

USING FLASHCARDS TO IMPROVE THE VOCABULARY MASTERY OF XI GRADERS AT AN INDONESIAN HIGH SCHOOL

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Abstract

Vocabulary becomes one of the most essential aspects for learning English. However, since English was a foreign language in Indonesia, students had a lack of vocabulary which made it difficult for them to learn English well. Teachers needed to help the students in mastering their vocabulary by using interesting media. Therefore, this study aimed to investigate the use of flashcards as a learning media to improve students' vocabulary mastery of XI Science 3 at an Indonesian High School. The participants of this study were thirty-two students from XI Science 3 at an Indonesian High School. Classroom Action Research was employed with 2 cycles. The data was collected using the pretest and posttest, and the questionnaires. The results showed that implementing flashcards in the learning process enhanced students' vocabulary mastery. It could be proven based on the average of students' scores which were 75.62 in the pretest, 94.68 in the posttest of cycle 1, and 98.12 in the posttest of cycle 2. Another thing, the results indicated that using flashcards gave many advantages for the students. By using flashcards, it was easy for students to remember the words, understand the meaning of the words, understand the synonyms and definitions of the words, and enhance new vocabulary. Moreover, flashcards increased students' motivation to learn vocabulary. From the results, it could be concluded that applying flashcards could improve students' vocabulary mastery.

Keywords: *Classroom Action Research, Vocabulary, Flashcards*

INTRODUCTION

Language is a crucial aspect of human life. They can use the language to communicate, express feelings, and ideas with others. Many languages can be found in the world. One of them is English. Since English acts as an international language in the world, people need to master it to communicate with someone from the same country or even a different country. However, many

countries do not use English as their first or second language, including Indonesia. English has become a foreign language in Indonesia where it is not used as a medium of communication for daily life, including for educational purposes.

Indeed, English is not used as the language of instruction in the field of education. It makes the students lack vocabulary so that they cannot express their ideas and needs. In today's Indonesian curriculum, English is a compulsory subject that must be learned by students in upper secondary school. In learning English, four skills should be mastered which are listening, reading, speaking, and writing. It is hard for Indonesian students to master one of them without first mastering the other. Hence, vocabulary becomes one of the most important aspects that should be taught in the classroom. According to Amiruddin and Razaq (2022), since vocabulary is connected to all aspects of language learning and influences all four language skills, teaching vocabulary is an essential part of teaching English.

Based on the researchers' observation in the teaching practicum at an Indonesian High School, the researchers found that students in grade XI Science 3 had difficulties in English. They did not understand well when the teacher used English to explain the material and give instructions. For example, when the teacher asked students to watch a video explanation and asked some questions about the video using English, they tended to keep silent and did not participate actively in answering the questions. Another example was when the teacher asked students to do both individual and group work and instructed the assignments using English. To check students' understanding of the assignments, the teacher asked the students to re-explain the instruction given. Instead of explaining the assignments, the students asked questions to the teacher about the assignments. Then, in group work, the researchers also walked around the classroom to check students' understanding of the assignments. The researchers found that some groups did not understand what they had to do and had difficulty doing the assignments. Therefore, the researchers decided to do a class observation and an interview with the English teacher. The researchers found that the students had lack of vocabulary mastery. Since vocabulary played a significant role in influencing students' overall language proficiency, this made it difficult for them to understand well when the teacher explained the materials and instructed the assignments using English. Some of the students did not understand the meaning of words. They also had difficulties in spelling the words, arranging the words into a sentence, understanding the synonym, and definition of the words.

Therefore, as educators, the researchers tried to find the best way to teach vocabulary. The researchers explored innovative and effective learning methods. One such method that had gained significant attention was the use of flashcards as a learning tool. It could be proven by Marpaung and Zainuddin (2012) who stated that students' vocabulary achievement had been successfully enhanced by using flashcards. Flashcards were simple yet versatile tools that provide learners with a visual representation of words phrases or pictures on one side and their corresponding meanings or definitions on the other. The repetitive and interactive of flashcards learning motivated the students actively in the vocabulary acquisition process. By using flashcard, students were exposed to the targeted vocabulary so that they could reinforce their understanding of the words.

