

## The Use of Quizizz Combine with Flipped Classroom to Improve Vocabulary Mastery SMPN 3 Banjar

I Putu Arya Dipayana<sup>1</sup>, Kadek Sintya Dewi<sup>2</sup>, Gede Mahendrayana<sup>3</sup>

<sup>1,2,3</sup> Universitas Pendidikan Ganesha, Indonesia

Email: [arya.dipayana@undiksha.ac.id](mailto:arya.dipayana@undiksha.ac.id)<sup>1</sup>, [sintyadewi@undiksha.ac.id](mailto:sintyadewi@undiksha.ac.id)<sup>2</sup>,  
[mahendrayana@undiksha.ac.id](mailto:mahendrayana@undiksha.ac.id)<sup>3</sup>

### Abstract

*This study aimed to improve students' vocabulary mastery through the implementation of a flipped classroom model assisted by Quizizz. The research employed a Classroom Action Research design conducted in two cycles involving 25 students, with data collected through a pre-test, post-test I, post-test II, and classroom observations. The results showed a gradual improvement in students' vocabulary mastery, indicated by an increase in the mean score from 71.00 in the pre-test to 73.28 in post-test I and significantly to 85.76 in post-test II. In addition to score improvement, students demonstrated better understanding of word meanings, verb forms, and the use of vocabulary in sentences related to daily activities using the Present Continuous Tense, as well as increased participation and confidence during learning activities. These findings indicate that flipped classroom learning with the aid of Quizizz is an effective instructional strategy for improving students' vocabulary mastery in English language classrooms.*

**Keywords:** Classroom Action Research, Flipped Classroom, Quizizz, Vocabulary Mastery.

### INTRODUCTION

Vocabulary mastery is an essential part of learning English for student who learn English (Mahendrayana, 2024). They need vocabulary to understand texts, express ideas, and communicate effectively. Without have a lot of vocabulary knowledge, students often experience difficulties in both spoken and written communication (Mulyono, 2023). Vocabulary mastery is not only about memorizing word meaning, but it also includes understanding word forms and using words correctly in context (Nabila, 2023) (Stott, 2023). These are important for junior high school students who are still learning and developing their basic English skills.

Vocabulary learning has a common challenge in the Indonesian EFL (dewi, 2024). Many students are able to recognize English words but struggle to use them correctly in sentences (Depalina, 2025) (Hariati, 2020). This problem often occurs because vocabulary learning focuses more on memorization than on meaningful use (Putri, 2024). As a result, students may know the meaning of a word but do not understand how to apply it in real communication or even write it on the book (Siregar, 2024). This difficulty becomes more visible when students learn grammar topics such as the Present Continuous Tense, simple past tense, simple present tense, which requires correct verb forms and appropriate word use at the same time.

Based on preliminary observations at SMP Negeri 3 Banjar, several problems related to vocabulary mastery were identified. Many students had difficulty understanding word meanings, distinguishing verb forms, and using vocabulary correctly in sentences. Students frequently made grammatical errors and showed low confidence during speaking activities.

Interviews with the English teacher revealed that vocabulary teaching mainly relied on textbooks and teacher explanations, with limited use of interactive learning activities.

The learning process in the classroom was also teacher-centered. Students usually received explanations during class and completed exercises afterward. This type of learning sometime makes the students feel bored and sleepy (Apoko, 2023). They rarely prepared learning materials before class, which reduced their readiness and participation during lessons. As a result, classroom time was not used effectively for practice and interaction. Students became passive learners and showed low motivation in learning vocabulary.

To overcome these problems, teaching strategies that encourage active learning and student involvement are needed. One approach that can support this goal is the flipped classroom model. In the flipped classroom, students learn basic materials before class through videos or digital content then classroom time is practice, discussion, and feedback (Safitri, 2024). This model helps students come to class better prepared and allows teachers to focus more on guiding students' learning (Lacher & Lewis, 2015a).

In addition, the use of educational technology can make vocabulary learning more engaging (Fatwa & Daulay, 2024). Quizizz is a digital learning platform that uses game elements such as points, rankings, and instant feedback (Pavita, 2021). These features can increase students' motivation and make learning more enjoyable. Quizizz also allows teachers to design vocabulary activities that focus on word meaning, word form, and word use (Agustin, 2022a).

