has proven to be very effective. Fun and engaging learning can be done by making repetitive exercises fun and not monotonous. According to Nasution (2001), repeated exposure to content is essential for deepening knowledge, and technology-enabled exercises provide this exposure in an engaging and dynamic way. To create a fun and interesting learning atmosphere, teachers can use videos on YouTube as learning media so that students can more easily remember the material (Almurashi, 2016; Juhana, 2014). Animated learning videos on YouTube can improve students' vocabulary mastery, helping them to pronounce words correctly so that they are more fluent in speaking (Wahyuni & Pratiwi, 2021). Video learning can positively change the learning environment (Almurasih, 2016). In addition, students will find it easier to understand the subject matter, become more interactive, and acquire new vocabulary through the videos they watch. Teachers will find learning more fun, while students will find learning more interesting and motivating them to be actively involved so that learning can run optimally (Ratminingsih et al., 2018).

In the context of education, student learning outcomes are not only measured by the improvement of student learning outcomes but also by how students respond to the use of the effectiveness of a learning technique. Understanding opinions and attitudes can help analyze how people respond to an issue. To reflect their experience of classroom learning, students' opinions are

needed. Students who feel comfortable and enjoy learning tend to have higher motivation in learning (Hamzah et al., 2010). The opinion not only includes their emotional response but also describes students' interest and motivation in learning (Ramadhona et al., 2022). Students will feel more motivated and active in the learning process if the learning method is interesting and in accordance with their learning style. Based on the application of drilling techniques with technology integration synthesized by Halimah et al. (2022); Lolita (2018); Mulyono (2020); Putri (2022) they stated that there are several important aspects encountered including 1) Can create an atmosphere in the classroom, 2) Increase students' interest in the learning process, 3) Motivate students towards English learning, 4) Help in learning English vocabulary, 5) Students get better achievement in English learning. Therefore, these aspects can be used as a guideline in this study to find out the opinions of students.

#### 2. Method

This study used research design in the form of Classroom Action Research (CAR). CAR was used to solve problems in the classroom. It aims to improve students' vocabulary mastery. A preliminary study was conducted before starting the CAR cycle. The cycle process implementation will be discontinued when the main problem in this research is solved. The cycle procedure used refers to a model by Kemmis et al. (2019), consisting of four phases: planning, action, observation, and reflection. The first stage is learning planning, which is prepared and developed by researchers and teachers. Some of the things included in the planning process include creating a teaching model according to the technique, preparing learning media, preparing learning materials, and choosing success criteria. In the action stage, researchers used the teaching module that had been made as a guide. The action in each cycle was three meetings. The teacher provided material to students using vocabulary videos. During the learning process, students were asked to repeatedly pronounce the vocabulary. Students were asked to write the vocabulary in front of the class according to what they got in the video and did exercises such as writing the vocabulary on the board (response exercise), completing vocabulary with pictures (completion exercises), word translation exercises (translation exercises) and making simple sentences or extension exercises. In the observation section, activities are carried out by collecting data to monitor the extent to which the results of the action are achieved objectively. The purpose of this step is to determine the development of each learning process and to determine the effect of the action. Furthermore, reflection is carried out to see opportunities for improvement of existing problems and determine whether there is potential for success or not. Therefore, as the last step in this process, researchers analyzed and discussed the results of observations during the teaching and learning process, including the weaknesses and strengths of the actions that had been taken based on the researcher's field notes.

The subjects of this study were fifth-grade students of An Elementary School in Bali, Bangli Regency, Bali. Involving one class with 19 students. Data collection methods in this study were vocabulary tests, including pre-tests and post-tests, observation, and interview. A vocabulary test was used to identify the number of students who still have problems in vocabulary mastery. The pre-test consisted of material entitled "parts of the human body" in the form of multiple choices totaling 20 questions.

