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 vocabulary mastery through the use of drilling techniques integrated with technology. This study is classroom action research. 21 4th grade students of SDN 1 Tunjung were the subjects of this study. The necessary data were collected through vocabulary tests and direct interviews with students. The results showed an increase in the average score of students from the pretest of 39.76, increased in the post-test 1 to 72.14, and ended in post-test 2 with a score of 88.33. In addition, the positive response from students regarding the application of drilling techniques integrated with technology supports the statement that drilling techniques integrated with technology are the appropriate solution in improving English vocabulary mastery, especially at the elementary level.

Keywords: Vocabulary Mastery, Drilling Techniques, Technology Integration, Vocabulary Video

1. Introduction

Vocabulary mastery is very important in language learning. In Indonesia, in the scope of English as a Foreign Language (EFL), English has been taught as one of the subjects in elementary school as an introductory stage to this field. This early stage can have a big impact on students' understanding of English in the future. Shejbalová (2006), states that without grammar only a few messages can be conveyed, but without vocabulary there is no way a single message can be conveyed. Mastering vocabulary can also help learners in mastering the 4 basic skills in English, namely speaking, reading, writing, and listening, in order to communicate well with others (Warnidah, 2015; Winola, 2021). As a foreign speaker of English, reading and listening affect how a learner can absorb information. While speaking and writing can be useful for expressing messages or ideas. Therefore, vocabulary must be mastered by students from the beginning of their education level.

Even though vocabulary is important to master, in reality there are still many students who have not mastered it. For example, this phenomenon was found at SDN 1 Tunjung, where the researcher had participated in the Kampus Mengajar program. To deepen understanding of the situation and ascertain the teachers' perspectives, the researcher conducted preliminary observations. It was found that An Elementary School in Buleleng, Bali set 60 as their Minimum Completion Criteria (KKTP) in English. The score serves to measure the students' English profici-

ency. This means that students are expected to achieve a score of at least 60 to be considered capable of understanding the material being taught. Unfortunately, based on the preliminary observation, only about 4 out of 21 students were able to achieve this score. 80% is the number of students who struggled to achieve the KKTP, and that is not a small percentage. This indicates that students' English language skills are still relatively low.

The characteristics of young learners who repeat learning material until they understand it requires the right way to teach the material. By repeating vocabulary, it can be one of the ways that help students improve vocabulary mastery. This is in line with the Audio-Lingual Method (ALM) which is widely used in English language learning (Mulyono et al., 2023). The main focus of ALM is habit, and on the other hand habit refers to repetition which is the main characteristic of drilling technique (Hidayat et al., 2022; Maro, 2018). Through drilling, students are trained how to use English fluently (Hidayat et al., 2022). In addition, in its implementation, the vocabulary is repeated several times until students get the ideal results to pronounce the vocabulary well and speak fluently (Hidayat et al., 2022; Khoyimah & Santoso, 2020). The drilling technique can help students to get the opportunity to be more familiar with the vocabulary learned, so that they can remember, understand, mention and use vocabulary better. With the concept and its benefits, it can be concluded that drilling techniques are the right solution to increase vocabulary mastery of elementary school students. Supported by research from (Laily & Febrianingrum, 2023; Terasne & Hafiz, 2022), states that drilling techniques are effective in increasing student vocabulary mastery through experimental research conducted. Moreover qualitatively (Hidayat et al., 2022; Mulyono et al., 2023), also supports this conclusion. Thus, making maximum use of the drilling technique can make it powerful in the learning process because of its principle that optimizes the way students learn naturally.

Ratminingsih & Budasi (2018), says that young learners are imaginative, active, but quickly get bored. Their focus tends to be shorter than adults and tends to fade when activities are monotonous (Sabgini & Wiraatmaja, 2023). So, in the learning process they need something to keep their attention so they can follow the lesson well. Research shows that technology has an important role in education. Technology can provide opportunities for the learning process to be more productive and interesting (Suhardiana, 2019). According to Kembuan & Irwansyah (2019), technology encourages students to actively participate in learning, because technology makes learning more interesting so that students are more interested in following the learning process. The use of learning media, such as videos, also plays an important role in improving mastery of English vocabulary. Munawir et al. (2022) said video is considered a good medium for improving students' academic abilities. Videos can attract students' attention in the learning process. In connection with that, You Tube is also one of video base media social. You Tube is an important tool and all educational institutions need to start using it in the classroom (Bonk, 2008). It is because You Tube can keep students from getting bored and participating more in learning, especially young learners (Sorohiti et al., 2024). Similar to Snelson (2011) says the role of You Tube as a learning media in education is an effective, efficient, applicable media but is still very less socialized. YouTube provides 3 types of videos that are commonly consumed by its users, namely regular videos, You Tube short and live streaming videos.