According to (Aziz, 2022) Quizizz can improve students' motivation and participation in EFL classrooms. However, Quizizz is often used only as an assessment tool, not as part of the learning process (Sinta, 2019). Similarly, the flipped classroom model is sometimes applied without integrating interactive digital tools that support vocabulary learning. This shows a gap in how technology and teaching models are combined in vocabulary instruction.

Therefore, this study integrates Quizizz with the flipped classroom model to improve vocabulary learning in an EFL classroom. In this approach, students study vocabulary materials before class through videos and Quizizz activities. During class, they practice using vocabulary through interactive activities such as discussions, games, and role plays. This combination is expected to help students understand vocabulary more deeply and use it more confidently.

This study aims to examine how Quizizz-assisted flipped classroom learning improves students' vocabulary mastery in terms of word meaning, word form, and word use. The study was conducted in an eighth-grade EFL classroom at SMP Negeri 3 Banjar. The findings are expected to provide practical insights for English teachers on how to integrate technology and instructional models effectively in vocabulary teaching.

## METHOD

### *Research Design*

This study employed Classroom Action Research (CAR) as the research design. Classroom Action Research was chosen because it focuses on improving teaching and learning processes in a real classroom setting. The research aimed to improve students' vocabulary mastery through the integration of Quizizz and the flipped classroom model.

Flipped classroom model used as the way teacher teach the student and Quizizz is the tool of the learning where the quizizz used to give the student test after read material or after learning in the class. The study was conducted in two cycles, and each cycle consisted of four stages: planning, action, observation, and reflection. To measure the improvement in students' mastery of basic skills, this study used three types of tests: pre-test, post-test I, and post-test II. The pre-test was administered before the action was carried out to determine students' initial abilities in vocabulary mastery. Post-test I was administered at the end of Cycle I to determine the improvement in students' abilities after the implementation of Quizizz and flipped class in the first cycle. Furthermore, post-test II was administered at the end of Cycle II to determine the final improvement in students' vocabulary mastery after the learning improvements were made. The third test focused on aspects of mastery of understanding which included word meaning, word form, and word usage.

### *Research Setting and Participants*

The research was conducted at SMP Negeri 3 Banjar. The school located at Temukus village, Buleleng regency. The participants of this study were eighth-grade students who were learning English as a Foreign Language. The class was selected based on preliminary observations that indicated students experienced difficulties in vocabulary mastery, particularly in understanding word meaning, using correct word forms, and applying vocabulary in sentences related to daily activities.

### *Data Collection Techniques*

Data were collected using vocabulary tests, observation sheets, and field notes. The vocabulary tests were administered to measure students' vocabulary mastery in terms of word meaning, word form, and word use. Observation sheets were used to record students' participation and engagement during learning activities, while field notes provided additional qualitative information about classroom situations.

### *Data Analysis*

The data were analyzed descriptively by comparing students' vocabulary performance across cycles. From pre-test, before the teacher teach the students to post-test in cycle 1 then to post-test in cycle 2. The results from vocabulary tests were used to identify improvements in vocabulary mastery, while observation data were analyzed to support the quantitative findings.

## **FINDINGS AND DISCUSSION**

### *Pre-test*

The result of the pre-test where the pre-test was administered to 25 students prior to the implementation of the learning activities to determine their initial English vocabulary mastery. This pre-test focused on aspects of word meaning, word form, and word usage related to daily activities and the Present Continuous Tense. The pre-test results yielded a total score of 1,775, with an average score of 71.00. The median score was 73, while the most frequently occurring score (mode) was 80. The highest score obtained by a student was 93,

while the lowest score was 50. These data indicate that students' initial English vocabulary skills are in the moderate category, but there is still significant variation among students.

Although the average pre-test score is relatively close to the completion criteria, the pre-test results indicate that students' vocabulary mastery is not yet evenly distributed. Some students have demonstrated good vocabulary skills, as seen from their high scores above 80. However, some other students still obtained low scores, especially in the 50–60 range, which indicates difficulties in understanding and using vocabulary appropriately.