**Table 1. Blueprint of Vocabulary-Test** 

Basic	Material	Indicator	Level of Cognitive Domain		
Competencies			<b>C1</b>	<b>C2</b>	<b>C3</b>
Vocabulary	Parts of	1.1 Students can mention the meaning	1, 2, 3, 4, 5, 6,		
	our body	of words about body parts.	7		
	that work	1.2 Students are able to arrange	8, 9, 10, 11,		
	together	random letters related to body parts.	12, 13, 14, 15		
		1.3 Students can choose and use the			16, 17,
		right word in the context of a			18, 19,
		particular situation			20

After the action process, a post-test (vocabulary test) was conducted to identify whether there was an increase in students' vocabulary mastery. With the same questions between the pre-test and

post-test, students were tested on whether they were able to exceed the score of 70 even with only the difference in the position of the randomized questions. Interview guidelines were used to find out students' opinions on the use of drilling techniques integrated with technology through vocabulary video media to improve vocabulary mastery at An Elementary School in Bali. Students' opinions are needed to find out students' learning experiences after using drilling techniques integrated with technology through vocabulary video media.

# 3. Findings

Before starting the Classroom Action Research, students were given a pre-test on Tuesday, February 4<sup>th</sup>, 2025. With the theme "parts of the human body" and a total of 20 multiple choice questions. After the pre-test was conducted, the results showed that many students were still lacking in vocabulary mastery. This can be seen in the following table:

Table 2. The Students' Pre-Test Scores

Descriptive	Score	
Mean	59.73	
Median	60	
Mode	60	

Based on the results of the pre-test conducted to measure students' vocabulary mastery, the following data were obtained: mean (average) of 59.73, median (middle value) of 60, and mode (most frequently occurring value) of 60. These results show that students' vocabulary mastery ability is still relatively low. The average score (59.73) is below the KKTP of 70. Meanwhile, the mode of 60 shows that many students scored below the standard. Similarly, the median of 60 shows that half of the students still get scores that are relatively close to the average score. The minimum and maximum scores obtained by students were 35 and 85, respectively. Furthermore, of the nineteen students who scored above the KKTP, 37% or seven students and 63% or twelve students did not pass. This shows that the vocabulary mastery of twelve students is still below the KKTP of 70.

Figure 1. Frequency Distribution of Pre-test Student Scores

Frequency Distribution of Pre-test Student
Scores

6
4
2
4
35
40
45
60
65
70
75
80
85
Student Scores

Based on the problems experienced by students related to their vocabulary achievement, the researcher developed an action plan. The pre-test results showed that students' vocabulary mastery was still low. Teachers and researchers collaborated to improve students' vocabulary mastery. In the planning stage, there are several important aspects, ranging from determining instruments to learning media. The researcher taught vocabulary to fifth-grade students at An Elementary School in Bali, combining in-person and online learning methods. The lessons aimed to improve pronunciation and expand students' vocabulary using YouTube videos, interactive games, and drilling exercises. In the first meeting, the researchers introduced themselves, engaged students with ice-breaking activities, and used vocabulary videos and drills. Many students struggled to recall body-part vocabulary in English, often responding in Indonesian. Online classes reinforced learning through WhatsApp, where students watched videos, wrote down vocabulary,

and practiced pronunciation through voice notes. In the second meeting, the lesson included greetings, interactive body-part games, vocabulary videos, matching exercises, and spelling activities. Some students memorized vocabulary, but others found recall challenging. Online reinforcement involved translating vocabulary using a Google Form. The third meeting featured vocabulary-guessing games, sentence-completion exercises, and further pronunciation practice. Students actively participated, writing words on the board and learning correct spelling. The final online session continued vocabulary drilling through video-based exercises, encouraging students to practice pronunciation and comprehension. Through the lesson, student engagement was maintained by interactive learning methods, continuous reinforcement, and motivation, helping them gradually improve their vocabulary retention and pronunciation skills.