In this study, regular YouTube videos are used because they are ready to be consumed by students. Which means that it is not limited to duration and has been well prepared by video creators in the form of sound effects, visual effects and others that can increase student interest. It has been proven by (H. R. Putri, 2022; Sorohiti et al., 2024), in quantitative research conducted to show the positive effect of YouTube on increasing student vocabulary mastery. Then qualitatively by Irawan (2022), supports these results. By preventing students from getting bored, YouTube can help students understand vocabulary more effectively because their focus is maintained. The utilization of English vocabulary videos available on YouTube, can be a perfect medium to be combined with drilling techniques to improve students' vocabulary mastery. Both have positive benefits, both drilling techniques and English vocabulary videos on YouTube, whose benefits have been tested in previous research studies.

The consideration that there is a problem in the form of a lack of vocabulary mastery, and there is an appropriate solution, encourages researchers to conduct this research to solve the problem of lack of vocabulary mastery in grade 4 An Elementary School in Buleleng, Bali.

However, to the best of the researcher's knowledge, studies that discuss the application of drilling techniques integrated with technology in the purpose of improving English vocabulary mastery on a primary school level education especially in An Elementary School in Buleleng, Bali, have not received much attention by most researchers. The existence of this gap encourages researchers to study the topic. Therefore, the researcher decided to take the title "The Use of Drilling Technique Integrated with Technology Through Vocabulary Videos to Improve Students' Vocabulary Mastery at SD N 1 Tunjung".

According to Lelawati et al. (2018), young learners are students who are between 7-15 years old and study in elementary and junior high schools. They have active imaginative characters and get bored quickly (Ratminingsih & Budasi, 2018). Drilling technique is one of the techniques included in the Audio-Lingual Method (ALM) which is a well-known method in teaching vocabulary and speaking in English as a foreign language (Maro, 2018; Mulyono et al., 2023). Young learners can learn English by repeating the learning material they get from the teacher, until they memorize it. Through repeated practice, good habits can form and persist. According to Santosa et al. (2020), elementary school students need applications on their smartphones that contain material in the form of audio visuals, exercises, quizzes with games as the basis and topics as entertainment that are relevant to learning in English. For example, the use of You Tube can make students more excited to participate in language learning (Sorohiti et al., 2024). Furthermore, integration of technology such as YouTube, applied to online learning can help students in developing their critical thinking positively (Merta et al., 2023). This is also supported by another example, the use of WhatsApp which is more effective than traditional media in learning vocabulary (Bensalem, 2018). Therefore, the role of technology such as vocabulary videos from YouTube and WhatsApp combined with drilling techniques can be an effective way to improve vocabulary in English.

YouTube is one of the commonly used technologies in vocabulary learning. Even Bonk (2008) argues that YouTube is a mandatory tool and needs to start being used in classrooms. Learners can gain infinite opportunities in the goal of maximizing learning. Because YouTube provides learners with access to language videos in a fun and engaging way, it motivates students to learn (Alwehaibi, 2013; Terantino, 2011). Moreover, Wahyuni & Pratiwi (2021), added that the videos provided by YouTube in the form of animated learning videos make students more fluent in speaking because they help students pronounce words correctly. It can be concluded that the vocabulary videos available on YouTube can improve vocabulary mastery through the benefits provided, in the form of technical things such as learning media and students' psychological conditions that affect students' learning motivation in improving their vocabulary mastery.

Based on the implementation of techniques and media synthesized from (Daming et al., 2024; Henny et al., 2024; Maro, 2018) drilling techniques can provide a number of influences in the form of 1) increasing mastery of understanding, 2) increasing student participation in learning, 3) increasing student confidence in the learning process, 4) increasing student learning motivation, and 5) becoming a method that suits student needs. These points can be used as a guide in conducting interviews with the aim of finding out students' opinions on the techniques and media used. The implementation of drilling techniques and media is considered good enough if students give responses such as these points. And adjustments should be made if students have not shown these responses because it can be an indication that the implementation of techniques and media is not optimal. Students' opinions can provide important information for researchers. through reflection, students can review their learning experiences. what made them comfortable during the learning process and what did not. although in theoretically drilling techniques and technology are the right solution to the lack of vocabulary mastery, researchers are always open to the possibility that researchers cannot understand everything, because of the limited knowledge they have. Therefore, it is likely that there will be things that are not discussed in this study but may affect how optimally the implementation is carried out. it is the reason why the researcher uses the reference points that have been synthesized to anticipate the non-optimality of the implementation of the techniques and media.