The pre-test analysis also showed that some students still had difficulty distinguishing verb forms and using vocabulary in sentences appropriate to the context. This was evident in the errors they made on questions requiring the use of vocabulary in the Present Continuous Tense. This finding aligns with initial observations, which indicated that students tended to have limited vocabulary understanding and were unable to use it consistently in sentences.

Thus, the pre-test results indicated that students' initial vocabulary mastery skills still needed improvement. This pre-test data served as the basis for planning learning activities in Cycle I, which involved implementing a flipped classroom model with Quizizz to help students understand vocabulary more deeply and actively use it in learning.

### *Cycle I Results*

The implementation of flipped classroom learning with the aid of Quizizz in Cycle I demonstrated initial improvements in students' vocabulary mastery. Prior to the implementation, most students experienced difficulty understanding word meanings, using correct tenses, and constructing sentences related to daily activities. After Cycle I, students began to demonstrate a better understanding of vocabulary, particularly in recognizing word meanings and verb tenses.

The post test, based on the results of post-test I, the total score was 2,124 with an average score (mean) of 73.28. The median score obtained by students was 73, while the most frequently occurring score (mode) was also 73. The highest score in post-test I was 93, while the lowest score was 50. These results indicate an improvement in student ability compared to the previous pre-test results.

Compared to the pre-test results, the average student score increased from 71.00 to 73.28 in post-test I. This improvement indicates that the implementation of the actions in Cycle I had a positive impact on students' vocabulary mastery, although the increase was not yet significant. Some students showed significant improvement in their scores, particularly those previously in the medium and high categories.

However, the results of post-test I also indicated that students' vocabulary mastery was not evenly distributed. Several students still obtained low scores, particularly in the 50–60 range. This indicates that some students still experience difficulties in using vocabulary appropriately, especially in applying verb forms and constructing sentences using the Present Continuous Tense.

In general, the results of post-test I showed that flipped classroom learning with the assistance of Quizizz was able to improve students' vocabulary mastery in the initial stages. However, these results also indicate the need for improvement and reinforcement of learning

in Cycle II, particularly by providing more exercises based on vocabulary use in sentences and more intensive guidance from the teacher.

### *Cycle I Reflection*

Based on the results of post-test I and classroom observations in Cycle I, it can be concluded that the implementation of flipped classroom learning with the aid of Quizizz showed an initial positive impact on students' vocabulary mastery. Students demonstrated improvement in recognizing word forms and understanding basic verb tenses related to daily activities. However, the reflection results indicate that several problems still hindered optimal learning outcomes.

First, some students continued to experience difficulties in vocabulary mastery, particularly in understanding word meanings, pronouncing vocabulary correctly, and using words appropriately in sentences related to the Present Continuous Tense. Although students were able to recognize word forms, their ability to apply vocabulary in meaningful sentences was still limited. This condition caused students to lack confidence when constructing sentences or participating in simple conversations.

Second, limited student focus during material delivery became a challenge in Cycle I. Some students were unable to maintain their concentration while the teacher was explaining the material. They tended to talk with their classmates or engage in other activities, which resulted in incomplete understanding of the lesson. This issue was closely related to classroom management and students' attention during the learning process.

Third, classroom observations revealed the dominance of certain students during learning activities, particularly when answering questions and participating in Quizizz exercises. While students' enthusiasm toward Quizizz was generally high, only a few students were actively involved, whereas others tended to follow passively and showed lower engagement. This imbalance reduced learning opportunities for less active students.

Fourth, not all students studied the preliminary learning materials sent through the WhatsApp Group prior to classroom instruction. As a result, when recall questions were asked at the beginning of the lesson, only some students were able to respond correctly. This condition reduced the effectiveness of the flipped classroom approach, which relies on students' preparation before class.

Fifth, the learning media used in Cycle I, particularly the Canva-based materials, were not sufficiently engaging for all students. The simple and relatively static design of the materials caused some students to lose interest quickly, which negatively affected their motivation and focus during the learning process.

Based on these reflection results, improvements were required in Cycle II. The learning activities in Cycle II were designed to strengthen students' understanding of word meaning and word use through more guided practice and contextual sentence construction. Classroom management strategies were improved to increase student focus and participation. More interactive learning activities were planned to encourage equal student involvement, and the learning media were enhanced to be more engaging. In addition, clearer instructions and monitoring were applied to ensure that students studied the preliminary materials before class. These improvements were expected to produce more evenly distributed vocabulary mastery and better learning outcomes in Cycle II.