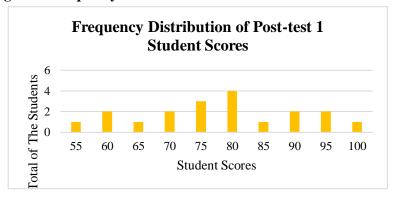
Before instruction, a pre-test revealed that most students struggled with vocabulary, as only 7 out of 19 scored above the Minimum Completion Criteria (KKM) of 70, highlighting the need for focused efforts. The first session introduced vocabulary through video media, but students showed low engagement and difficulty in pronunciation. The second session incorporated repetition and individual exercises, improving comprehension, although some students still faced challenges. By the third meeting, students demonstrated increased confidence, actively answering questions and recognizing body-part vocabulary. Interactive media and games helped maintain enthusiasm and motivation. Despite successes, challenges remained, such as difficulty recalling vocabulary meanings, pronunciation struggles, and lack of confidence in speaking English. A post-test conducted on February 12, 2025, assessed students' vocabulary retention following these interventions. While progress was evident, continued reinforcement was necessary to address lingering difficulties.

Table 3. The Students' Post-Test 1 Score

Descriptive	Score
Mean	77.89
Median	80
Mode	80

The results of the post-test cycle 1 increased compared to the results of the pre-test. Based on the results of the post-test 1 conducted to measure students' vocabulary mastery, the following data were obtained: scores ranged from 55 as the lowest score and 100 as the highest score. The mean (average) was 77.89, the median (middle score) was 80, and the mode (the most frequently occurring score) was 80. Of the 19 students, 15 students (79%) scored above the KKTP 70, while 4 students (21%) scored below the KKTP 70. This shows that although there has been progress in vocabulary mastery, some students still have difficulty understanding the material and applying vocabulary learning in cycle 1. Further strategies are needed to improve understanding and vocabulary mastery for students who have not reached the KKTP 70. The details of the frequency distribution of post-test 1 student scores can be seen in Figure 2.

Figure 2. Frequency Distribution of Post-test 1 Student Scores



Based on the observation results seen from the post-test results and the process in the classroom, students experienced a considerable increase. The pre-test results of 59.73 increased during the post-test to 76.89. However, there are still four students who have not reached the standard of success. This is also supported by the results of observations during the action process, namely: Some students lacked discipline in recording new vocabulary and understanding important points during learning, the loss of students' focus and participation in the learning process often occurs because some students are distracted by friends during the learning process, some students still have difficulties in pronouncing the vocabulary correctly which indicates the need for additional pronunciation practice and four students showed difficulty in remembering the vocabulary taught and difficulty in spelling the vocabulary correctly.

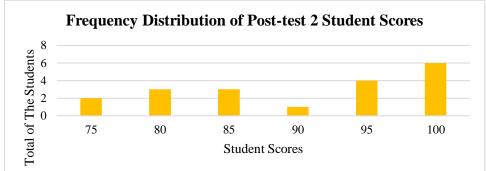
The second cycle of learning focused on improving vocabulary mastery, pronunciation confidence, and student motivation through enhanced teaching strategies. The planning stage introduced richer vocabulary videos, interactive games, and personalized guidance for struggling students. During implementation, varied media, such as videos, pictures, and quizzes, helped increase engagement. Lessons followed a structured format, incorporating games and direct pronunciation practice. Students showed growing enthusiasm, particularly in competitive activities, and online learning continued through video links and pronunciation exercises. Observation revealed significant improvement compared to the first cycle, with students demonstrating increased confidence and comprehension. Online drilling reinforced learning, and students completed tasks efficiently. A post-test conducted on February 21, 2025, assessed vocabulary mastery, showing overall progress while highlighting areas for further reinforcement.

Table 4. The Students Score of Post-Test 2

Descriptive	Score	
Mean	90,26	
Median	95	
Mode	100	

Based on the results of post-test 2 conducted to measure students' vocabulary mastery, the following data were obtained: scores ranged from 75 as the lowest score and 100 as the highest score. The mean (average) is 90.26, the median (middle score) is 95, and the mode (most frequently occurring score) is 100. All 19 students (100%) met and exceeded the KKTP of 70. These results show that each student has reached the required level of vocabulary mastery.

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



Cycle 2 showed a very good picture of students' ability and understanding of English vocabulary about the parts of the human body. This can be proven through the comparison of vocabulary test results from pre-test, post-test 1 and post-test 2. In post-test 2, students' scores increased with an average of 90.26 and 100% or all students managed to exceed the KKTP. Overall, it can be concluded that based on the vocabulary test data, there was an increase in students' mean scores from the pre-test to the post-test.