A previous study had been carried out by Maghfiroh (2020). It investigated the use of flashcards

as media to improve students' vocabulary mastery at tenth grade senior high school. The participants were 30 students from X Social 1 and 30 students from X Science 1 at MA Miftahul Ulum Pendem. The finding showed that in the learning process the use of flashcards was very suitable to be applied. Flashcards could be used for the media in the teaching and learning process especially vocabulary mastery. The calculation of the checklist questionnaire showed that the average score of both material and media experts was 80.82 with the criteria very worthwhile. It meant that flashcards became one of the media that was valid and no revision was needed. Therefore, enhancing students' vocabulary mastery at tenth-grade senior high school was effective for teaching vocabulary. The effectiveness of the use of flashcards could be proven based on the result of the posttest done by the students. The post-test showed that the average of the control class without flashcards was 67,60 %, and the average of the control class with flashcards was 78,83%. So, it could be concluded that developing flashcards media to improve the students' vocabulary mastery was effective, valid, and worthwhile.

In this study, the researchers wanted to find out on how the use of flashcards as a learning medium enhance students' vocabulary mastery of XI Science 3 at an Indonesian High School. This study is expected to enhance students' vocabulary mastery by using flashcards and to help the educators utilize flashcards as learning media for students' vocabulary learning.

Vocabulary Mastery

Vocabulary becomes one of the most essential aspects of learning English. Students who learn English without mastering vocabulary will have a big problem in learning. It will be hard for them to convey their ideas and to explain what they need. The students need to master vocabulary to learn English successfully. According to Wulanjani (2016), in language acquisition, teaching vocabulary plays an essential role because the vocabulary mastery will be helpful for students in mastering all the language skills which are speaking, listening, writing, and reading. Students' vocabulary mastery makes it easier for them to improve the four skills in English. In listening, students' understanding of teachers' explanations, classroom discussions, and native speech increases when they have a rich vocabulary. Then, students' vocabulary mastery also affects how well they choose the vocabulary to talk with others. Then, students' vocabulary mastery also affects their skills in reading in which they can understand and comprehend texts. Lastly, vocabulary also plays an important role in writing. The students' vocabulary mastery affects how well they produce their thoughts and ideas to be put into writing. In short, vocabulary plays an essential role for students to increase their skills in English.

Flashcards

Flashcards is one of the learning media that can be used in the learning process. Flashcards is a cardboard that consists of a word, a sentence, or a picture on it. Flashcards will be useful for both the teachers and students. For the teachers, flashcards can be interesting media that they can use when teaching in the classroom. Then, for students, the Flashcards can help them to increase their vocabulary mastery. As stated by Hamer and Rahimajaya (2016), flashcard can be used as an excellent media because of the researchers' view that there are many students interested in flashcard. Also, by using flashcards, students' imagination can be stimulated to develop their ideas and new vocabulary can be learned and found. Therefore, it can be said flashcards is one of the effective media that teachers can use when teaching in the classroom, especially teaching vocabulary. There are some benefits of teaching vocabulary using flash-

cards for students. First, students can help each other to learn the language. Flashcards can be created to improve English mastery while learning a new language can be helped by others. The key of utilizing flashcards is to look at the word or definition on one side, and check to look at the answers written on the others (Wright, 1990). Second, flashcards can be useful to help the students in memorizing English words. According to Hamer and Rahimajaya (2016), flashcard can make it easier for the teachers to teach the material to the students, and make it easier for the students to understand and memorize the material because flashcard is an attractive media and/or technique. Lastly, flashcards can be fun, enjoyable, creative and colorful way of teaching students. By using flashcards, students tend to be interested and motivated in joining the learning process. Therefore, it can be said that creating students' interest and motivation in learning English vocabulary is the most essential thing for the teachers (Hamer & Rahimajaya, 2016).

