

## THE PFAR-BASED FLIPPED CLASSROOM AT ELEMENTARY SCHOOL: STUDENTS' VOCABULARY MASTERY

Adin Fauzi<sup>1</sup>, Dinda Saroh Wahdati<sup>2</sup>, Fu'ad Sholikhi<sup>3</sup>

<sup>1,2</sup>Department of Elementary School Teacher Education, Universitas Islam Balitar, Blitar, Indonesia

<sup>3</sup>Department of Sociology, Universitas Islam Balitar, Blitar, Indonesia  
[adinfauzi2693@gmail.com](mailto:adinfauzi2693@gmail.com) [dindasaroh7@gmail.com](mailto:dindasaroh7@gmail.com) [fuadsholikhi@gmail.com](mailto:fuadsholikhi@gmail.com)

### ABSTRACT

*Vocabulary mastery is essential to help students learn English. However, many elementary students struggle with having sufficient vocabulary. This classroom action research aims to improve elementary students' vocabulary mastery through the PFAR-based flipped classroom. PFAR, which stands for Plan, Flip, Assess, and Reflect, is a recent development of flipped classroom for teaching English to young learners. The participants of this study included 15 grade VI students from an Islamic elementary school. The data were collected using tests, observations, and interviews. The findings revealed that the PFAR-based flipped classroom enhanced the students' vocabulary mastery. This improvement was made possible by active learning during vocabulary lessons. The students learned vocabulary through videos, pictures, and academic games, both online and in face-to-face classes. The results of the tests showed that the students were able to achieve the learning objectives, namely (1) understanding the meaning of certain vocabulary; (2) writing certain vocabulary with correct spelling; and (3) applying certain vocabulary in simple sentences. All the students yielded a mean score of more than 70 on five vocabulary tests. In addition, they became more active during the lessons and confirmed that the entire learning process was more attractive. All of this evidence suggests that this research was successful in improving students' vocabulary mastery.*

**Keywords:** *vocabulary, the PFAR, flipped classroom, active learning*

### INTRODUCTION

English is one of the subjects learned at elementary school. Although it is not a compulsory subject, English is strongly advised to be taught at the elementary level for three reasons. Firstly, English is needed by students to communicate across cultures and nations and to contribute to the world community. Secondly, the English curriculum needs to be more harmonized by giving English lessons at elementary school to overcome the gap in English learning achievement at the junior high school level. Thirdly, English is used as the language of instruction for the majority of learning resources. Thus, teaching English at the elementary level will improve the quality of learning (Anggraena, Felicia, Ginanto, Pratiwi, Utama, Alhapip, & Widiawati, 2022).

One of the basic components of English that needs to be introduced and taught from an early age is vocabulary. Without strong vocabulary, a person will find it extremely difficult to listen to and read English resources, as well as write and speak in English. A linguist, David Wilkins, states that “without vocabulary, nothing can be conveyed” (Thornbury, 2002, p. 13). This statement is corroborated by Dellar & Hocking (2000, as cited in Thornbury, 2002), pointing out that one's English ability will greatly develop by learning vocabulary. Referring to these propositions, it is clear that English learning at elementary school should give more time to vocabulary learning as part of the basic level.

Teaching vocabulary can be done in various ways based on the learning conditions. In the adjustment of learning after the COVID-19 pandemic, for example, the flipped classroom, which is seen as a learning solution (Kusnandar, 2021), can be applied to teach vocabulary. Several studies have shown that the flipped classroom can improve students' vocabulary mastery (Kırmızı & Kömeç, 2018; Alnuhayt, 2018; Yang, Liu, & Todd, 2019; Latipah, Saefullah, & Rahmawati, 2020; Aziz & Rohmah, 2022; Al Qasmi, Al Barwani, & Al Seyabi, 2022). The flipped classroom is a modern instructional model that involves technology. Through the flipped classroom, students can learn anytime and anywhere (Dhawan, 2020), using information and communication technology. The basic principle of the flipped classroom is to provide learning materials online before face-to-face classes begin. This activity aims to prepare students for active learning in the classroom (Lo & Hew, 2017; Reidsema, Hadgraft, & Kavanagh, 2017).

