Using word cross game to impprove students' vocabulary learning at SMK Muhammadiyah 1 Yogyakarta

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ABSTRACT

This research was conducted at SMK Muhammadiyah 1 Yogyakarta. Based on the experience during the teaching practicum, it was identified that students still got problem with their vocabulary. It caused them afraid to speak English and feeling embarrassed if the word or sentence they conveyed was wrong. They also have little effort to read or look up the dictionary to know the new words. In addition, students easily got bored when learning in a conventional way. There is a problem in learning vocabulary. Based on those problems, classroom action research was conducted with two objectives: to describe the increase of students' interest and vocabulary mastery taught using the word cross game. The subject of the research was a class consisting of 21 students. To collect the data, observation, test, and interview were done. Mixed methods were used to analyzed the data. The research was conducted in two cycles. Each cycle followed the steps of planning, acting, observing, and reflecting. The research findings revealed that the students' interest in learning increased. They stated that learning using cross word games is fun and exciting. The other finding revealed the increase in vocabulary mastery. It was shown by the increase in score from 54.6 in post test of cycle one to 79.14 in the post test of cycle 2. Therefore, it can be concluded that the use of word cross game improved the students' vocabulary learning.

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1. Introduction

The vocabulary learning of students at SMK Muhammadiyah 1 still faces some problems. Students were afraid to speak English, also feeling embarrassed to make wrong sentences. In addition, they also rarely do the reading or look up words in the dictionary. Students also feel bored with traditional way of learning. This condition becomes concern for researches to help improve their vocabulary learning.

There are four skills that are integrated in teaching English, namely speaking skills, reading skills, listening skills, and writing skills. These four skills are very important to master in learning English. In addition to these four skills, we should first understand several other sub-skills such as vocabulary, grammar, and pronunciation. The mastery of vocabulary supports the mastery of the four language skills.

According to Susanto, Halim, & Nuwrun (2019) vocabulary is as important as the four main skills. Therefore, mastering vocabulary is very important in learning English. Students who have a

stock of vocabulary, especially before they study, will make it easier for them to understand English easily (Goundar, 2019; Bai, 2018). Hatch and Brown (1995) stated, "Vocabulary is the foundation for developing language which acts as the basis for communication". Meanwhile, according to Harmer (2001), a student who is just learning grammar without learning vocabulary will find it difficult to convey what he wants to say. However, a student who is just learning vocabulary or just reading a text or opening a dictionary will be able to easily say something. In addition, according to Edwards (2006) students who lack of vocabulary mastery will find it difficult to read, they do not understand many words, read slowly, and repeatedly look for words in the dictionary.

What does knowing a word mean? Thornbury stated that knowing a word in the basic level involves knowing its forms and its meaning (2002). Vocabulary mastery is then, knowing the forms of the words and knowing their meaning. The forms refer to the part of speech and also the structure of the word (Sari, & Aminatun, 2021; Zamani et al., 2021). Understanding meaning and knowing the form of word will lead students to use the words in context (Huang et.al., 2022; Zhang, 2015).

Besides mastering language knowledge, other factors such as interest may influence the learning achievement. Students who are not interested in learning something will not pay attention or ignore the teaching activity. They will get bored soon and do not comprehend or master what they learn. On the other hand, students who have interest when learning something will get ease in the process of understanding it. Interest in education is mentioned as learners' inclination towards a specific subject that they can connect easily without any problems.(Thonburry, 2002). Students who are interested in an academic topic will be more diligent to join class, pay attention, become engaged, process the information effectively and finally perform well (Harackiewicz et.al., 2016; Wang et al., 2016; Maruf et al., 2022; Polis, 2018). This is not only because this state of being interested is typically charged with positive feelings and engagement but also because interest can energize higher levels of performance (Harackiewicz & Knogler, 2017; Molaee et.al., 2016). Many ways can be done to improve the students' interest in learning (Tajeri Moghadam et.al., 2020; Tus et.al., 2020).