METHODS

The research was held at an Indonesian High School, Sleman, Yogyakarta. The participants of this study were 32 students of XI Science 3 at an Indonesian High School. Three researchers were involved in this study. The researchers used Classroom Action Research (CAR) as the type of this research. Classroom Action Research was research that was done in the classroom, and simply attempted to examine what actually happened inside the classroom (Allwright & Bailey, 1991). In this Classroom Action Research, the researchers tried to discover a problem in the classroom and how the researchers found the best solution to overcome the problem. As stated in Cohen (1993), by doing Classroom Action Research, teachers could inject additional or innovatory approaches to teaching and learning into an ongoing system which normally inhibited innovation and change. The Classroom Action Research was expected to improve teachers' skills and students' skills in the English teaching and learning process. The Classroom Action Research was done through three cycles that were designed into four steps. Those four steps were planning, implementing, observing, and reflection. Each step should be carried out sequentially.

The procedure of the action research was explained as follows. First, the researchers gained the data by doing observations in the classroom, documenting the teaching and learning process, and interviewing the English teachers. In doing the observations, the researchers needed two meetings with students in the classroom. The researchers made observations about student characteristics, student motivation, and students' difficulties in learning English. After doing the observations in the classroom, the researchers conducted interview with English teachers. The interview was very useful to add a deeper understanding of the problems faced by students. The researchers also obtained the data by giving a pre-test to the students before implementing the learning intervention. The researchers made a pre-test in the form of multiple choice consisting of 20 questions. The twenty questions were related to the material taught which was song. By doing that way, the researchers found out the problem that students faced in the classroom. The problem was about the lack of students' vocabulary mastery.

Second, the researchers tried to plan some actions related to the problem which was about the lack of students' vocabulary mastery. The problem was known after doing observation in the classroom, documenting the teaching and learning process, interviewing the English teacher, and knowing the result of students' pretest. After that, the researchers discussed the solution with the English teacher and found flashcards as an appropriate solution to improve students'

vocabulary mastery. Another thing, the researchers prepared the teaching media and lesson plan based on the curriculum 2013 that had been revised in 2018.

Third, after preparing the teaching media and the lesson plan, the researchers applied the plan. In this study, the researchers implemented flashcards to improve students' vocabulary. The researchers implemented flashcards at the English meeting twice. Then, the collaborator helped the researchers in taking a picture and recording the teaching and learning process. Another thing, the researchers also discussed with the collaborator about the teaching and learning process that had been done. All of the actions above were useful for the researchers to understand whether flashcards improved students' vocabulary mastery or not.

Fourth, the researchers gave a pre-test before implementing the learning intervention, and followed by giving post-test after implementing the learning intervention. The post-test questions were the same as the pre-test questions that had been given before which was multiple choice consisting of 20 questions. The students' pre-test and post-test score showed their vocabulary growth and their success in improving their vocabulary mastery by using flashcards. Another thing, the data was also gathered through a questionnaire to gain insights into students' perceptions and experiences in using flashcards. The questionnaire consisted of nine statements relating to student motivation and the benefits of flashcards on student vocabulary. There were four answer choices, which were strongly disagree, disagree, agree, and strongly agree. Students had to choose one answer based on how they felt and gained after learning with flashcards. In addition, students had to answer one question whether they were happy/excited/motivated to learn new vocabulary in English using Flash Cards and wrote down the reason in the column provided.

Last, after gaining the results of the scores from the pre-test and post-test, the results of observations, and the results of the questionnaire, it turned out that using flashcards improved students' vocabulary mastery. Therefore, the researchers added one more cycle as confirmation. The results of the additional cycle showed satisfactory results and showed that flashcards indeed enhanced students' vocabulary mastery.

The criteria for success in this research was the improvement of the students' vocabulary mastery. This was proven based on the increase of students' pretest scores before implementing the learning intervention to the students' post test scores after implementing the learning intervention within the classroom. Then, since the minimum criteria of mastery learning (KKM) score of the English subject in the school was 75, the students' improvement of the vocabulary mastery could be considered successful if they could get a score of 75 or above. It was expected that 70% of the total number of students could achieve the minimum criteria of mastery learning (KKM) score.