2. Method

This study used a Classroom Action Research (CAR) design. This method involves collaboration between teachers and students to achieve significant improvements in classroom learning (Noor & Syah, 2016). In other words, CAR allows teachers to identify problems, plan corrective actions, implement them, and evaluate the results through several cycles to improve the learning process in the classroom. There were four stages that carried out in each cycle such as planning, action, observation, and reflection. If problems still exist after the first cycle, a second cycle is implemented using the concepts from the first cycle. In addition, a preliminary study was conducted before the classroom action research cycle began. In class action research quantitative and qualitative approaches was used in analyzing data. Quantitative analysis to analyze data obtained from vocabulary test results, both pre-test and post-test. While for the qualitative analysis in this study using thematic analysis.

This study focused on fourth grade students of An Elementary School in Buleleng, Bali in the second academic year of 2024/2025, involved one class with a total of 21 students. This school was chosen as the research subject because it had adequate facilities to implement the vocabulary video media that used. Data collection method in this study was devided into two part such as test (pre-test and post-test). This research used vocabulary test which was consist pre-test and post-test. Researchers used a pre-test consisting of 20 multiple choice questions about "I Go to School After Having Breakfast". This test was used to measure students' vocabulary mastery to obtain information about students' prior knowledge before entering the learning process.

Table 1. Blueprint of Vocabulary Test

Scope of Subject	Material	Cognitive level	Question Indicator	Total Question
I Go to School After Having Breakfast	Daily routines	C1	1. Students are able to remember the meaning of the verb.	10
		C2	2. Students are able to identify vocabulary use according to the context.	5
		C3	3. Students can apply comprehension by arranging random letters into correct words.	5

Then after the action process, a post test was conducted to identify the improvement of students' vocabulary mastery. By randomizing the position of the questions, it was expected that students would be able to pass 60 as the minimum completion criteria (KKTP) in answering the same questions between the pre-test and post-test. If the average score of students was able to pass KKTP, it could be concluded that there was an expected improvement. Based on the implementation of drilling techniques synthesized from (Daming et al., 2024; Henny, 2024; Maro, 2018), drilling techniques can provide a number of influences in the form of 1) increasing mastery of understanding, 2) increasing student participation in learning, 3) increasing student confidence in the learning process, 4) increasing student learning motivation, and 5) becoming a method that suits student needs. The interview guide was used to find out students' responses to the use of drilling techniques integrated with technology through vocabulary videos to improve vocabulary mastery at SD N 1 Tunjung. Where the researcher conducted a semi-structured interview means that the interview was conducted informally or without strict rules in order to see the honesty of students' responses.

3. Findings

A test as a form of vocabulary test is carried out in the acting phase of classroom action research. This test is in the form of 20 multiple choices which are used to measure students' initial knowledge. With the material entitled "I Go to School After Breakfast" which contains the vocabulary of daily activity verbs in English. The result of the Pre-Test shown in the following table:

Table 2. The Students' Pre-Test Scores

Descriptive	Score
Mean	39.76
Median	35
Mode	20

Based on the results of the pre-test, the mean scores show the number 37.76, which indicates that student vocabulary mastery is still below the KKTP which is 60. Then with the median with a score of 35, shows that many students are still unable to pass the standard score, but the rest are able to. As well as the mode that shows the number 20, reveals that most students are only able to achieve relatively low scores, which are below the KKTP. 20 is the minimum score and 90 is the maximum score obtained by students. Furthermore, 19.05 % or 4 students out of 21 students were able to pass KKTP of 60. And 80.05 % or 17 students were not able to achieve it. This indicates that there are 17 students whose vocabulary mastery passed the KKTP 60 standard that has been determined.

The planning phase involved collaboration between teachers and researchers to ensure the research aligned with its objectives. Key preparations included developing a teaching module based on the syllabus, which detailed the use of drilling techniques and provided student worksheets. Data collection tools such as field notes and interview guides were also prepared. For learning media, vocabulary videos from YouTube (e.g., "I Go to School After Breakfast") were selected for both offline and online sessions. Success criteria were established with a minimum passing score of 60 (KKTP), and the research would be considered successful if students showed improved scores in future cycles.