Given its advantages, the flipped classroom has the potential to help students improve their vocabulary. At an Islamic elementary school, it was discovered that students had poor vocabulary. Additionally, vocabulary learning was found to be monotonous. This is evidenced by the pretest results showing that 14 out of 15 students (93%) lacked strong vocabulary. Furthermore, the teacher and students' reflection also indicated that vocabulary learning has yet to be effective. In this case, conventional methods such as lectures and memorization are still often applied.

In addition to overcoming the problems found in vocabulary learning, this research is significant because it enriches information about various kinds of flipped

classroom practices at elementary school, specifically in English learning. Based on the literature study, modifications of the flipped classroom in vocabulary learning remain scarce. In fact, modifying a flipped classroom is helpful to cope with diverse and dynamic learning conditions as well as the uniqueness of each learning content. Moreover, Huang & Hong (2016, as cited in Lo & Hew, 2017) also emphasize that English is one of the subjects that requires more studies to examine the effects of flipped classrooms on student achievement. Taking this into consideration, the present study investigates the implementation of the PFAR-based flipped classroom developed by Fauzi & Aini (2020) to enhance students' vocabulary mastery.

The PFAR model is a recent modification of the flipped classroom for teaching English to young learners. PFAR stands for Plan, Flip, Assess, and Reflect. These terms represent learning stages in the flipped classroom. At the Plan stage, teachers prepare the flipped classroom activities attentively. This preparation includes formulating learning objectives; selecting learning materials; dividing lessons into stages; determining teaching strategies and media; and planning how to perform assessments and give feedback. After finalizing the plan, teachers begin to carry out the flipped classroom at the Flip stage. At this stage, teachers share content with students online before the face-to-face class begins; check students' initial understanding; divide students into groups; set learning stations; implement active learning; and guide students during learning. At the Assess stage, teachers conduct formative assessments during and at the end of the learning process. The assessment process covers setting assessment criteria; assessing learning; analyzing students' mistakes; and providing feedback. At the Reflect stage, teachers and students reflect on their learning to identify the successes and shortcomings of the flipped classroom. To enhance reflection, teachers can guide students in conducting peer and self-assessment (Fauzi & Aini, 2020).

To support the PFAR-based flipped classroom in vocabulary learning, this study adapted the six steps of vocabulary learning by Marzano & Sims (2013). These six steps, which represent active learning, consist of (1) providing a description, explanation, or example of certain vocabulary, complete with its visual

representation; (2) asking students to restate the description, explanation, or example of the vocabulary in their own words; (3) asking students to draw pictures or symbols that represent the vocabulary; (4) engaging students in activities that can increase their vocabulary; (5) asking students to discuss the vocabulary with their friends; and (6) involving students in games that allow them to play with the vocabulary. The combination of the PFAR-based flipped classroom with the six steps of vocabulary learning is believed to be able to improve students' vocabulary mastery at elementary school.

## **METHODS**

The present study adopted a classroom action research design. It is used to understand problems in learning and solve them in a planned, systematic, and cyclical manner (Ary, Jacobs, Sorensen, & Razavieh, 2010; Creswell, 2012). Classroom action research belongs to the category of technical action research (Carr & Kemmis, 1986, as cited in Kemmis, McTaggart, & Nixon, 2014). In technical action research, education researchers aim to improve the learning process to achieve good learning outcomes.

This research was divided into several stages. The first stage was planning learning activities to solve the problems. The second stage was implementing and observing the learning process. The third stage was reflecting on the learning process and student achievement. All these stages, which were covered in one cycle, can be replicated in the next cycle if the learning objectives have yet to be attained.

Fifteen sixth grade students from an Islamic elementary school participated in this research. The data were collected through tests, observations, and interviews. The tests vary in type, such as performance tests and written tests. These tests were administered in each learning activity. In addition to testing, the researchers also observed learning activities and interviewed several students to scrutinize the effectiveness of learning. The test results were analyzed using descriptive statistics (mean and frequency). Meanwhile, observation and interview results were analyzed by reducing the data, displaying the data, and drawing conclusions.