FINDINGS AND DISCUSSION

After analyzing the research results from the observation, interview, questionnaire, documentation, and tests (pre-test and post-test), the researchers found out several findings that could answer the research question mentioned in the introduction. The researchers divided the explanation into three points which were the improvement of the students' vocabulary mastery, the use of flashcards for students' vocabulary, and the improvement of the students' motivation.

Improvement of the students' vocabulary mastery

First, from the results of the pre-test and post-test in cycle 1 and cycle 2, it showed that using flashcards improved students' vocabulary mastery. It could be proven based on the increase of the average of the students' vocabulary score. The students' scores of the pre-test and post-test were summarized in Table 1.

Table 1. The Students' Scores of the Pre-test and Post-test

NO	NAME	KINDS OF TEST		
		PRE-TEST	POST-TEST (CYCLE 1)	POST-TEST (CYCLE 2)
1	Student 1	75	100	100
2	Student 2	80	95	95
3	Student 3	85	100	100
4	Student 4	65	95	100
5	Student 5	75	90	95
6	Student 6	60	70	90
7	Student 7	65	95	95
8	Student 8	90	100	100
9	Student 9	80	95	100
10	Student 10	60	90	100
11	Student 11	80	95	100
12	Student 12	65	85	95
13	Student 13	80	95	95
14	Student 14	85	100	100
15	Student 15	90	100	100
16	Student 16	80	100	100
17	Student 17	80	95	100
18	Student 18	70	95	100
19	Student 19	85	100	100
20	Student 20	75	100	100
21	Student 21	65	90	100
22	Student 22	65	95	100
23	Student 23	70	100	100
24	Student 24	70	90	95
25	Student 25	65	85	95
26	Student 26	75	95	100
27	Student 27	90	90	95
28	Student 28	85	100	100
29	Student 29	65	90	90
30	Student 30	90	100	100
31	Student 31	70	100	100
32	Student 32	85	100	100

NO	NAME	KINDS OF TEST		
		PRE-TEST	POST-TEST (CYCLE 1)	POST-TEST (CYCLE 2)
	TOTAL SCORE	2420	3030	3140
	AVERAGE	75.62	94.68	98.12
	INCREASING OF THE STUDENTS' SCORE		19.06	3.43

Table 1 shows that the students' average of the pre-test was 75.62. The students did the pre-test before implementing the flashcards and it turned out that the results were not satisfactory. Thus, this could be said that students had lack of vocabulary. Because of the lack of students' vocabulary, the researchers prepared an interesting learning media which was flashcards to help the students in facing the difficulty.

Therefore, in cycle 1, the researchers implemented the flashcards as a solution with the topic was song. In implementing the flashcards, the students were divided into nine groups, each group consisted of four students. Then, the students were given twenty random cards. Those cards consisted of ten cards that contained the pictures and the words below the pictures that indicated the meaning of the pictures and ten cards that contained the synonym of the words. The words on the flashcards were related to the song chosen. The title of the song was Who Says. First of all, the students were asked to match the cards that contained the pictures and words with the cards that contained the synonym of the words. After matching the flashcards, each group was asked to help each other to understand the words. For example, in group 1, two students played the role as questioners and two students played the role as answerers. Two questioners were in charge of holding a card and showing a card containing a picture and a word to the answerer. The questioners saw a picture on the other side that contained synonyms of the word. Next, the questioners asked a questions about the synonym of the word and the answerer was responsible to answer it. When the answerer did not know the answer, they could guess the synonym by seeing the pictures. Based on the study from Nurhaliza and Sari (2023), it made it easier for students to illustrate and remember vocabulary when the teachers provided a picture in the flashcards. After finishing up to ten cards, the students swapped roles. After doing the activities, the students were asked to do posttest individually. The result of the posttest in Table 1 showed the increase of the students' score which was 19.06 and the increase of students' average from 75.62 to 94.68. This proved that after applying the flashcards in teaching vocabulary, the students' vocabulary mastery improved. It meant that using flashcards was a solution to help the students in enhancing their vocabulary mastery.