In the action phase, the researcher implemented the teaching module through offline classroom sessions and online learning via WhatsApp groups. The first meeting (Feb 3, 2025) began with a brainstorming session on daily activities, followed by vocabulary videos and pronunciation practice using drilling techniques. Activities included guessing vocabulary from pictures, repetition drills, and sentence translation. Students recorded vocabulary and were assigned online homework. In the second meeting (Feb 5, 2025), students reviewed previous vocabulary, practiced writing and pronunciation, and watched another video. Vocabulary was distributed across seating rows to enhance memorization. The cycle concluded with a post-test on Feb 6, 2025, consisting of 20 multiple-choice questions to assess student understanding.

In the observation phase of the first cycle, the researcher documented the learning process through field notes, focusing on students' abilities, classroom dynamics, and online interactions. During the first meeting, students were hesitant and shy, even when questions were asked in Indonesian. However, they responded positively to the integration of technology, especially when watching vocabulary videos. While some students began to try answering in English, their pronunciation was still lacking. Most were already familiar with platforms like YouTube and WhatsApp, which they also used in other subjects. Despite this, participation in the online session was limited, with many students giving minimal or no responses. Some only reacted using emojis or very short replies.

By the second meeting, there was noticeable improvement. Students became more confident, engaged more actively, and showed better recall of vocabulary. Although spelling errors remained, they were more willing to write on the board and speak up in class. Disruptions, such as chatting during lessons, were quickly managed by the teacher. Positive feedback was emphasized, helping students feel more encouraged without focusing too much on their mistakes. Still, peer judgment affected some students' willingness to speak, prompting the teacher to reassure them that making mistakes is a natural part of learning. This cycle concluded with a post-test on January 6, 2024, to evaluate the students' progress after the two learning sessions. the results are shown in table 3.

Table 3. The Students Score of Post-Test 1

Descriptive	Score
Mean	72.14
Median	80
Mode	100

The results of post-test 1 show the improvement achieved by students. In post-test 1, students were able to achieve an average score of 71.19. This value has increased when compared to the previous pretest results, where the average score was 39.76. With a median value that also increased to 80, it shows that more than half of the students have been able to pass the KKTP. Details of the frequency distribution of student scores on post-test 1 can be seen in the following figure 1.

Figure 1 Frequency Distribution of Pre-Test Student Scores
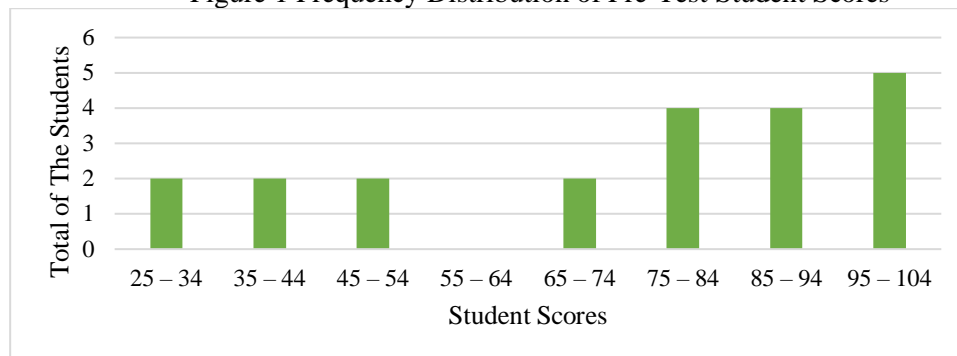
With a student score of 25 as the lowest to 100 what is the highest score, is the score achieved by students in this cycle 1. But there are 14 students out of 21 students who have been able to pass the standard score. There are still 6 students who have not been able to pass the KKTP. Which indicates that learning must be continued to cycle 2. Because even though the average score of students has passed the standard score, but in individual scores, not all students have been able to pass the predetermined KKPP.

Researcher found that students generally showed improvement in vocabulary mastery after the learning sessions, as indicated by the increase in the average score from the pre-test (39.76) to post-test 1 (71.19). However, 28.57% of students still did not meet the minimum passing grade (KKTP), likely due to challenges in remembering vocabulary meanings and spelling. Discussions between the researcher and the homeroom teacher highlighted several key issues: student confidence greatly influences performance, distractions can reduce focus and understanding, and some students continue to struggle with pronunciation and spelling, requiring more repetition and support.