Cross word game is a kind of game that can be used to learn vocabulary. According to Edwards (2006), it can help students to improve vocabulary mastery. In addition, it gives some advantages in the teaching and learning process (Tus, 2020; Kumar, 2015).

Researches about vocabulary and cross word have been conducted by many researches. Tegu and Hadiwijaya (2022) conducted research to know the effectiveness of crossword puzzle game towards the students' vocabulary achievement. The findings showed that using crossword puzzle is effective to improve students' achievement in vocabulary learning. The finding showed there was improvement in vocabulary mastery of the students. Another research on vocabulary was done by Karakedo, Saukah, and Muhtar (2020). It was classroom action research using crossword puzzle in the action. The finding shows that crossword puzzle games succeeded in improving students' vocabulary. The next research was about the use of crossword puzzle to improve vocabulary acquisition in English report text by Seran (2021). This is classroom action research too. The finding of the research revealed that the use of crosswords improved vocabulary acquisition. In addition, the classroom condition became more conducive, lively and effective. Meanwhile, other studies conducted also found that the use of puzzle can improve students' vocabulary mastery (Nurteteng and Nopitasasri, 2019; Melasari et.al., 2019; Sadiyah et.al., 2019).

Although many researches about puzzles and its connection to vocabulary have been conducted by researchers, this recent research was different from them. It was done to different respondent and used different model of cross word puzzle in the action step. There is also difference in the aim of the research. Since the students' problem relate to vocabulary learning, this research is aimed at describing the improvement of interest and vocabulary mastery used taught cross word games.

2. Methodology

This study used a classroom action research design that involved only one sampling class. The design comprises four steps in every cycle: planning, acting, observing, and reflecting (Kemmis & Taggart, 1988). The participant were 1st semester students consisting of 21 students (3 male and 18 female).

To collect the data, observation, interviews, and test were done. Pre-test was conducted to determine students' vocabulary mastery before learning began and the post-test was conducted to determine the students' vocabulary mastery after the learning was carried out. The test consisted of 35 items. Meanwhile, the interview was done to collect data of students' interest in learning using cross word games. There were 10 questions given to the interviewee. The data were then analyzed using qualitative and quantitative methods (King, 1991). The observation was conducted during the teaching and learning process. It was to know how crossword games were implemented in the classroom. The interview was done outside the teaching and learning process. The quantitative method was used to analyze the test score by calculating the mean score. In addition, qualitative method was used to analyze the data from observation and interview.

3. Findings and Discussion

3.1. Findings

The research findings are presented below. Research was conducted in two cycles for cycle one had not gained the targeted result.

1) The implementation of the classroom action research.

Cycle 1.

Planning

It was started by preparing lesson plan and pre-test preparation.

Acting

It consisted of 4 meetings. The first meeting was for pre-test and introduction to the material. In the second meeting material was explained and in this step the word cross games were implemented. The third meeting the researcher gave the material in the form of video. After that the students were given word cross game again to practice the vocabulary. Next, the fourth meeting students learnt vocabulary and spelling the words. At the end of meeting 4 students were given post-test.

Observing

The observation was done based on the observation checklist. It was to monitor the students' activity in the learning process. It was found that students get problem in word meaning, pronouncing and spelling words, and using the words. The use of word cross games, however, made the students more active in learning.

Reflecting

Reflection was made at the end of cycle 1. The result found the positive and negative result. The positive ones showed that the use of word cross games helped students add new vocabulary, motivate students to know the meaning of new words, and students became more active. The negative ones showed that the class became crowded, noisy, some students still got difficulty to know the meaning of words, and some students laughed at their friends when they gave wrong answers. The result of reflection was used to revise the plan that will be used in cycle 2.

At the end of cycle 1, post-test was conducted to know the students' vocabulary mastery after taught using word cross game.

Cycle 2

Planning

Based on the reflection, especially the negative result, the researcher focused on teaching the meaning of words, spelling and pronouncing the words. The meeting in cycle 2 was conducted 4 times.

