Increasing Vocabulary of Elementary Students Through Quizizz

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ABSTRACT

This study aims to increase the vocabulary of grade VI students at SDN 4 Banawa through the use of Quizizz. The research method employed was Classroom Action Research (CAR), conducted in two cycles. Each cycle consisted of four stages: planning, action, observation, and reflection. The research instruments used for data collection were observation and tests. The test results at the end of each cycle show a significant increase in students' vocabulary, with the success rate rising from 21% in cycle 1 to 89.5% in cycle 2, surpassing the success indicator of 70%. Observation results indicate that using Quizizz created an engaging learning environment and increased student motivation. Therefore, Quizizz can be effectively used to increase elementary school students' vocabulary. The implication of this research highlights the importance of integrating technology in learning. Support in the form of providing digital devices, strengthening internet infrastructure, and training teachers in using interactive learning media needs to be improved to ensure the sustainability and equity of technology-based education quality.

Keyword: Classroom Action Research, Gamified Learning Increase, Quizizz, Vocabulary

I. INTRODUCTION

Vocabulary is a fundamental element in language learning including English. Cameroon (2001) argues that vocabulary plays a pivotal role in learning a language. A broad and varied vocabulary enables students to communicate fluently, to understand the reading text better, and to write effectively. According to Staehr (2008), Vocabulary is one of the important aspects to be proficient in all four language skills. Additionally, Harmon, Wood, and Keser (2009) states that learners' vocabulary knowledge is a significant aspect of their language development. However, in reality, many students including elementary students still face

difficulties in vocabulary. Most students have difficulty remembering the meaning of vocabulary, understanding the context of its use, and applying it in sentences. This difficulty is evident in learning activities, such as low student participation during discussions or when asked to read English texts.

The factors that influence students' low vocabulary are quite diverse. One of them is English is only set as a compulsory subject starting from third grade in 2024. (Educational Standards, Curriculum and Assessment Agency 2024). It made public school did not have the obligation to provide English to accommodate students' need to be able to have intercultural competence. Another problem is the lack of varied learning methods. Many teachers still use conventional methods such as lectures or giving vocabulary memorization assignments without actively involving students. Conventional method like this often makes students feel bored and less motivated to learn. In addition, the lack of use of technology in the learning process is also an obstacle. In fact, technology has great potential to increase students' interest and motivation to learn through interactive and fun learning media.

In order to overcome this problem, teacher can use a framework originally proposed by Shulman (1987) called pedagogical and content knowledge (PCK) and extended by Mishra and Koehler (2006) by adding technological elements. Hence, the name technological, pedagogical, and content knowledge or commonly known as TPACK. One learning method that teacher can use to implement TPACK approach is gamified learning. Gamified learning can provide rich, interactive resources to help students learn and master vocabulary in an engaging and fun way. Gamified learning approach modifies the regular learning environment settings to become a revised version that students perceive as game (Muhsin & Aziz, 2020; nur Aziz & Rohmah, 2022)(Sailer and Homner, 2020). Gamified learning recently rises up as the tool to keep students active and learn effectively in a fun manner (Belova and Zowada, 2020). This is in line with the characteristic of 21st century learners where students tend to be more active if the learning process has gaming elements that allow them to compete one another.

One of online platforms that can be used in gamified learning is Quizizz. It is a digital platform which teacher can create interactive quizzes, games, and evaluation. it is a game-based learning aid which allows multiplayers activities (Citra and Rosy, 2020). This platform can assess students learning progress in a special and engaging way. There are so many features in Quizizz

that can be utilized whether in face-to-face classroom or in online classroom such as interactive quizzes, games, and assessments. (Michelle and Lockyer, 2013). Quizizz also provides an alternative mode for students who does not have digital devices such as smartphone or PC. Moreover, the platform supports students to work collaboratively, promoting teamwork and enhancing students' social skill.