### *Cycle II Result*

Post-test II was administered at the end of Cycle II to measure students' vocabulary mastery after the implementation of improved learning actions based on the reflection of Cycle I. The post-test focused on students' understanding of word meaning, word forms, pronunciation, and the use of vocabulary in sentences related to daily activities using the Present Continuous Tense.

Based on the results of post-test II, students showed a significant improvement in vocabulary mastery. The mean score increased to 85.76, indicating a substantial improvement compared to post-test I. The median score obtained by students was 86, and the most frequently occurring score (mode) was also 86. The highest score achieved by students was 100, while the lowest score was 60. These results indicate that most students reached a high level of vocabulary mastery by the end of Cycle II.

Compared to the results of Cycle I, the improvement in Cycle II was more evenly distributed among students. Most students were able to achieve scores above 80, which shows that students not only recognized word forms but were also able to understand word meanings and apply vocabulary appropriately in sentences. This improvement reflects the effectiveness of the revised learning activities implemented in Cycle II.

The increase in students' performance can be attributed to several improvements made during Cycle II. More guided practice, interactive activities such as group work and role play, and clearer teacher feedback helped students become more confident in using vocabulary. In addition, enhanced classroom management and more engaging learning media supported students' focus and participation during the learning process.

Overall, the results of post-test II demonstrate that the implementation of flipped classroom learning with the aid of Quizizz, combined with improved instructional strategies in Cycle II, successfully enhanced students' vocabulary mastery. The findings indicate that the research objectives were achieved, as students showed significant and consistent improvement in understanding and using vocabulary in meaningful contexts.

### *Discussion*

The findings of this classroom action research indicate that the implementation of the flipped classroom learning model with the help of Quizizz effectively improved students' vocabulary mastery. This improvement is evident in the consistent increase in scores from pre-test to post-test I and post-test II, as well as changes in student learning behavior throughout the learning process.

After the implementation of learning actions in Cycle I, students' vocabulary mastery showed an initial improvement, as indicated by the increase in the mean score from the pre-test to post-test I. The use of learning videos and Quizizz helped students become more familiar with vocabulary and verb forms. This is in line with (Wang, 2019) study on gamification in vocabulary learning, which showed that tools like Quizizz provided immediate feedback and increased student motivation, which aligns with the findings of this study where Quizizz helped students become more familiar with vocabulary and verb forms. However, the improvement was not yet evenly distributed among students. Several students still showed low performance, and classroom observations revealed issues related to limited focus, unequal participation, and insufficient preparation before class. These

findings suggest that while the flipped classroom approach was effective at an initial stage, it required refinement to better accommodate students' learning needs.

The revisions implemented in Cycle II addressed the weaknesses identified in Cycle I. More guided practice, increased interaction through group work and role play, clearer teacher feedback, and improved classroom management contributed to better learning outcomes. As a result, students' vocabulary mastery improved significantly in Cycle II, with most students achieving scores above 80. Students were not only able to recognize word forms but also demonstrated improved understanding of word meanings and more accurate use of vocabulary in sentences.

The significant improvement in Cycle II supports the effectiveness of combining the flipped classroom model with Quizizz as an interactive learning tool. Quizizz provided immediate feedback and increased student engagement, while the flipped classroom approach allowed students to access learning materials before class and use classroom time for meaningful practice. This combination created a more student-centered learning environment that supported vocabulary development more effectively. This result align with (Bergmann, 2012) on flipped classrooms showed that this model allows students to access materials before class, freeing up class time for more meaningful, hands-on activities. Their findings support this study, where students who initially struggled with verb forms and sentence construction in the Present Continuous Tense experienced improvement after accessing learning videos outside of class. Furthermore, a study by Zainuddin and Halili (2016) on flipped classrooms in English language learning found that this approach increased student engagement and vocabulary mastery, consistent with the increase in average scores from pre-test to post-test I in this study. The pre-test results showed that students' initial vocabulary mastery was still limited. Although some students had achieved relatively high scores, many students experienced difficulties in understanding word meanings, using correct verb forms, and constructing sentences related to daily activities using the Present Continuous Tense. This condition indicated the need for an instructional approach that could support students' independent learning and provide more engaging practice opportunities.