Acting

In this step the video about hydroponics was played. After finished watching the video students were asked everything about the content of the video. They were very enthusiastic to answer the questions. Students then worked in groups and were asked to look for synonyms, antonyms and word meaning, then they were to work on word cross games. The groups who finished with the word cross game shared the result. The groups who made no mistakes were given prizes.

Observing

The activity in cycle 2 was more alive than cycle 1. Students were more active and not shy anymore. They were not afraid to ask questions if they did not understand. Students and teacher felt comfortable with the class situation.

Reflection

From cycle 2 a conclusion can be drawn that students' spelling of words, pronouncing words and using words became better after learning using word cross games. The vocabulary mastery also increased based on the result of the post-test given.

2) The increase in students' learning interest
Based on the interview result, students who formerly get bored in learning English became more enthusiastic when they were taught using word cross game. The following are some of their responses in answering the interviewer which were taken randomly.

Question about the use of word cross game

I: "Do you think learning to use word cross game is fun? Why?

S1: "For me, it's very fun because it can add to the spirit."

S2: "Yes, in my opinion learning to use word cross games is fun and can increase my vocabulary."

S3: "It's quite fun because learning can be more relaxed, don't think too much about it."

S4: "It's very fun, because this method is a new learning that has never been used."

S5: "It's fun miss because it makes new vocabulary easy to remember and I can memorize it."

S6: "Learning to use word cross game It's fun because the game itself is easy, it can also increase cooperation with friends, it's not too complicated to understand, the game is quite interesting, makes the mind not too stressed, which usually learns by remembering and writing which makes it boring and doesn't understand learning by learning to use word cross games makes learning English vocabulary interesting and fun to play."

Question about the students. interest

I: "Can the use of word cross games increase interest in learning vocabulary? Why?"

S1: "Yes, miss, because the lessons are more fun, it's not like the usual lessons".

S2: " Yes, miss, because it inspires me to learn."

S3: " I don't think it's a miss, because it's like it's not serious enough."

S4: " It really increases my interest because it's easier and more fun to do it."

S5: " Yes miss, can improve because it is easy to understand."

S6: " By learning to use word cross games, you can increase your asking for learning because the game itself is not too complicated, it is also fun to play."

3) The increase in students' vocabulary mastery

The increase in vocabulary mastery is presented in the following tables.

Student Score on Pre-test Cycle 1

The pre-test given by the researcher to the students aims to determine their ability in vocabulary before treatment by using a word cross game.

Table 1. Classification of pre-test score

Classification	Score	Frequency	Percentage
Excellent	86-100	0	0%
Good	71-85	0	0%
Fair	56-70	5	24%
Poor	41-55	7	33%
Very Poor	0-40	9	43%

Table 1 shows the percentage of classification of pre-test given in cycle 1. The table above shows that, in the pre-test there were no students who got very good or good classification, 5 (24%) students got moderate scores. There are 7 (33%) students who get a poor classification, and 9 (43%) students get a very poor classification. In this presentation, it can be seen that the vocabulary mastery of students in class X F accounting at SMK Muhammadiyah 1 Yogyakarta is still very low. After knowing the percentage of pre-test classification, the researcher calculated the average score and standard deviation of the pre-test. The results of the mean and standard deviation can be seen in the table below:

Table 2. Mean Value and Standard Deviation of Pre-test Cycle 1

Test	Mean Score	Standard Deviation (SD)
Pre-test	45.33	10.38

Table 2 shows the mean and standard deviation of the pre-test. The table illustrates that the mean value of the pre-test is 45.33 and the standard deviation is 10.38. It can be seen that the students' vocabulary mastery is in the very low category.

Student Score on Post-Test Cycle 1

Furthermore, after the researcher conducted a pre-test and provided understanding of the material to the students, the researcher also gave a post-test to determine the students' vocabulary mastery after being taught using word cross games.