The researchers set the success criteria to define the accomplishment of this research. The success criteria were formulated by referring to the learning objectives, namely (1) understanding the meaning of certain vocabulary; (2) writing certain vocabulary with correct spelling; and (3) applying certain vocabulary in simple sentences. If the students meet these objectives and obtain a mean score of at least 70 on vocabulary tests, this research is said to be successful. In addition to learning outcomes, another standard for accomplishing this research was the students' involvement during the learning process.

## **RESULTS**

The present study aims to improve students' vocabulary mastery through the PFAR-based flipped classroom. The vocabulary taught falls into the Tier 1 category. This category covers basic vocabulary such as sight words, nouns, verbs, adjectives, and other basic words commonly used in texts for beginners (children).

This research began with administering a pretest. This test was crucial to obtaining more accurate information about the students' initial vocabulary mastery. In learning activities prior to this research, the teacher normally did classical oral tests to check students' vocabulary mastery in particular themes. These tests were often followed by pronunciation drilling. Although this type of test allowed the teacher to obtain information more quickly, he was unable to measure each student's ability. In fact, whenever the teacher administered a quiz, only a few students were willing to answer the questions, and the rest of the students remained silent. This condition led the researchers to conduct a written vocabulary test. This test covered two themes: directions and locations, and holidays. Both themes appear in the English student book for grade six. The pretest result showed that 14 out of 15 students (93%) had poor vocabulary mastery. Of the 22 Tier 1 words tested, the students were only able to correctly answer 8 words on average. This result indicates that the students' vocabulary mastery must be improved.

After obtaining valid information from the pretest, the researchers began to implement the PFAR model. The first stage is Plan, which is intended to prepare learning activities. The researchers initially formulated learning objectives as previously mentioned. After that, the researchers arranged the learning steps and

selected the proper instructional strategies and media. In addition, the researchers also prepared assessment activities for each learning step.

This research entered the Flip stage after the lesson was planned. The fundamental principle of this stage is to implement active learning through a variety of instructional strategies and media. The students' first activity was to watch videos. The first video depicts words associated with directions and locations. Prior to the face-to-face class, this video was shared via the student's WhatsApp group. This activity aimed to introduce the content to the students so that they had a preliminary understanding of it. As a result, the students were better prepared for the lesson the following day.

When learning took place in the classroom, the first activity was to re-watch the video that had been previously distributed. For this activity, the students were divided into 6 groups; each group consisted of 2-3 students. In turn, each group watched the video at a particular learning station. This station was placed in a different room to avoid distractions from other students. While watching, the students had to write the vocabulary and expressions that appear in the video under the researchers' supervision. In addition to taking notes, the students were also guided to understand the meaning of certain vocabulary displayed in the video. This video-watching activity was redone in the classroom since not all students were able to access the video during the online session. The students were then asked to discuss the meaning of certain vocabulary in their own groups. The researchers also drilled the students on pronouncing each word correctly.

In the next activity, the students learned vocabulary through pictures. In their own groups, the students had to complete a worksheet containing several exercises, such as matching words with pictures; drawing objects based on the instructions; and writing sentences based on the pictures. On the worksheet, there is a picture of a town area complete with several objects (buildings). Several positions in the area, however, remain empty. The students had to draw some objects based on the instructions to fill those empty positions. The instructions are written in simple sentences and contain keywords indicating the location of the objects. For instance, "The school is *opposite* the library." The students must

comprehend this instruction, particularly the mentioned location, to draw the object correctly. From this activity, the students can improve their vocabulary understanding as well as develop their imagination and creativity. In addition to drawing objects, the students must also write simple sentences about the locations of some existing objects. Prior to writing sentences, the students were required to observe the objects carefully and learn the examples of the sentences. By following these steps, the students were able to construct simple sentences with the correct structure and spelling.