Mean Score

100
80
60
40
20
Pre-test
Post-test 1
Post-test 2

Figure 4. The Students' Improvement in Vocabulary Achievement Score

In addition, during the action process, students' vocabulary mastery improved. They managed to remember, pronounce, and apply the vocabulary in the correct context and write appropriately. Finally, the class action research was successfully conducted. Thus, the cycle could be stopped, and the CAR learning successfully improved the vocabulary mastery of fifth-grade students of An Elementary School in Bali by using the drilling technique integrated with technology.

This study aims to find out students' opinions regarding the use of technology-integrated drill techniques in English language learning in grade five. Data were collected through interviews conducted with fifth-grade students who participated in the lesson. The results of the interviews were then analyzed using a qualitative thematic analysis approach to identify patterns, themes, and students' main opinions towards their learning experiences. This also supported the data obtained from students' learning experiences with the interview results. The interview results showed positive responses from students who enjoyed learning English and discovered many new vocabulary words on YouTube.

The first theme that emerged was the ease of learning for students. Most students stated that through vocabulary videos they found it easier to understand the material. Students feel that it is more practical in learning and can be done anywhere.

*Interview question:* Do you think that learning vocabulary through videos makes it easier for you to understand the material?

P1-P10: It's easier because we can also watch the videos at home.

P11-P15: Through the video, I understand the material better because there are pictures.

**P16-P19:** It is easier because we can watch the video anytime and anywhere.

The second theme is the benefits of vocabulary learning. Most students said that through vocabulary learning with drilling techniques integrated with technology, they find it easier to understand English vocabulary. Students find it easier to remember new vocabulary learned through videos.

**Interview question:** Does learning with drilling technique using vocabulary videos have any benefits in learning English vocabulary?

P1-P8: I can pronounce and remember English vocabulary easily through vocabulary videos.

**P9-19:** My confidence level has increased to speak in English.

Students' responses show that the drilling technique using vocabulary videos is beneficial for students in learning English. Students feel more confident in speaking English and easily remember the new vocabulary given.

The next theme is engagement in the learning process. Students feel more active in participating in learning because of the fun classroom situation. Many students felt involved during the learning process conducted with drilling technique.

*Interview question:* Did you become more actively involved during the learning process through learning using drilling technique?

P1-P5: Yes, I became more active because we had to pronounce each vocabulary given.

**P6-P15:** I became more active during the learning process, because the class atmosphere was exciting plus there was an interesting video.

**P-16-P19:** Yes, in addition to the material provided we were actively involved because we were given interesting games but still using the material provided.

Students' statements show that the drilling technique using vocabulary videos has a positive impact. This is because almost all students will be actively involved in the learning process, both in reading, answering questions and playing fun games.

The next theme that emerged was students' learning motivation. Students stated that learning by using the drilling technique through vocabulary videos can affect the spirit of learning to be more improved and motivated.

**Interview question:** How does the drilling technique using vocabulary videos affect your vocabulary learning motivation?

**P1-P10:** I feel that learning English vocabulary is no longer boring. So I am more motivated to learn.

**P11-P19:** Through the video, I became more interested in learning and more confident in pronouncing English vocabulary.

Students' responses are very positive, and the drilling technique using vocabulary videos can motivate students' enthusiasm for learning. Students look more confident in pronouncing English vocabulary.

The last theme that emerged was online learning and the constraints experienced by students. Through interviews, internet connection and technological devices play an important role in the online learning process.

*Interview questions*: How do you study at home, and are there any obstacles experienced during the online learning process?

**P1-P19:** I watch videos accompanied by my parents, then do the assignments according to the instructions given.

Then, for responses regarding obstacles:

**P2, P5, P11, P15 - P19:** I have my cellphone, but sometimes the signal is not good. So, sometimes, I can't deposit assignments quickly.