There are some previous studies showing the effectiveness of Quizizz. Komalasari and Zuhriyah (2021) found that the use of Quizizz as an online learning media resulted students' vocabulary increased. They suggested that teachers and school must provide students with sufficient internet connection for accessing Quizizz. There is also study conducted by Agustin (2022). In her study, she found that the use of Quizizz has positive effect on students' vocabulary by increasing students' motivation during the learning process. Another study by Putra (2023) found that students' vocabulary increased after the use Quizizz. He suggested that Quizizz should be integrated in learning process not only in junior high school but also in other educational levels.

Based on preliminary observation, students in SDN 4 Banawa showed limitation in learning. Their daily tests results reflected that the majority of students' vocabulary were low based on criteria for achieving learning objectives (Kriteria Ketercapaian Tujuan Pembelajaran or KKTP) and categorized as "need remedial intervention". Additionally, their engagement in learning process showed that they were unmotivated to learn English through conventional methods such as memorizing words and practicing writing. They were not accommodated with enough stimulation and technology-based strategy to be actively engaged in the learning process.

II. LITERATURE REVIEW
Vocabulary

Vocabulary is a collection of words that a person knows and uses in a language. Vocabulary includes all the words that are understood and can be actively used in speaking, writing, reading and listening. According to Hatch and Brown (1995), Vocabulary refers to the collection of words and phrases that a person knows and can use in their language. It encompasses both the breadth (the number of words) and the depth (the understanding and usage of those words) of a person's linguistic repertoire. Vocabulary size can vary significantly among individuals, influenced by factors such as age, language proficiency, and exposure to different languages. Vocabulary is a basic element in communication and language understanding. With a rich and varied

vocabulary, a person can express their thoughts, ideas and feelings more clearly and effectively.

Vocabulary can be divided into two main categories. They are receptive and expressive vocabulary. According to Stahl and Fairbanks (1986), Receptive vocabulary includes words that individuals recognize and understand when they encounter them in reading or listening, while expressive vocabulary comprises words that individuals use actively in speech or writing.

A well-developed vocabulary is linked to academic success and cognitive development. Research indicates that vocabulary knowledge is a strong predictor of reading comprehension and overall academic achievement (Baumann, Kame'enui, & Ash, 2003). Students with a rich vocabulary can comprehend texts more effectively, make inferences, and engage in critical thinking. Moreover, vocabulary knowledge enhances writing skills, enabling individuals to express their thoughts more precisely and creatively.

There are various methods to enhance vocabulary, including direct instruction, reading widely, and engaging in conversations (Nagy and Anderson, 1984; Graves, 2006). Direct instruction involves teaching specific words and their meanings explicitly, often through vocabulary lists and exercises. Reading widely exposes individuals to new words in context, which aids in understanding their usage and meanings. Conversations and discussions also provide opportunities to learn and practice new vocabulary in a meaningful context.

In the digital age, technology offers additional resources for vocabulary development. Online tools, apps, and games can make learning new words engaging and interactive (Hirsch, 2003). Furthermore, access to a vast array of digital texts broadens the exposure to diverse vocabulary, fostering continuous learning.

Gamified Learning

Gamified learning integrates game elements into educational contexts to engage students and enhance learning outcomes. This approach leverages principles from game design to create interactive and motivating learning experiences. By incorporating game mechanics such as points, badges, and leaderboards, gamified learning aims to make education more engaging and effective.

Gamified learning involves applying game design elements and principles to non-game contexts, particularly in education. Unlike game-based learning,

which involves playing actual games for educational purposes, gamified learning incorporates elements like rewards, levels, and competition into traditional educational activities (Deterding et al., 2011). The goal is to motivate students, enhance their engagement, and improve learning outcomes through a structured and interactive environment.

Quizizz

Quizizz is a well-liked online learning tool for making and sharing interactive tests, games, and quizzes. Quizizz has emerged as a useful resource for energizing students and improving their educational experience in the context of English language instruction in Indonesia. It is is a flexible platform that can be operated whether in PC or smartphone (Zhao, 2019). Quizizz is a game-based learning approach that has been introduced in several areas of life, especially in the field of education. (Rajendran, Naaim, & Yunus, 2019).