Then, the researchers added one more cycle as a confirmation to prove that indeed using flashcards could help the students in increasing their vocabulary mastery. The activities were the same as in Cycle 1. The students were asked to match twenty random cards in group. The difference was the students were asked to match the cards that contained the pictures and words with the cards that contained the definition of the words. Because the definition was in the form of a phrase or sentence, students were asked to understand the meaning first. Next, the students did the same activities in cycle 1. After finishing the activities, the students were asked to do posttest. Based on the result of posttest in cycle 2, the increase of the students' score was 3.43 with the average was 98.12. This showed that the use of flashcards in teaching had been successful in helping students' improved their vocabulary mastery. In line with that, Maghfiroh

(2020), in her research stated that it was effective, valid, and worth in developing flashcards media to improve the students' vocabulary mastery.

The use of flashcards for students' vocabulary

Based on the results of the questionnaire given to the students, it showed that using flashcards gave many benefits for students. The students had positive responses toward the use of flashcards. The students' responses were summarized in Table 2.

Table 2. Students' Response to the Use of Flashcards

PART A					
The Use of Flashcards					
No	Assessed Aspects	Number of Students			
		SD	D	A	SA
1.	Flashcards make it easier to remember new vocabulary in English.			20	12
2.	Flashcards make it easier to understand the meaning of new vocabulary in English.			18	14
3.	Flashcards made it easier to understand synonyms of the new vocabulary discovered.			21	11
4.	Flashcards made it easier to understand the definitions of the new vocabulary discovered.			22	10
5.	Flashcards improved the new vocabulary in English.			16	16

Explanation

- SD : Strongly Disagree
- D : Disagree
- A : Agree
- SA : Strongly Agree

Table 2 shows the students' responses toward the questionnaire for part A. There were 32 students who filled out the questionnaire that consisted of five statements. Those 32 students showed great responses toward the use of flashcards. In the first statement, 12 of 32 students strongly agreed and 20 of 32 students agreed that flashcards made it easier for them to remember new vocabulary in English. Then, flashcards helped the students in learning vocabulary. It could be seen based on the result from the second statement which was 14 of 32 students strongly agreed and 18 of 32 students agreed that flashcards could helped them in learning vocabulary. Next, the third statement showed that 11 of 32 students strongly agreed and 21 of 32 students agreed that flashcards made it easier for them to understand the synonym of the new vocabulary discovered. This was because they did the activity directly where they matched the words and pictures with the synonyms. Furthermore, as seen in the fourth statement, 10 of 32 students strongly agreed and 22 of 32 students agreed that flashcards made it easier for them to understand the definitions of the new vocabulary discovered. Same as the previous activity on synonyms, this was also because the students did the activity directly in which they matched the words and the pictures with the definitions. In the last statement, 16 of 32 students strongly agreed and 16 of 32 students agreed that using flashcards enhanced their new vocabulary in English. The students understood a lot of vocabulary through the flashcards they used in the classroom. According to Rahmawati and Utami (2019), using flashcards as a learning meth-

od enhanced students' vocabulary mastery. Therefore, from the results of the questionnaire, it could be said that using flashcards was fruitful for the students. The statement was supported by Nugroho et al. (2012) who stated that applying flashcards had many benefits in the teaching-learning process.

The improvement of the students' motivation

After gaining the data results of the questionnaire, the researchers found that using flashcards could increase students' motivation. The improvement of the students' motivation could be proven based on Table 3.

Table 3. The Improvement of Students' Motivation

PART B					
Students' Motivation for Using Flashcards					
No	Assessed Aspects	Number of Students			
		SD	D	A	SA
6.	I am happy in learning English.			16	16
7.	I am happy in learning English using Flashcards.			21	11
8.	I have more spirit to learn new vocabulary when I learn English using Flashcards.			22	10
9.	I am motivated to increase my new vocabulary when I learn English using Flashcards.			20	12