P1, P3, P4, P6, P7, P8, P9, P10, P12 - P14: I feel safe because the signal in my area is good.

The interview results show that the role of parents is very important in the online learning process. Although all students have smartphones, they still need to be accompanied by their parents. In addition, there are obstacles experienced by students, such as signal difficulties that cause interference in the process of watching videos and sending assignments.

#### 4. Discussions

The results of this study indicate that the use of drilling techniques with vocabulary videos succeeded in improving students' vocabulary mastery and received positive opinions from fifthgrade students at An Elementary School in Bali. The improvement of students' vocabulary mastery can be seen from the results of the vocabulary test. Judging from the comparison of the average scores of pre-test and post-test 1 shows an increase, from an average score of 59.73 increased by 30.4% to 77.89. This shows the progress of learning outcomes in cycle 1. However, there are still four students who have not reached the KKM. Then, the average score of students again increased by 15.9% when the post-test 2 was conducted, with an average score of 90.26. The data also shows that all student scores have exceeded the KKM, which is more than 70. This shows consistent progress in mastering the material. This improvement is supported by students' performance during the learning process. Students showed limited English vocabulary, lack of confidence and difficulty in pronunciation at the beginning of learning. However, after the drilling technique was applied through vocabulary videos, there was an increase in students' ability in vocabulary.

The findings were in line with the results of studies such as the one by Laily & Febrianingrum (2023), who examined the effect of implementing routine practice tasks on students' vocabulary acquisition. The application was found to have a significant effect on the vocabulary acquisition of Beginner English Class students, where the pre-test score was 56.8, while the post-test was 85.2. Furthermore, Hariyono, T. C. (2020) teaches vocabulary to young learners using videos on YouTube an English course. Positive responses were obtained from students who were actively involved in the learning process by using technology. The results showed that most of the young learners in the English course were engaged during the implementation of videos on YouTube in teaching vocabulary. The improvement of students' vocabulary mastery is also supported by students' performance during the process. In the classroom process using drilling

techniques and vocabulary videos, the students managed to master vocabulary with several aspects, namely Huyen, N.T.T., & Nga, K.T.T. (2003)'s theory on vocabulary mastery. Vocabulary mastery can be measured using aspects of meaning, pronunciation, spelling and use of words in appropriate contexts. With repetition and vocabulary videos students can increasingly remember the vocabulary that has been learned. The findings was in line with Hidayat et al. (2022), who emphasize the importance of repeated practice in an interesting learning atmosphere to improve vocabulary mastery.

During the interview process, positive responses were given by students during the learning process using drilling techniques through vocabulary videos. Most students stated that through vocabulary videos they found it easier to understand the material. Students feel that it is more practical in learning and can be done anywhere. The material provided through videos makes it easier for them to learn both at school and at home. Padmadewi and Dewi (2024) stated that vocabulary can be improved through online learning through WhatsApp showing that it can share videos, voice notes and photos so that it can be said to be a useful teaching tool. Students also said that through vocabulary learning with the drilling technique integrated with technology, it is easier for them to understand English vocabulary. Students find it easier to remember new vocabulary learned through videos. Chun & Plass (1996) argue that supporting vocabulary learning with pictorial and verbal clues can help improve memory and retention of lexical elements. Videos that are interesting and provide images can facilitate students' memory. In addition, it increases students' enthusiasm in the learning process and remember every vocabulary given. Students stated that they are always interested in learning vocabulary through videos because they feel comfortable and easy to understand. The visualization of the video successfully helped students to know the meaning and understand the explanation of the speaker (Merdianti et al., 2023). This was in line with a recent research (Devanti, Y.M, 2018), which stated that the use of video as learning media can increase students' active participation and vocabulary mastery.

In addition, students' responses show that drilling techniques through vocabulary videos provide motivation for higher learning enthusiasm. The video shown and the audio heard provide more effective information so that the vocabulary learned can survive in students' memory. (Gezegin, 2014; Kafle, 2022) revealed that audio-visual video materials can attract students' attention longer than oral materials because the content is easy to understand and visually appealing. Students can also be free to play videos anytime and anywhere. Widiastuti et al, 2021 stated that students can do learning anywhere as long as they have internet access because online learning is done by utilizing information technology and internet networks.