To address these issues in the next cycle, several actions were proposed. First, students will be encouraged to answer questions even if incorrect, with praise and positive reinforcement to boost confidence. Second, class rules will be implemented more clearly to manage distractions, including rearranging seating if needed. Finally, the use of repetition through drilling techniques will be emphasized to familiarize students with English vocabulary, as their everyday language use is mostly Indonesian and Balinese. These adjustments aim to create a more supportive and structured environment that promotes vocabulary retention and student participation.

Table 4. The Students' Post-Test 2 Score

Descriptive	Score
Mean	88,33
Median	85
Mode	100

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 9 Based on the results of student scores in post-test 2, the mean score of students has increased from 71.19 in post-test 1, and to 86.19 in post-test 2. This indicates a further improvement in students' abilities when compared to before. The most frequently occurring score was 100, which 9 students were able to achieve. This indicates that the improvement in student performance was consistent from cycle to cycle. Details of the frequency distribution of post-test 2 scores can be seen in the figure 2.

**Figure 2. Frequency Distribution of Student Score in Post Test 2**
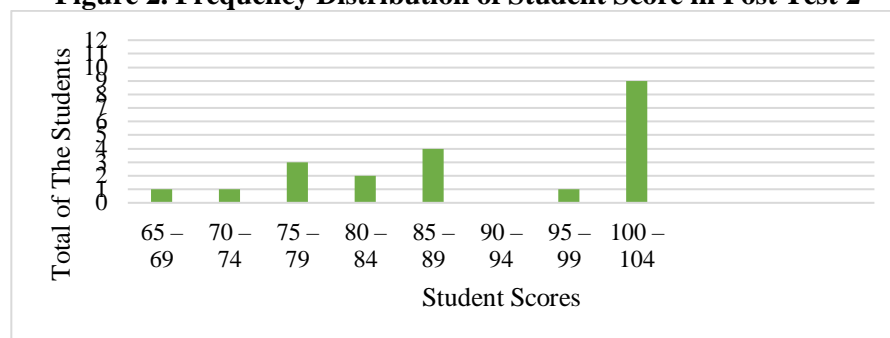
Based on the figure, 65 is the lowest score and 100 is the highest score that students can achieve. And this time all students have been able to pass the KKTP, which is 60. This result shows that all students have been able to achieve the required vocabulary skills because 100% of the students have been able to achieve it.

The data obtained from the research field notes showed a great progress in students' ability to use English vocabulary from cycle 1 to cycle 2. Overall, the learning process went very well. Students were able to remember to pronounce and apply vocabulary in the right context. Students also felt interested and motivated in following the learning. Overall cycle 2 has been able to achieve the objectives of this study. And all students showed their success in mastering vocabulary.

Quantitatively, the comparison of the mean score of post-test 1 and post-test 2 shows an increase. The min score of post-test 1 which was originally 71.19 increased to 86.19 in post-test 2 which also shows that in general students have been able to pass the KKTP.

From all these indications in general it can be concluded that based on the vocabulary test, there is an increase in the student mean score from the pretest to the post-test. The increase is shown in the following figure 3.

Figure 3. Frequency Distribution of Student Score in all
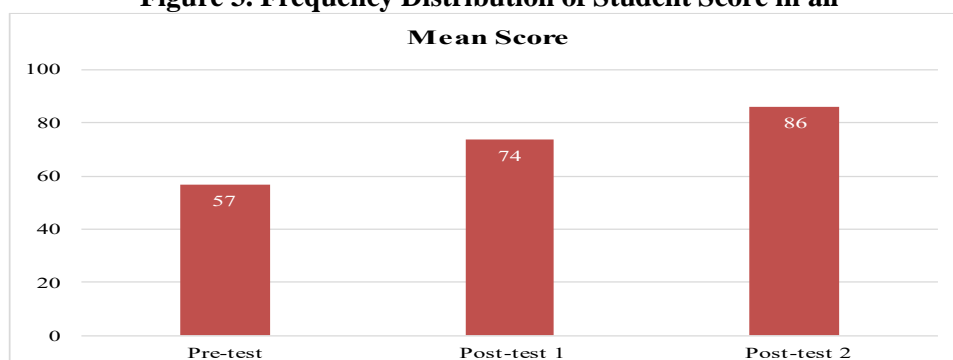
With a mean score of 39.76 on the pretest shows that the improvement of students' vocabulary mastery is still needed. Because with this score in general students have indeed passed the KKTP, but there are still some students who have not been able to pass the KKTP. After post-test 1, there was an increase to 72.14, which means that there was about 81.4% increase in the increase in students' mean score. This shows that there is progress regarding the vocabulary

mastery of most students and the learning action carried out is quite appropriate. However, it turns out that there are still 6 students who have not been able to pass or even reach the KKTP so that the next cycle must be carried out.