Quizizz's capacity to enhance learning through fun and interaction has led to its rising popularity in Indonesian classrooms. The platform is a useful tool for evaluating students' knowledge and comprehension because it enables teachers to design tests that accommodate various learning levels and styles. (Hy, Boeriswati, & Herlina, 2024) Quizizz also offers real-time analytics and feedback, which helps

teachers monitor their students' progress and pinpoint areas in need of development. (Mujahidah & Yasin, 2022). Quizizz can be the most relevant online platform to conduct learning and assessment in the teaching-learning English (Bury, 2017). The platform enables teacher to keep track of each student's learning progress because it provides real-time respond to students' work (Pranoto,2020; Mei, et al., 2013). Students are encouraged to compete with one another by seeing the leaderboard and rewards on the platform.

Quizizz includes a number of possible uses that could improve Indonesian students' English language proficiency. Evaluation and assessment of language skills is one such application. teachers may evaluate their students' language proficiency in areas like grammar, vocabulary, and reading comprehension while gaining insightful knowledge about their academic achievement. (Triyanto, et. al., 2022). Quizizz can also be used to create interactive language-learning classes and activities, like exercises in sentence formation and vocabulary building.

Quizizz has grown to be a useful instrument for improving English language instruction. It is a useful tool for increasing student engagement and boosting learning results because of its dynamic and competitive character, tailored learning

experiences, and real-time feedback. To make sure that students are ready for the increasingly globalized world, it is crucial to maintain a balanced approach to English language education as the nation changes. This strategy should incorporate both conventional and modern methods.

Unlike any other educational game-based platform, Quizizz has game characteristics such as avatars, themes, memes, and music, which keep students entertained in the learning process (Zhao, 2019). Implementation of the use of Quizizz by students in the classroom using their electronic devices (Setiawan, Wigati, & Sulistyaningsih, 2019). The total number of players who will take the quiz is determined by the teacher, and the teacher ensures that students who join the quiz are not intruders, because the teacher ensures that students who join the quiz are on the student attendance list (Pitoyo & Asib, 2019).

III. Research Method
Research Design
The design of this research was classroom action research or commonly known as CAR. It is administered by teacher based on problem encountered by teacher's daily observation and experience. The primary objective of CAR is to overcome the problem encountered in learning process.

According to Hokpins (1985), there are some cycles in conducting classroom action research which consists of four phases for each cycle. The phases are planning, action, observation, and reflection. If the problem has been resolved in a particular cycle, then the action can be stopped. In this research, the model that used was the spiral model suggested by Kemmis & McTaggart (1988).
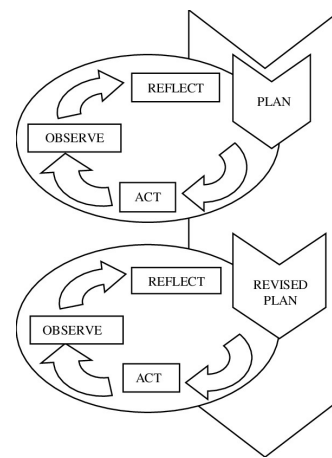

Figure 1. CAR in Spiral model suggested by Kemmis & McTaggart (1998)

Research Subjects
The subject of the research was class VI B in the odd semester academic year 2024/2025. The class consisted of 19 students. The collaborator of the research was the English teacher of the class. The collaborator observed the learning process.

Research Procedure
Planning

During planning stage, the researcher and the collaborator worked collaboratively to address the problem and determine the best solution to solve it. in this stage, the researcher and the collaborator identified

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and analyzed the issue, preparing the lesson plan, learning media, observation sheets, and evaluation instruments.

Action

In this stage, the plan that have been formulated were implemented. In this research, the collaborator played role as the observer while the researcher taught the students about the topic by using Quizizz as learning media.

Observation

In observation, the collaborator as the observer observed the action. In this step, as the researcher teaching the class, the observer collected the data by filling out observation sheets. In this stage, teacher directly observed students who faced difficulties in the learning process.

Reflection

The last stage in a cycle of this research was reflection. In the reflection stage, the researcher reflected on the results of the learning implementation consisting of student learning outcomes, documentation and observation results to determine the level of achievement. If the result of learning process and criteria of minimum completeness were met the action could be stopped and the research was classified as successful. The criteria of minimum completeness of English in elementary school level was 70. On the other

hand, if students' learning result were not showing improvement, the researcher had to revise the plan before implementing it on the next cycle.