Students also recognize that through online learning, they can access the materials many times. WhatsApp as a learning media is a powerful online application and has been proven to motivate student learning by producing creative writing and oral projects (Ratminingsih et al., 2022). In line with research from Aryanata et al. (2022), the implementation of the use of online voice notes can improve students' pronunciation skills in speaking. The use of the WhatsApp group in vocabulary learning increases the spirit of learning. Students are free to ask questions through the WhatsApp group when they still do not understand the vocabulary contained in the video. Students shared how their learning process was online. There are no serious challenges, but sometimes there are signal problems, and some students need assistance from parents. From the discussion, it can be said that the vocabulary mastery of fifth-grade students of An Elementary School in Bali can be improved through the use of drilling techniques integrated with technology and get positive responses from students.

The study provides a deeper understanding of the use of drilling techniques with technology applied in the classroom and online sessions in elementary school students' vocabulary acquisition. In addition, the results also align with cognitive and motivational theories. The findings reinforce the behaviorism theory, which emphasizes the importance of repetition in memory reinforcement and accelerating the vocabulary learning process. This shows how technology can help long-term memory. Video can also be used as an effective technological tool to increase intrinsic motivation. Therefore, this study also supports the technology integration learning theory. It is also in line with the independent curriculum, which emphasizes the importance of creativity, innovation, and flexibility and encourages the use of technology as a tool in supporting the learning process.

# 5. Conclusion and Suggestion

The results showed an increase in students' vocabulary test results from pre-test to post-test in each cycle. At the beginning of the study, the average score of students' pre-test was 59.73, which showed that students' vocabulary mastery was still relatively low. In cycle 1, after the implementation of the drilling technique through the vocabulary video, the students' vocabulary test results increased. The average score of post-test 1 reached 77.89, indicating that the score in post-test 1 increased compared to the pre-test results. However, the reflection results at the end of cycle 1 showed that some students still needed to be given additional practice to strengthen vocabulary understanding.

Based on the reflection of cycle 1, the same method was applied in cycle 2. The drilling technique was integrated with technology both offline and online through WhatsApp groups. The results showed that the average score of post-test 2 greatly increased to 90.26 compared to post-test 1. The increase in vocabulary test results from pre-test to post-test 2 shows that the drilling technique through vocabulary videos is effective in improving students' vocabulary mastery. Students can understand and remember vocabulary well in class and online by drilling through a repetitive process. In addition, the support of learning media such as vocabulary videos and exercises through WhatsApp groups, can improve student learning outcomes. Furthermore, interviews with fifth-grade students of An Elementary School in Bali showed their opinions on the drilling technique with vocabulary videos. Students gave positive responses to the implementation of drilling using videos both online and offline. Explaining the material through videos, students felt very motivated and more comfortable learning in class. This is because students are more interested in learning using videos than learning using traditional or monotonous methods.

The use of videos in the classroom makes the learning atmosphere fun and interesting, while in online learning, students can learn anywhere and anytime. With this method, students find it helpful to remember the material. Although there are some challenges, such as internet access and device limitations, students realize that the benefits of this learning technique greatly support learning outside the classroom. Online drilling techniques through WhatsApp groups are effective in improving students' vocabulary mastery. This study proves that the use of technology can help deliver material that is more interesting and flexible, as well as independent.

After knowing and applying the use of drilling techniques with technology through vocabulary videos, the researcher would like to convey some important suggestions to all readers, students, teachers, schools, and future researchers. Students are expected to utilize technology optimally in the learning process, such as watching vocabulary videos to improve understanding and mastery of vocabulary. Practice using drilling techniques both in groups and independently to strengthen memory, such as improving vocabulary mastery. Always learn to speak English and practice through relevant digital media sources. Teachers can use drilling as a technique and vocabulary videos as a medium to teach vocabulary. Future researchers need to conduct research involving more participants at various levels of education to gain deeper insights into the effectiveness of the drilling method. It is expected that this drilling technique by using other learning strategies and by utilizing technology, can make a valuable contribution to language learning research, especially English.