In the second process after the second cycle of learning, the mean score of students has increased again by about 22.44% where the mean score rose from 72.14 to 88.33 and this is also accompanied by all students being able to pass the KKTP. This shows consistent progress towards increasing students' vocabulary mastery with the use of drilling techniques integrated with technology. In the end, the classroom action research that has been carried out can be categorized as successful.

Moreover, Students responded to this first theme. The drilling method integrated with vocabulary videos makes students feel happy in the learning process. The techniques and media used make them not feel bored and understand and remember new vocabulary more easily in an interactive way.

Interview question: *do you enjoy learning new vocabulary using drilling techniques and vocabulary videos? What do you feel?*

Student's responses:
- **S1-S3:** "It's really fun! I don't get bored when learning."
- **S4-S5:** "I like it because it's easy to remember new words."
- **S6-S9:** "It's fun! Watching videos makes me understand more."
- **S10-S13:** "I'm happy, so I don't get sleepy while studying."
- **S14-S17:** "I get more excited because I learn while watching videos."
- **S18-S21:** "Learning is easier to understand."

Using videos as a tool in the implementation of learning makes learning more interesting so that students' interest increases and tend to be more involved in the learning process.

1. **Motivation in Learning**

The next question was asked to find out how motivated students are in following the learning with the application of drilling techniques integrated with technology.

Interview Question: *do you feel more eager to learn when learning using drilling techniques and vocabulary videos?*

Student's responses:
- **S1-S2:** "Yes! I want to keep learning."
- **S3-S6:** "I'm more excited because the way of learning is different and more exciting."
- **S7-S9:** "My motivation has increased! It's not just reading books."
- **S10-S14:** "I want to practice more so I can be more fluent."
- **S15-S21:** "I'm happy because I know more vocabulary."

From the students' answers, it can be concluded that students feel more motivated by the technique that emphasizes a more interactive approach and contributes directly to the learning process. The drilling technique and also the visualization of the video provide a much easier learning experience for them. Because it is not only interesting, but students are given the opportunity to confirm several times whether their pronunciation or memory of the vocabulary is correct. Through the repetition of repetition provided by the technique while being helped by their focus that is maintained based on the visualization of the video shown.

2. **Students' Participation in Learning.**

The next theme that emerged was the increase in students' involvement in participating in the learning process.

Interview Question: *does learning English by repeating it like this make you more willing to answer or give opinions when we learn together about vocabulary?*

Student Responses:
- **S1-S2:** "I become more active in answering questions in class."
- **S3-S6:** "Often participating in drilling exercises makes me more courageous in speaking."
- **S7-S10:** "I'm more focused because the learning is more interesting."
- **S11-S13:** "Instead of just sitting there, I practiced more."
- **S14-S21:** "I am more diligent in joining the exercises than before."

Based on the themes or patterns of the students' answers, there are indications that drilling techniques and vocabulary videos can increase students' involvement in the learning process. They tend to be more courageous to give opinions and actively engage in class voluntarily. This shows that students are encouraged to speak more often to practice vocabulary and indirectly strengthen their understanding of the vocabulary they are studying.

3. **Students' Confidence in Using English**

The fourth theme shows an increase in students' confidence with the application of drilling techniques integrated with technology.

Interview Question: *do you feel more confident in using English after the learning process?*

Student responses:
- **S1:** "I became more confident because I practiced a lot."
- **S2-S4:** "I'm not afraid to make mistakes when speaking English."
- **S5-S9:** "Often listening to videos makes me know how to speak correctly."
- **S10-S13:** "I feel more confident when I talk to my friends in English."
- **S14-S21:** "Now I dare to speak in front of the class."

Students' perspectives indicate that drilling techniques and technology can help students become more confident. With repetition during practice, they feel more confident in their ability to use English. It is also accompanied by the freedom given when making mistakes so that students do not feel intimidated when making a mistake.

4. **Improving Students' Vocabulary Mastery.**

Interview Question: *do drilling techniques and vocabulary videos make you understand more vocabulary?*

Student Responses:
- **S1-S5:** "I memorize new words more easily."
- **S6-S9:** "Words that were difficult before, now I understand better."
- **S10-S14:** "Listening to the video over and over again makes me remember words longer."
- **S15-S17:** "I know the meaning of words that I didn't understand before faster."
- **S18-S21**: "My vocabulary is more than before."