Overall, the discussion highlights that continuous reflection and improvement across cycles played a crucial role in achieving the research objectives. The findings demonstrate that flipped classroom learning aided by Quizizz can be an effective strategy to improve students' vocabulary mastery, particularly when supported by appropriate classroom management, engaging learning media, and sufficient guided practice.

## CONCLUSION

Based on the research results and discussion, it can be concluded that the application of Quizizz combined with the flipped classroom model is effective in improving vocabulary mastery among eighth-grade students at SMP Negeri 3 Banjar. Improved vocabulary mastery is evident in three main aspects: understanding word meanings, correct word forms, and the ability to use vocabulary in contextually appropriate sentences. The research results showed an increase in student engagement and confidence in using English. Students became more active in learning activities and more confident in using vocabulary in various activities, such as discussions and role-plays. Thus, vocabulary learning is not only focused

on improving grades but also on a meaningful learning process. Based on these findings, flipped classroom learning using Quizizz can be recommended as an alternative vocabulary learning strategy in English lessons in junior high schools. Teachers are advised to integrate technology-based learning media creatively and in a planned manner to make learning more engaging and effective. This study still has limitations, such as the limited number of research subjects and the research context, which was only conducted in one classroom. Therefore, future research is expected to expand this research by involving a wider range of subjects, different materials, or more diverse research methods to obtain more comprehensive results.

## REFERENCES

- Assingkily, M. S. (2021). *Metode Penelitian Pendidikan: Panduan Menulis Artikel Ilmiah dan Tugas Akhir*. Yogyakarta: K-Media
- Agustin, N. T. (2022a). The effect of using the quizizz application on students' vocabulary. In *Dialectical Literature and Education Journal* (Vol. 7, Issue 2). <https://dlejpancasakti.ac.id/index.php/dlejpancasakti>
- Agustin, N. T. (2022b). THE EFFECT OF USING THE QUIZIZZ APPLICATION ON STUDENTS' VOCABULARY MASTERY. In *Dialectical Literature and Education Journal* (Vol. 7, Issue 2). <https://dlejpancasakti.ac.id/index.php/dlejpancasakti>
- Apoko, T. W., Dunggio, A. A., & Chong, S. L. (2023). The Students' Perceptions on The Use of Mobile-Assisted Language Learning Through Duolingo in Improving Vocabulary Mastery at The Tertiary Level. *English Review: Journal of English Education*, 11(1), 17–26. <https://doi.org/10.25134/erjee.v11i1.7069>
- Degirmenci, R. (2021). The Use of Quizizz in Language Learning and Teaching from the Teachers' and Students' Perspectives: A Literature Review Article Info Abstract. In *Language Education and Technology (LET Journal)* (Vol. 1, Issue 1). <http://langedutech.com>
- dewi. (2024). *The Use of Drilling Techniques Integrated with Technology to Improve Students' Vocabulary Mastery*.
- Fatwa, N., & Daulay, E. (2024). The Effectiveness of Using Quizizz as a Tool in Developing Student's Reading Comprehension. In *Jurnal Kependidikan* (Vol. 13, Issue 2). <https://jurnaldidaktika.org>
- Hariati, P. (2020). Improving Students' Vocabulary Mastery through Teaching Real Objects. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 3(2), 740–748. <https://doi.org/10.33258/birle.v3i2.905>
- Hasibuan, A., & Depalina, S. (2025). *The effect of using quizizz application as an english learning exercise in vocabulary mastery*.
- Intan Belinda. (2018). THE EFFECTIVENESS OF USING OFFLINE YOUTUBE VIDEO TOWARD STUDENTS' VOCABULARY MASTERY AT THE SEVENTH GRADE OF SMPN 14 KOTA TANGERANG.
- Jurianto, R. F. (2016). *The Use of Drilling Technique in Teaching English Vocabulary to the Seventh Grade Students of SMP Negeri 2 Tanggulangin*.