### References

- Abrar, A., & Widiati, B. (2024). The Use of Drilling Method in English Speaking Skills. Jurnal Pendidikan: Riset dan Konseptual, 8(3), 436-443.
- Adhabi, E. A. R., & Anozie, C. B. L. (2017). Literature review for the type of interview in qualitative research. *International Journal of Education*, 9(3), 86. https://doi.org/10.5296/ije.v9i3.11483
- Ali Haniffa, M., Devi, S., & Binti, A. (2018). The Drill and Practice Application in Teaching Science for Lower Secondary Students. International Journal of Education, Psychology and Counseling, 3(7), 128–164. <a href="https://www.ijepc.com">www.ijepc.com</a>
- Aryanata, I. M. W. A., Padmadewi, N. N., & Utami, I. G. A. L. P. (2022). Implementation of voice note on WhatsApp for teaching speaking English. *Journal of Educational Study*, 2(1), 54–64. https://doi.org/10.36663/joes.v2i1.221

- Cahyono, B. Y., & Widiati, U. (2008). The teaching of EFL vocabulary in the Indonesian context: the state of the art. TEFLIN, 19(1), 2.
- Devanti, Y. M. (2018). The use of video as a media to improve students' vocabulary mastery. ELLITE: Journal of English Language, Literature, and Teaching, 3(1), 42-47.
- Dewi, N. A. K., Trisnawati, T., & Kristina, M. (2020). The Drill Method with Realistic Approach to Improve Learning Outcomes of Descriptive Statistics in Higher Education. JINoP (Jurnal Inovasi Pembelajaran), 6(2). DOI: https://doi.org/10.22219/jinop.v6i2.13010
- Fransiska, R., & Jurianto, J. (2016). The use of drilling technique in teaching English Vocabulary to the seventh grade students of SMP Negeri 2 Tanggulangin. Unpublished Thesis, Universitas Airlangga]. http://lib. unair. ac. id.
- 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
- Hariyono, T. C. (2020). Teaching vocabulary to young learner using video on YouTube at English course. Language Research Society, 1(1).
- Haycraft, J. (1978). An Introduction to English Language Teaching. New York: Longman.
- Huyen, N. T. T., & Nga, K. T. T. (2003). The effectiveness of learning vocabulary through games. Asian EFL Journal.
- Jannah, M. (2019). *Teaching and Learning English for Young Learners: Student-Teachers' View* (Doctoral dissertation, UIN Ar-raniry Banda Aceh).
- Juwitawati, W., & Pratiwi, A. R. (2018). Analysis students' anxiety in learning speaking using drill method. PROJECT (Professional Journal of English Education), 1(5), 600.
- Kabouha, R., & Elyas, T. (2015). The impacts of using YouTube videos on learning vocabulary in Saudi EFL classrooms. In ICERI2015 Proceedings (pp. 3525-3531). IATED.
- Kawulich, B. B. (2012). Collecting data through observation. *Doing Social Research: A Global Context*. https://www.researchgate.net/publication /257944783\_Collecting\_data\_through\_observation
- Kemmis, S., McTaggart, R., & Nixon, R. (2019). Critical participatory action research. *Action Learning and Action Research: Genres and Approaches*, 179–192. https://doi.org/10.1108/978-1-78769-537-520191016
- 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).
- Lado, R. (1955). Patterns of difficulty in vocabulary.
- Laily, U., & Febrianingrum, L. (2023). The Effect of Drilling Routine Tasks on Students' Vocabulary Mastery of Beginner English Class (BEC) at Islamic Boarding School Pamekasan. PANYONARA: Journal of English Education, 5(1), 30-40.
- Merdianti, K. F., Santosa, M. H., & Dewi, K. S. (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
- 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
- Michael McCarthy, Language Teaching: A Scheme for Teacher Education; Vocabulary, (New York: Oxford University Press, 1990), p. viii.
- Mokodompit, R. N., Samola, N. F., & Tuerah, J. C. (2021). Student Perception Of Using Youtube In Vocabulary Mastery. Journal of English Language and Literature Teaching, 5(2).
- Muliawan, J. U. (2018). *Penelitian Tindakan Kelas (Classroom Action Research)* (Revisi). http://103.78.106.29:8123/inlislite3/opac/detail-opac?id=12652
- Mulyono, N., Nuraeni, L., & Azizah, Z. S. (2023). Drilling Technique to Improve the Young Learners' English Vocabulary Mastery. Journal of Applied Linguistics (ALTICS), 5(1), 8-13
- Munawaroh, H., Hosmila, H., & Safitri, R. (2020). The Use pf Video to Improve Student Vocabulary at 7 Grade SMPN 1 Nanga Pinoh. JEELL (Journal of English Education, Linguistics and Literature) English Departement of STKIP PGRI Jombang, 7(1), 95-103.