Table 3. Classification and percentage of Post-test 1

Classification	Score	Frequency	Percentage
Excellent	86-100	0	0%
Good	71-85	2	9%
Fair	56-70	5	24%
Poor	41-55	9	43%
Very Poor	0-40	5	24%

Table 3 shows the percentage of post-test classification. The table above shows that, in the post-test, 2 (9%) students got good classification, 5 (24%) students got moderate classification. 9 (43%) students got a good classification, and 5 (24%) students got a very poor classification. After determining the percentage of post-test classification, the researcher calculated the mean score and

standard deviation of the post-test. The results of the mean and standard deviation can be seen in the table below:

Table 4. Mean Score and Standard Deviation Post-test 1

Test	Mean Score	Standard Deviation (SD)
Pre-test	53.6	10.26

Table 4 shows the mean and standard deviation of post-test 1. The table illustrates that the post-test mean score is 53.6 and the standard deviation is 10.26. It can be seen that after the post-test, students' mastery increased but not significantly so that cycle 2 is needed to make students understand vocabulary better using word cross games.

Student Score on Post-Test Cycle 2

Table 5. Classification and percentage of Post-test 2

Classification	Score	Frequency	Percentage
Excellent	86-100	2	10%
Good	71-85	19	90%
Fair	56-70	0	0%
Poor	41-55	0	0%
Very Poor	0-40	0	0%

Table 5 shows the percentage of post-test classification. The table above shows that, in the post-test, 2 (10%) students got very good classification, 19 (90%) students got good classification. After the post-test cycle 2 there was an increase in students' vocabulary mastery after given action, the increase was very significant. After determining the percentage of post-test classification, the researcher calculated the mean score and standard deviation of the post-test. The results of the mean and standard deviation can be seen in the table below:

Table 6. Mean Value and Standard Deviation of Post-test 2

Test	Mean Score	Standard Deviation (SD)
Post-test	79,14	3,24

Table 6 shows the mean and standard deviation of the post-test 2. The table illustrates that the mean value of the pre-test is 79,14 and the standard deviation is 3,24. It can be seen that the students' vocabulary mastery is in the good category.

3.2. Discussion

The use of word cross games in this research has been proven to gain success in improving the vocabulary learning that was indicated by the increase in the students' interest and the students' vocabulary mastery. The increase in students' interest was proven by students statement that learning vocabulary using word cross game is fun, improving learning spirit, fun, and making learning easy. This condition of learning in which the students learn with interest influence the students' achievement in mastering vocabulary. This is in line with statement given by Hidi and Harackiewicz (2020) that students who are interested in an academic topic will be more diligent to join class, pay attention, become engaged, process the information effectively and finally perform well. Harackiewicz and Knogler (2017) also said that not only because the state of being interested is typically charged with positive feelings and engagement but also because interest can energize higher levels of performance.

The improve of vocabulary mastery due to the use of word cross game supported Edwards (2006) statement that word cross game can help students to improve vocabulary mastery. This

findings also also similar to the previous studies conducted by Tegu and Hadiwijaya (2022), Karakedo, Saukah, and Muhtar (2020), Seran (2021), Nurteteng and Nopitasasri (2019).

4. Conclusion

The results of the study on students of class X F accounting at SMK Muhammadiyah 1 Yogyakarta showed that the use of word cross games in learning English vocabulary could increase students' interest in learning and students' vocabulary mastery. Students feel that they learnt with fun and spirit. They became engaged and active in the learning activity. Students become more understanding and easier to remember new vocabulary. This can be seen in cycle 1 with the average pre-test score of students (45.33) which states that students still poor in vocabulary mastery because many get low scores. However, when doing the post-test 1, the students got an average score 53.6 which means that there was an increase in students' vocabulary mastery, although it was not too significant. When the post-test 2 was conducted, the students got an average score of 79.14 which was categorized into good. By using the word cross game method, students became more active and not boring, students also felt that the method used made it easier for them to understand new vocabulary.

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