Technique of Data Collection
Observation

In this research, the collaborator observed the action carried out by the researcher in term of teaching by filling out the observation sheets to see students' and teacher's activity during learning process.

Test

In implementing this research, the post-test was given at the end of each cycle to measure students' achievement in learning vocabulary by using Quizizz. The tests were administered by using Quizizz that consisted of multiple choices questions and matching or true/false questions.

IV. RESULTS AND DISCUSSION
Cycle I

In the implementation of cycle I, there were several steps that had to be taken. First, the researcher and the collaborator create a lesson plan that include Quizizz as learning media to be used during learning process. Second, the researcher prepared the material about vocabulary specifically Adjectives and Nouns that are used to describe peoples' appearance. Third, the researcher also needed to adjust the learning method to accommodate students' learning needs. Last, the researcher created

observation sheets and test as instruments to collect data about teacher's and students' performance during learning process by using Quizizz.

After completing the planning stage, the researcher continued to the action stage. In this stage, students learned about adjectives that are used to describe peoples' physical appearance. The researcher facilitated students with learning videos to stimulate students' curiosity. After stimulation, the researcher then asked the students to formulate a question about how to describe your best friend's physical appearance properly. Next, the students were asked to work on students' worksheet on Quizizz which consisted of ten numbers of multiple-choice questions. The questions were about common Adjectives that are used to describe peoples' physical appearance. Students were also to write description about people by using guideline question on Quizizz. Unfortunately, not all of students had internet quota and the internet connection of the school was under maintenance. The researcher decided to share the internet connection to whom does not have the internet access. After having worked on all worksheets, the students verified their work by presenting it in front of the class. Other groups were asked to give feedback to the group that presented their work. After all groups of students had presented their work, the researcher gave generally feedback and recognition to students about their performance. The researcher asked the students to conclude the learning process and reflection.

After administering the action, the researcher conducted post-test to find out the effect of Quizizz in vocabulary learning. The data obtained from the post-test in cycle I is presented in table 1 below:

Table 1 – The Result of Post-test in Cycle I

No	Aspect	Score
1	Mean Score	49,47
2	Students who obtained ≥70	4
3	Success Percentage	21%

From the table, it can be seen that the mean score was 49,47 and there were only 4 students who met the criteria of success with the percentage of success only 21%. This condition is both a motivation and a challenge for the researcher to continue the research process to cycle II.

When the action stage was implemented conducting the action stage, the researcher also perform observation with the assistance of the collaborator. the collaborator acted as the observer. The observer filled out the observation sheet of teacher's performance and students' activity

while the researcher conducted classroom action research. In conducting action stage, there were several steps that the researcher did not perform at all. Moreover, the students' activity showed that in the first meeting, only half of students who were motivated to follow teacher's instruction during learning process.

The next stage in the implementation of cycle I is reflection, at this stage, the researcher and the collaborator reflected starting from planning, action and observation. The researcher conducts a joint reflection regarding what needs to be improved in cycle II. Based on the results at the action stage, the percentage of student learning success was onlt 21%. The result of observation conducted by the collaborator showed that there were several steps that the researcher as the teacher did not perform optimally during the learning process. It effected students' activity because students did not think that they were facilitated in the whole learning process. The students also faced difficulties in using their device during learning process using Quizizz because not all of them have internet access. These problems can be solved by sharing internet connection or using paper-mode where student does not need digital device to join the quizzes. Based on the result of cycle I, even though there were slight increase from students' initial achievement, the focus of this research was

to significantly increase students' vocabulary. Thus, the researcher needed to continue the CAR by using Quizizz platform to increase students' vocabulary. Before implementing cycle II, there were some adjustments that have been formulated by both the researcher and the collaborator to be done for improvement in cycle II.