The next lesson focused on enhancing the students' vocabulary understanding by playing an academic game called Pictionary. To play this game, the students were divided into some groups. Each group comprised 2-3 students. In this game, the researchers provided 8 cards. Of the 8 cards, 6 cards contained certain vocabulary, such as *next to*, *in front of*, *under*, *behind*, *opposite*, and *between*, while the remaining 2 cards had the words *lucky* and *unlucky*. These 2 cards were inserted to make the game more attractive. Each group had 2 minutes in total to play the game. To clarify, each group member had 20 seconds to draw a word. If he/she can draw the word correctly, his/her group earns points. Extra points will be awarded to any group that picks the lucky card. On the contrary, point reductions will be given to any group that gets the unlucky card. These rules made the students more enthusiastic about the game. They were also eager to draw. After playing this game, the students were able to better memorize the meaning of certain words.

After studying directions and locations, the next lesson concentrated on the holiday theme. Another video was distributed to the students as the initial learning step. This video contains words and expressions related to holiday activities. To support the video, the researchers also provided digital flashcards containing a collection of holiday-themed vocabulary. As a part of the online session, the students were assigned to write the vocabulary in the video and flashcards as well as learn their meanings. When it comes to the face-to-face class, the researchers implemented a Total Physical Response game to follow up the online session. This game was played to enhance student engagement and excitement in the learning process. To play this game, the students had to work in groups. The members of

each group took turns demonstrating certain words with body movements. When a student demonstrated a word through a particular movement, other students in the same group tried to guess the movement by saying the word. Each group had 5 minutes to play this game. They seemed content with demonstrating the words and guessing the movements. Some of them even looked very passionate about the movements. Overall, the game went well, and the majority of the students were able to understand the words.

To improve the students' knowledge of spelling, the researchers introduced a game that required the students to write words correctly. This game was also played in groups. Before participating in this game, the students had already studied the words from videos, flashcards, and books at home. Each group, consisting of 2-3 students, had 4 minutes to play the game. The game started with one of the group members writing the first word. After that, the second member wrote the next word. This word must start with the last letter of the first word. For example, if the first word is *opposite* (the last letter is *e*), the following word must start with the letter *e*, for example, *east*. The students had to write down the words that fall into two themes, namely directions and locations, and holidays. If they write words on different themes, their points will be reduced. After the game was over, each group corrected the other group's writing by focusing on spelling. In doing this activity, the students used their books and vocabulary notes as a reference. This activity resulted in the students' ability to write words with correct spelling.

At the last meeting, the researchers administered a written test to assess the students' mastery of vocabulary after participating in the whole learning activities. This written test and the previous performance tests are the manifestation of the Assess stage in the PFAR model. Table 1 shows the results of each test that was carried out from the beginning until the end of this research. These test results were complemented by the students' mean scores.



**Table 1.** The Results of Vocabulary Tests

No.	Names	Performance Test 1 (Understanding words through drawing and making sentences)	Performance Test 2 (Understanding words through drawing)	Performance Test 3 (Understanding words through movement)	Performance Test 4 (Writing words with correct spelling)	Written Test	Mean
1.	Zakira	80	80	78	90	100	85.6
2.	Amalia	80	75	80	90	90	83
3.	Ayatul	80	75	80	90	90	83
4.	Clarista	85	70	70	70	70	73
5.	Dani	88	70	70	70	75	74.6
6.	Azzam	80	70	70	70	85	75
7.	Shofi	88	70	78	80	90	81.2
8.	Irsyad	88	70	78	80	80	79.2
9.	Khoir	88	70	78	80	70	77.2
10.	Afrigh	80	75	80	80	95	82
11.	Rahmad	78	70	70	70	70	71.6
12.	Izzatul	85	70	70	70	80	75
13.	Mulyani	80	80	78	90	95	84.6
14.	Mahera	85	70	70	70	70	73
15.	Wasfha	80	80	78	80	95	82.6