Explanation

SD : Strongly Disagree

D : Disagree

A : Agree

SA : Strongly Agree

Table 3 shows students' good responses to the questionnaire for part B. The students' good responses could be proven when there were no students who chose strongly disagree and disagree. It meant 32 students who filled out the questionnaire agree or even strongly agree that using flashcards could increase their motivation in learning vocabulary. In the questionnaire given, the students also gave their opinions toward their motivation in using flashcards. For the first statement, 16 of 32 students strongly agreed and 16 of 32 students agreed that they were happy in learning English. Furthermore, in the second statement, 11 of 32 students strongly agreed and 21 of 32 students agreed if they were pleased in learning English using flashcards. It was because flashcards provided a picture that facilitated the students to understand well. Another thing, using flashcards could reduce students' boredom in the classroom that made them motivated to follow the learning process to the end. Next, the students were enthusiastic to learn new vocabulary using flashcards. It was supported by the results of the third statement in which 10 of 32 students strongly agreed and 22 of 32 students agreed that learning English by using flashcards could give more spirit for students to learn new vocabulary. Based on the students' opinion, they were enthusiastic because the flashcards display was attractive and like playing a game. The students did not feel burdened when learning in the classroom. It was because using flashcards was like playing a game that could reduce students' tension when learning. Moreover, in the last statement, 12 of 32 students strongly agreed and 20 of 32 students agreed that

they were motivated to increase their new vocabulary when learning English using flashcards. The reason was the learning process became not monotonous and more fun. They felt that they not only learned about the material, but they could learn while doing interesting activities. Also, using flashcards in learning vocabulary was a new experience for them. This made them felt pleased and interested in learning vocabulary because this was the first time for them to learn vocabulary using flashcards. In line with that, Nugroho et al. (2012), in their research, said that in motivating and stimulating students, flashcards had a good strength. The most important thing for the teachers was producing students' interest and motivation in learning English vocabulary (Hamer & Rahimajaya, 2016).

CONCLUSION

The objective of this study was to investigate the use of flashcards to improve students' vocabulary mastery. Classroom Action Research (CAR) was used to gain the data. This study proved that the use of flashcards as a learning medium enhanced students' vocabulary mastery of XI Science 3 at an Indonesian High School. The findings showed that using flashcards as learning media had been fruitful to help the students in improving their vocabulary mastery. It could be proven based on the increase of students' pre-test score to students' post-test score in cycle 1 and cycle 2. Before implementing the flashcards, students' average of the pre-test was 75.62. Then, it turned out that after implementing the flashcards, students' average of post-test 1 was 94.68 and post-test 2 was 98.12.

Next, the results also showed that there were many advantages that students gain when the researchers implemented flashcards in teaching vocabulary. First, flashcards helped the students in remembering the words. Not only remembering the words, but flashcards helped the students in understanding the meaning easily. Then, applying flashcards was very helpful for students to understand the synonyms and definitions of the new vocabulary well. They could practice directly in matching the words and pictures with the correct synonyms and definitions. Lastly, implementing flashcards was useful to enhance students' vocabulary mastery.

Another thing, flashcards increased students' interest and motivation in learning vocabulary. Students were enthusiastic in learning vocabulary by using flashcards because of some reasons. First, flashcards provided pictures that helped the students in understanding the words. Second, flashcards could reduce students' boredom in the learning process. Third, applying flashcards was interesting for students because the way to learn was interesting and fun like playing a game. This could reduce students' tension when learning English in the classroom. Fourth, the learning process became not monotonous and more fun when applying flashcards in learning vocabulary. The students not only learned the material, but they also did fun activities. Furthermore, using flashcards was a new experience for the students in learning vocabulary. This made them felt happy and interested in joining the learning process. From these results, it could be concluded that using flashcards was a solution to improve students' vocabulary mastery and students' motivation. Moreover, it was also beneficial for students in learning vocabulary.

The finding of this study had valuable insight for the students of grade XI Science 3 at an Indonesian High School where they understood that flashcards was one of the effective tools that could help them in improving their vocabulary. Besides, this research informed the educators about the strategies for incorporating flashcards into their instructional practices. It is expected

that the research shed light on the potential benefits and limitations of flashcards. It is also expected to offer practical recommendations to the educators for maximizing the use of flashcard on students' vocabulary mastery.

Moreover, this study had a limitation in a data collection instrument in which the researchers only gained the data through the students' pre-test vs post-test score and a questionnaire. Therefore, the researchers suggest further researchers to conduct interview to obtain more detailed information from the students.

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