These responses show that from the students' point of view, there is also an increase in vocabulary mastery experienced by students. Students tend to be faster in remembering understanding and using vocabulary in appropriate situations. With the repetition of repetition from videos and also practice carried out in the classroom, helping students process incoming information better so that increased vocabulary mastery can be achieved by students.

5. **Methods Needed by Students**

the next theme is an indication of drink techniques and technology are techniques and media needed by students in learning English vocabulary.

Interview Question: *when you want to learn English vocabulary, do you need to be repeated and use videos to learn faster, rather than just being asked to read or listen to the vocabulary that is being taught to you?*

Student Response:
- **S1:** "Yes! I need a fun way to learn like this."
- **S2-S6:** "It's perfect! It makes it easier for me to understand."
- **S7-S9:** "This method makes me more comfortable learning English."
- **S10-S16**: "I like this method because it keeps me motivated."
- **S17-S21:** "I hope learning like this can continue."

Students feel more comfortable with the techniques and media used in their learning process. Students need repetition of link techniques to understand vocabulary more easily and quickly. And they also need visualization from videos and technological sophistication to learn in a more interesting way than just using manual media.

6. **Challenges to Online Implementation**

The next theme that emerges is the form of challenges that students face in the application of online techniques and technology.

Interview Questions: *Did you experience any difficulties in implementing online learning?*

Student Response:
- **S1-S3:** "No problem, I can still study well."
- **S4-S6:** "Sometimes the signal is bad, but I can still follow the lessons."
- **S7-S10:** "It's a bit difficult if there's no quota, but I'm still enthusiastic."
- **S11-S14:** "It's better face-to-face, but the videos still help."
- **S15-S21:** "It was difficult at first, but I got used to it and became comfortable."

Most students encountered challenges during the implementation of online learning, mainly due to technical issues like poor internet signals and limited technological skills, which initially made them uncomfortable. However, with continued use of technology, they gradually adapted and became more comfortable. Some students even felt that technology enhanced their learning experience by making it more enjoyable and beneficial.

The interview results highlight the importance of considering students' perspectives in improving vocabulary learning through drilling techniques and technology. Factors like family support and stable internet access play a significant role in the success of online learning. Using mobile phones for educational purposes instead of entertainment can also enhance learning. Regular use of technology and media can help students adjust better to the learning environment and support their vocabulary development, showing that effective tech-based learning depends on both student readiness and supportive infrastructure.

4. Discussions

In relation to the objective of the study the collected results will be analyzed to find out the development of students' vocabulary master and also how they respond to the techniques and media used during the learning process. Based on the findings, the 4th grade students of An Elementary School in Buleleng, Bali went through 2 cycles implementing the drilling technique integrated with technology which improved their vocabulary mastery. This development is shown from the vocabulary test results, classroom observations and online sessions, as well as students' opinions. It can be described as follows:

1) Improvement of Students' Vocabulary Mastery

The mean score obtained from the vocabulary test results showed an increase from the pre-test to post-test 1 which showed the mean score of the students' scores was 39.79 to 72.14 which means there was about 81.4% increase. This indicates that there is progress based on the learning that has been carried out in cycle 1. However, despite this increase there are still students who have not reached KKTP. Cycle 2 was held to follow up on the situation. It was found that there was a binding of the students' mean score of about 22.44% in the implementation of the second post-test with a mean score of 88.33. The data showed an increase again and all students were able to pass the predetermined KKTP value. This indicates consistent progress for students in mastering the material taught.

This finding is in line with Hidayat et al. (2022), mentioning that repetition can create a pleasant classroom atmosphere so that children's vocabulary mastery ability can increase. Moreover, Alhamami (2016), also added that the involvement of students in the learning process that applies drilling techniques in can help to improve their memory. Finissha et al. (2021), also believes that drilling techniques make the classroom situation more relaxed so that it can help increase vocabulary ability in children. In addition, a study conducted by Laily and Febrianingrum (2023), also showed results in the form of a significant increase in vocabulary mastery of beginning English class students by 50% from the initial score of 56.8 to 85.2. In addition to the way of teaching using drilling techniques, learning media provided by YouTube in the form of vocabulary videos also contributes greatly to improving students' vocabulary mastery. through questionnaires and interviews conducted by Irawan (2022), also mentioned this. 6-year-olds can state and recognize the meaning of some of the words they learn. While 7-year-olds can understand phrases and sentences through YouTube videos that are shown. Thus, through YouTube, children can mention, understand and write vocabulary fluently.