As Table 1 shows, all the students (100%) obtain a mean score of more than 70 on five vocabulary tests that correspond to the learning objectives. This finding signals the success of this research and the improvement of students' vocabulary mastery. Moreover, the observation results also showed that the students were greatly engaged in every learning activity. This is possible thanks to the active game-based learning that uplifted the students' eagerness to learn. This positive finding was confirmed by the students. Mulyani, one of the sixth graders, states that the learning process was fun. She really enjoyed learning through play. Another student, Ayatul, expresses that learning in groups made her feel exhilarated. She further says that group work stimulated collaboration among the students so that the learning process became more attractive. Amalia reveals a similar opinion that active learning made the learning process more exciting. This learning excitement was evident during the implementation of academic games that encouraged competition among groups. Regarding the students' ability, they agree that their

vocabulary improved after taking all the lessons. They state that learning activities that employed videos, pictures, and games, led to a better understanding and remembrance of many words. These reflections, which fall into the Reflect stage, confirm the effectiveness of vocabulary learning through the PFAR-based flipped classroom. By looking at the improvement of the learning process and outcomes, this single-cycle study was declared successful.

## **DISCUSSION**

This study yielded some key findings. Firstly, the use of videos and pictures helped the students understand and remember the meaning of certain vocabulary. In particular, the use of videos enhanced the effectiveness of learning. This finding is in line with Clare (2017), who states that videos help students learn concepts more quickly, deeply, and memorably. In addition to videos, this study also emphasized the importance of pictures in vocabulary learning. In some learning activities, the students were required to draw objects that represent certain vocabulary. This drawing technique was found effective for boosting memory, specifically in remembering words. This finding confirms Fernandes, Wammes, & Meade's (2018) proposition that drawing technique improves recall so that it is applicable to enhancing vocabulary learning.

Secondly, game-based learning and group work stimulated a passion for learning. Learning through play that was done in groups obviously created an excellent learning condition. As suggested by Clark (2015), group work certainly characterizes the flipped classroom. Bergmann & Sams (2012), the pioneers of the flipped classroom, also state that group work has the potential to build a positive atmosphere for learning by enhancing interaction. In this study, group work that was applied in the whole vocabulary games brought excitement to learning and boosted the students' motivation. This finding corroborates Marzano & Simms's (2013) viewpoint that vocabulary games are attractive and provide opportunities for students to expand their vocabulary. The application of exciting games in this study also supports the previous study by Bavi (2018), figuring out that fun activities make vocabulary learning more effective. Marzano & Simms (2013) further point

out that academic games should be followed by an opportunity for students to return to their vocabulary notebooks. In this study, specifically in the vocabulary-writing game, the students had to reopen their vocabulary notes after the game was over to correct the other group's writing.

Thirdly, the application of the PFAR-based flipped classroom improved students' vocabulary mastery. This finding confirms the results of previous studies discovering that the flipped classroom is an effective strategy for vocabulary learning (Kırmızı & Kömeç, 2018; Alnuhayt, 2018; Yang, Liu, & Todd, 2019; Latipah, Saefullah, & Rahmawati, 2020; Aziz & Rohmah, 2022; Al Qasmi, Al Barwani, & Al Seyabi, 2022).

## CONCLUSION

The PFAR-based flipped classroom was able to improve students' vocabulary mastery. This is owing to the implementation of active learning that utilizes videos, pictures, and educational games. All the students (100%) participating in this study achieved a mean score of more than 70 on five vocabulary tests. Besides, the learning process was also more attractive. The students were well engaged in every activity through game-based learning and group work. This evidence signals a considerable improvement in the process and outcomes of vocabulary learning. The findings of this study may stimulate new approaches to teaching English at the elementary level. English teachers at elementary schools can adjust the flipped classroom to particular learning conditions. Further researchers may wish to investigate the application of the PFAR-based flipped classroom to teach grammar, listening, reading, speaking, or writing.

## REFERENCES

- Al Qasmi, A. M. B., Al Barwani, T., & Al Seyabi, F. (2022). Flipped classrooms and their effect on Omani students' vocabulary achievement and motivation towards learning English. *Journal of Education and Learning (EduLearn)*, 16(2), 152–163.  
<https://doi.org/10.11591/edulearn.v16i2.20324>