- Nasution, A. K. R. (2019). YouTube as a media in English language teaching (ELT) context: Teaching procedure text. Utamax: Journal of Ultimate Research and Trends in Education, 1(1), 29-33.
- Nation, P. (2017). How vocabulary is learned. Oxford University Press.
- 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).
- Putri, H. R. (2022). 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., Ana, I. K. T. A., Fatmawan, A. R., Artini, L. P., & Padmadewi, N. N. (2022). WhatsApp implementation on pedagogical content courses during COVID-19 pandemic: Students' learning activities and perception. *Kasetsart Journal of Social Sciences*, 43(1), 238–244. https://doi.org/10.34044/j.kjss. 2022.43.1.32
- 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 self-regulated learning scale (The comparison of aiken index and expanded gregory index). *REID (Research and Evaluation in Education)*, 2(2), 155–164. https://doi.org/10.21831/reid.v2i2. 11029
- Richard, J. and Rogers, T. (1991). Approaches and Methods in Language Teaching: Descriptive and Analysis. Cambridge Language Teaching Library.
- Rohmah, Z. (2005). English as a global language: Its historical past and its future. Jurnal Bahasa & Seni, 33(1), 106–117. https://sastra.um.ac.id/wp-content/uploads/2009/10/.
- Sabgini, K. N. W., & Wiraatmaja, T. (2023). The Usage of Video in Teaching Vocabulary for Young Learners. Journal of English Educational Study (JEES), 6(1), 93-104.
- 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. (2000). Vocabulary in Language Teaching. Cambridge. U.K: Cambridge University Press.
- Siahaan, A., Setiawan, W., & Surista, A. (2024). The Use of Drilling Method to Improve Students' Vocabulary Mastery. Jurnal Bahasa Asing, 17(1), 29-36.
- Syafrizal, S., & Haerudin, H. (2018). The implementation of vocabulary building strategy in teaching English vocabulary to young learners. Jo-ELT (Journal of English Language Teaching) Fakultas Pendidikan Bahasa & Seni Prodi Pendidikan Bahasa Inggris IKIP, 5(1), 40-48
- Thornbury, S. (2017). Scott Thornbury's 30 language teaching methods
- Terasne, T., & Hafiz, H. S. (2022). The Effect of Drill Technique Towards Students' Vocabulary Mastery in Learning EnglishVermeer, A. (2001). (). In Applied Psycholinguistics (Vol. 22).
- Vitasmoro, P., Jatmiko, & iwan Candra, A. (2019). Improving Student's English Vocabulary Mastery through Animation Cartoon. 383(Icss), 505–509. https://doi.org/10.2991/icss 19.2019.32
- Vossoughi, H., & Zargar, M. (2009). Using word-search-puzzle games for improving vocabulary knowledge of Iranian EFL learners.
- 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). <a href="https://doi.org/10.21070/jees.v6i2.1378">https://doi.org/10.21070/jees.v6i2.1378</a>
- 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
- Yusuf, F., Usman, H., & Irfan, M. (2023). The Use of Drill Method to Improve Elementary School Students' Learning Outcomes in Vocabulary. Journal of English Language Teaching, Linguistics and Literature, 3(1), 13-21.