Cycle II

In implementing cycle II, the researcher still acted as the teacher while the collaborator still acted as the observer. The initial stage in the implementation of cycle II is to make revised prepared in cycle I by using the follow-up plan in the reflection stage of cycle I as a reference. The researcher then prepared the lesson plan by integrating Quizizz Papermode as the learning media. The researcher also prepared several digital devices such as chromebook and personal internet connection to overcome issues that surfaced in the previous cycle.

The next stage after revised plan was the action. The researcher taught the students vocabulary used in describing animals. During the learning process, the collaborator observed teacher's performance and students' engagement by filling out the observation sheets.

In stage, the topic was describing

animal. Students learned about Adjectives that are used to describe animals. The researcher provided real-life scenario problem that students might encounter in describing pet, domestic animals, and wild animals. The problem was "how to find your lost pet by describing their characteristic to other people". After providing problems that need to be solved, the students were organized to five heterogenous groups. the researcher then asked the students to comprehensively watch videos about describing animals. After watching videos, the students are asked to worksheet by using paper-mode Quizizz individually. Next, the students were asked to analyze a description about animals by answering true/false and fill in the blank questions in group. The students were also asked to write down five descriptions about their pet or animal around them on Quizizz in group. After having worked on all worksheets, the students were asked to develop and to present their work. Other groups gave their responds and questions. After all groups of students had presented their work, the researcher asked the students to reflect on the process of problem solving. The researcher the gave feedback to students' performance and asked the students to conclude the learning process and to reflect on the whole leaning process. The learning process was closed by motivating the students and prayer. After conducting

action stage, the researcher administered the post-test of cycle II to see the result of the implementation in cycle II. The data that was obtained in the post-test in cycle II can be seen in table 2 below:

Table 2 – The Result of Post-test in Cycle II

No	Aspect	Score
1	Mean Score	81,75
2	Students who obtained ≥70	17
3	Success Percentage	89,5%

From table 2, it can be seen that the mean score was 81,75 and there were 17 students who obtained ≥ 70 with the percentage of success 89,5%. The researcher and the collaborator reflected the observation results. The result showed that the teacher did all the aspects in observation sheet that affected students' engagement during the learning process in two meetings.

After conducting two consecutive meetings and one post-test in cycle II, the researcher obtained enough data to decide that the classroom action research can be classified as success. However, during the implementation of this research, there were several challenges that need to be noted. One of the main challenges is the limited

support for digital devices. Not all students have devices such as smartphones or tablets to access Quizizz. As a solution, teachers try to accommodate students by utilizing school-owned devices or using group learning modes. In addition, internet network problems are also a significant obstacle. Schools located in areas with inadequate internet infrastructure often experience connection problems during learning that affects the optimization of using Quizizz.

The findings of this research are supported by the research conducted by Komalasari and Zuhriyah (2023). They conducted classroom action research to overcome students' problem in learning vocabulary by using Quizizz. Their research was conducted in two cycles which the result in each cycle were also significantly increased. They suggested that the resources such as digital devices and network connection must be take into consideration to ensure the quality of learning.

Quizizz has beneficial effects on students' vocabulary and participation because it turns the learning situation to become more engaging. Putra (2023) argues that the use of Quizizz increases students' learning outcomes in vocabulary learning by enabling students to be more active during the learning process. Additionally, Dasalma,

et al. (2024) suggest that online learning platform like Quizizz should be used to create fun and interactive learning that stimulate students to learn vocabulary effectively. Thus, from the result of findings and discussion, it can be concluded that vocabulary of the grade VI students at SDN 4 Banawa can be increased through the use of Quizizz.

V. CONCLUSION

Based on the result the classroom action research that was conducted in two cycles, it can be concluded that the use of Quizizz can significantly increase students' vocabulary specifically in noun phrase. This is proven by the increase in the percentage of success from cycle 1 to cycle 2. In cycle 1, the student success rate only reached 21%, while in cycle 2 it increased sharply to 89.5%. These results indicate that Quizizz does have a positive impact on students' vocabulary mastery. In addition, the use of Quizizz has been proven to create a more interesting learning atmosphere and motivate students to learn. Features such as quiz-based games, competition elements, and instant feedback provide a different learning experience from conventional methods. That way, students are more motivated to be actively involved in the learning process.

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