- Alnuhayt, S. S. (2018). Investigating the use of the flipped classroom method in an EFL vocabulary course. *Journal of Language Teaching and Research*, 9(2), 236-242. <http://dx.doi.org/10.17507/jltr.0902.03>
- Anggraena, Y., Felicia, N., Ginanto, D. E., Pratiwi, I., Utama, B., Alhapip, L., & Widiaswati, D. (2022). *Kurikulum untuk pemulihan pembelajaran*. Pusat Kurikulum dan Pembelajaran, Badan Standar, Kurikulum, dan Asesmen Pendidikan, Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.
- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to research in education*. Cengage Learning.
- Aziz, I. N., & Rohmah, I. S. Z. (2022). The use of flipped learning strategy in teaching English vocabulary at elementary school. *Journal of English Education and Technology*, 3(1), 30–43.
- Bavi, F. (2018). The effect of using fun activities on learning vocabulary at the elementary level. *Journal of Language Teaching and Research*, 9(3), 629-639. <https://doi.org/10.17507/jltr.0903.24>
- Bergmann, J., & Sams, A. (2012). *Flip your classroom*. International Society for Technology in Education.
- Clare, A. (2017). The power of video. In K. Donaghi, & D. Xerri (Eds.), *The Image in English Language Teaching* (pp. 33-42). ELT Council.
- Clark, K. R. 2015. The effects of the flipped model of instruction on student engagement and performance in the secondary mathematics classroom. *Journal of Educators Online*, 12(1), 91–115.
- Creswell, J. W. 2012. *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson Education.
- Dhawan, S. (2020). Online learning: a panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>
- Fauzi, A., & Aini, M. R. (2020). *An extended flipped classroom: The PFAR model*. Insan Cendekia Mandiri.
- Fernandes, M. A., Wammes, J. D., & Meade, M. E. (2018). The surprisingly powerful influence of drawing on memory. *Current Directions in Psychological Science*, 27(5), 302–308. <https://doi.org/10.1177/0963721418755385>
- Kemmis, S., McTaggart, R., & Nixon, R. (2014). *The action research planner: Doing critical participatory action research*. Springer Science + Business Media.
- Kırmızı, Ö., & Kömeç, F. (2019). The impact of the flipped classroom on receptive and productive vocabulary learning. *Journal of Language and Linguistic Studies*, 15(2), 437-449.
- Kusnandar. (2021, June 24). *Flipped classroom sebagai solusi pembelajaran tatap muka bergilir pasca pandemi*. Pusat Data dan Teknologi Informasi. <https://pusdatin.kemdikbud.go.id/flipped-classroom-sebagai-solusi-pembelajaran-tatap-muka-bergilir-pasca-pandemi/>
- Latipah, I., Saefullah, H., & Rahmawati, M. (2020). Students' behavioral, emotional, and cognitive engagement in learning vocabulary

- through flipped classroom. *English Ideas: Journal of English Language Education*, 1(1), 93-100.
- Lo, C. K., & Hew, K. F. (2017). A critical review of flipped classroom challenges in K-12 education: possible solutions and recommendations for future research. *Research and Practice in Technology Enhanced Learning*, 12(1). <https://doi.org/10.1186/s41039-016-0044-2>
- Marzano, R. J., & Simms, J. A. (2013). *Vocabulary for the common core*. Marzano
- Reidsema, C., Hadgraft, R., & Kavanagh, L. (2017). Introduction to the flipped classroom. In C. Reidsema, L. Kavanagh, R. Hadgraft, & N. Smith (Eds.), *The Flipped Classroom: Practice and Practices in Higher Education* (pp. 3-14). Springer.
- Thornbury, S. (2002). *How to teach vocabulary*. Pearson Education Limited.
- Yang, S. C., Liu, Y. T., & Todd, A. G. (2019). Effects of flipped classroom on high- and low-achievers' English vocabulary learning. *Journal of Asia TEFL*, 16(4), 1251–1267. <https://doi.org/10.18823/asiatefl.2019.16.4.12.1251>

***How to Cite (APA style):***

Fauzi,A.,Wahdati,D,S & Sholikhi.F. (2022,November). The PFAR-Based Flipped Classroom at Elementary School: Students' Vocabulary Mastery. *Exposure: Jurnal Pendidikan Bahasa Inggris*, 11(2), 318-330. <https://journal.unismuh.ac.id/index.php/exposure/article/view/6945>