2) Positive Opinions from Student Interviews

Based on the research findings, the use of drilling techniques integrated with technology for fourth grade students at An Elementary School in Buleleng, Bali resulted in an improved

mastery of student vocabulary and positive opinions from students regarding the implementation. The positive student responses obtained through the interviews, in the form of expressions of pleasure they showed based on their experiences, indicated student satisfaction with the application of drilling techniques integrated with technology. Drilling Techniques and vocabulary videos create a dynamic and fun learning environment for students. Drilling Techniques can effectively improve students' intonation as well as pronunciation, as students tend to listen and imitate pronunciation based on their teachers or instructors, as well as from videos (Hidayat et al., 2022). Drilling techniques can also help students to be more familiar with the vocabulary learned.

In addition, the use of vocabulary videos can improve students' vocabulary mastery during the learning process. Through their answers in the interview session, students admit that vocabulary videos increase their interest in learning vocabulary. In participating in learning, students' success in understanding the material is highly dependent on their learning motivation. Their focus, attention and willingness to participate in learning may decrease if they are not in a good mood. In general, young learners tend to be more emotional in their learning process (Saputra, 2017; Sudarmaji & Yusuf, 2021). thus, by providing animation, images combined with music can make learning more enjoyable for students. the availability of audio-visual materials can keep students' attention compared to oral materials only, because the material is easier to understand and more visually appealing to. Visualization from videos can help students to understand the meaning of what is explained by the speaker (Santosa et al., 2023). learning will be effective if the media used can increase students' visual engagement(Lampai & Sukying, 2023).

In addition, WhatsApp with the group feature provided can be a forum that students need in the online learning process. Through WhatsApp groups students can learn through mistakes made by their friends Irawan (2022). In WhatsApp groups, students can also enrich their vocabulary through activities they do with their teachers and friends online. (Ratminingsih et al., 2022), recognized that WhatsApp is the right application to use as a learning media, because it can motivate students to produce creative projects in the form of writing and speaking. The opinions of students who claim to be more motivated to take part in learning because they get feedback or reactions in WhatsApp from the teacher also support this argument. Moreover, the availability of the voice note feature on WhatsApp can be a means to improve students' vocabulary pronunciation. Students admit that they are happy to participate in mentioning and pronouncing vocabulary through the voice note feature as a form of practice that they do online. This is in line with research from Padmadewi et al. (2022) which claims that the use of voice notes can improve students' pronunciation skills in speaking. The use of drilling techniques and technology in the form of vocabulary videos, as well as WhatsApp groups can create an effective and fun learning atmosphere for students. Not only providing offline learning, students are also provided with online learning forums. This is in line with the habits of students who are accustomed to using technology. Thus, as with the implementation of this research, students not only utilize technology as entertainment but also as an educational tool for them. Offline and online implementation helps students to be continuously exposed to the vocabulary being taught. So that it can improve students' vocabulary mastery both directly and indirectly.

5. Conclusion and Suggestion

This study can be concluded as successful in improving students' vocabulary mastery ability. The application of drilling techniques integrated with technology for grade 4 students of An Elementary School in Buleleng, Bali in the first academic year 2024/2025 shows results as evidence of the improvement, such as:

First, students' performance in class is getting better from the meetings of cycle 1 and cycle 2. Both offline and online students are able to remember to pronounce, spell and use vocabulary according to the context of the conversation. The increase in student scores achieved on the vocabulary test also supports this. 39.76 in the pretest to 72.14 in the first cycle and to 88.33 in the second cycle post-test with the result that all students can pass the standard score or KKTP.

Second, the results of interviews conducted with students gave positive results. The positive response of students through their opinions on the use of vocabulary techniques and videos, can indicate the success in the implementation of this study because of the benefits that students get

from this study. Students recognize the techniques and media used attract their attention, provide motivation and can help them improve their vocabulary mastery.

Based on the results obtained from this study, the researcher can convey several suggestions. Due to the positive impact given from the implementation of drilling techniques integrated with technology in the form of vocabulary videos, students should utilize the media optimally. Students should spend more time studying vocabulary videos online at home with the aim of expanding vocabulary. Moreover, utilizing flexibility of the techniques and media used, it is hoped that other researchers can use more diverse media and can be implemented in teaching vocabulary that can create a fun and easy atmosphere for students

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