- Lacher, L. L., & Lewis, M. C. (2015a). The effectiveness of video quizzes in a flipped class. *SIGCSE 2015 - Proceedings of the 46th ACM Technical Symposium on Computer Science Education*, 224–228. <https://doi.org/10.1145/2676723.2677302>
- Lacher, L. L., & Lewis, M. C. (2015b). The effectiveness of video quizzes in a flipped class. *SIGCSE 2015 - Proceedings of the 46th ACM Technical Symposium on Computer Science Education*, 224–228. <https://doi.org/10.1145/2676723.2677302>
- Mahendrayana. (2024). *The Use of Drilling Techniques Integrated with Technology to Improve Students' Vocabulary Mastery*.
- Mulyono, N., Ihsanda, man, Nuraeni, L., & Sofwah Azizah, Z. (2023). *Drilling Technique to Improve the Young Learners' English Vocabulary Mastery*. <https://www.e-journal.unper.ac.id/index.php/ALTICS>
- Nabila, H., Muliati, A., & Talib, A. (2023). *The Effectiveness of Using Quizizz to Improve the Students' Vocabulary*.
- Niek, M. Y. W., & Abdul Aziz, A. (2022). The Use of Quizizz as an Online Teaching and Learning Assessment tool in an ESL Classroom: A Systematic Literature Review. *International Journal of Academic Research in Progressive Education and Development*, 11(1). <https://doi.org/10.6007/ijarped/v11-i1/11929>
- Pavita, M. D. A., & Nirmala, D. N. (2021). Merdeka belajar in pandemic: Using quizizz game based learning to improve students' vocabulary mastery. *Language Literacy: Journal of Linguistics, Literature, and Language Teaching*, 5(1), 221–227. <https://doi.org/10.30743/ll.v5i1.3842>
- Phetmanee, T., & Pradubayat, N. (2018a). The Application of Quizizz with Flipped Classroom Teaching Method in Large Pharmacology Class. In *Interprof. J. Health Sci* (Vol. 2023, Issue 2). <https://li05.tci-thaijo.org/index.php/IJHS>
- Phetmanee, T., & Pradubayat, N. (2018b). The Application of Quizizz with Flipped Classroom Teaching Method in Large Pharmacology Class. In *Interprof. J. Health Sci* (Vol. 2023, Issue 2). <https://li05.tci-thaijo.org/index.php/IJHS>
- Pratiwi, D. I., Fitriati, S. W., Yuliasri, I., & Waluyo, B. (2024). Flipped classroom with gamified technology and paper-based method for teaching vocabulary. *Asian-Pacific Journal of Second and Foreign Language Education*, 9(1). <https://doi.org/10.1186/s40862-023-00222-4>
- Putri, R. S., Roza, V., Reflinda, R., & Dewi, M. P. (2024). The Effectiveness of Using Quizizz Application in Learning English at Online Learning at the Eleventh Grade of SMA N 1 Padang Gelugur. *International Journal of Education, Culture, and Society*, 2(2), 129–141. <https://doi.org/10.58578/ijecs.v2i2.3151>
- Safitri, E., Sofia, B. F. D., Ningsih, B. N. S., & Savalas, L. R. T. (2023). The effect of pre-class quizzes assisted flipped classroom learning on student learning outcomes in the biochemistry course of fatty acid metabolism. *Jurnal Pijar Mipa*, 18(6), 898–903. <https://doi.org/10.29303/jpm.v18i6.5745>
- Safitri, E., Sofia, B. F. D., Ningsih, B. N. S., & Savalas, L. R. T. (2024). The effect of pre-class quizzes assisted flipped classroom learning on student learning outcomes in the biochemistry course of fatty acid metabolism. *Jurnal Pijar Mipa*, 18(6), 898–903. <https://doi.org/10.29303/jpm.v18i6.5745>

- Sinta, I., Rahayu, D., & Purnawarman, P. (2019). *The Use of Quizizz in Improving Students' Grammar Understanding through Self-Assessment*.
- Stott, A., & Neustaedter, C. (2023). *Analysis of Gamification in Education*.
- Suciati Berutul, E., & Yunita Siregar, D. (2024). *The Implementation of Quizizz Application as a Learning Media in Teaching English in Senior High School*. <https://jurnaldidaktika.org>
- Teng, M. F. (2022). Incidental L2 vocabulary learning from viewing captioned videos: Effects of learner-related factors. *System*, 105. <https://doi.org/10.1016/j.system.2022.102736>.