

IMPROVING STUDENTS' VOCABULARY BY USING WORD CROSS GAME IN SMA MUHAMMADIYAH 4 MAKASSAR

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Abstract: This study aimed to find out whether the word cross game used in the first grade at SMA Muhammadiyah 4 Makassar improves students' vocabulary. Pre-experimental research design was used by the researcher. The population consisted of SMA Muhammadiyah 4 Makassar first-graders. The sample was chosen using the total sampling method, and there were 20 samples in all. Noun's score increased from its mean pre-test (58.88) to post-test (76.33) score by 29.63%. From the mean pre-test score of 53.84 to the post-test score of 87.14, the verb score increased by 61.84%. Affective had increased (59%) from the pre-test mean score of 50.76 to the post-test mean level of 80.71. The mean score in adverb had increased (41.75%) from the pre-test (65) to the post-test (92,14). After calculating the result, it was discovered that vocabulary had improved (48.05%), with the mean score in the pre-test being 57.12 and the post-test being 84.08. The study's findings demonstrated that the word cross game helped students learn more nouns, verbs, adjectives, and adverbs. The fact that students post-test scores were greater than their pre-test scores served as evidence. The findings of this study also demonstrate the potency of the term "cross game." The fact that the t-test result (25.09) was higher than the t-table value (2.093) served as evidence. It demonstrated that there were considerable disparities and also demonstrated that H_1 was accepted whereas H_0 was rejected. It is concluded that the use of word cross game can improve students' vocabulary.

Keywords : Vocabulary, Word Cross Game

INTRODUCTION

Vocabulary is one of the most crucial elements of learning English, which ranks right up there with grammar, spelling, and pronunciation. The English curriculum stresses linguistic structure, thus students must be able to understand the tenses pattern. Students struggle greatly with the tenses pattern, which discourages them from studying English. Students who lack vocabulary find it difficult to converse in English. For language learners, vocabulary is one of the knowledge domains that is crucial to language acquisition (Cameron, 2001).

The significance of vocabulary in English lessons cannot be overstated. It will be difficult for students to articulate their ideas if they solely pay attention to grammatical study. However, a learner who just learns vocabulary, reads a text, or makes use of an open dictionary would be able to speak (Harmer, 2014;13). You will need more vocabulary if you want to improve your four English language abilities of speaking, listening, reading, and writing. Small-vocabulary students will struggle to understand the text's context, speak English, and express themselves in writing. Additionally, because they must pause to look up unfamiliar words in dictionaries, students with limited vocabulary read texts more slowly (Edwards, 2015;177).

Vocabulary mastery affects one's capacity for language use, whether in spoken or written form. To improve their listening skills, students must understand the meaning of the words, sentences, or text being said. They are therefore able to answer verbally or

inactionally since they are aware of the meaning of the speech. The ability to understand the message conveyed by the written words should also be present for those who are reading. Like speaking, writing should allow people to structure their words to convey meaning. In addition to writing down the words, they should be able to read, spell, and understand them. The growth of a learner's vocabulary is a crucial component of that learner's language development, according to studies by Harmon, Wood, & Keser (2009) and Linse (2005).

Students in senior high school still have a restricted vocabulary, particularly those at SMA Muhammadiyah 4 Makassar. They occasionally failed to comprehend what the teacher was doing. Additionally, there were many misunderstandings because it was always challenging for students to speak or chat with one another in English. It could demotivate students from wanting to study or learn English. When the teacher was lecturing to the class about the material, students weren't paying attention. In addition, students simply remain silent when the teacher discusses them in English. As a result, the majority of students only learn a limited number of words, which reduces their vocabulary. The researcher needs to devise a plan to pique students' enthusiasm in studying English. SMA Muhammadiyah 4 Makassar also sees the majority of these instances. The majority of students had problems understanding the teacher's English and having trouble recalling new words.

The majority of students at SMA Muhammadiyah 4 Makassar did not comprehend the significance of the instructor's question during the test due to a lack of vocabulary, according to data gathered during the researcher's observation. This led a few students to ask what the assignment's purpose was. Because of this, playing word cross games is a great technique for students to increase their vocabulary. Students can increase their vocabulary and learn new terms by playing a word cross game.

Teachers significantly affect their students' academic progress during the teaching and learning process. Teachers are continuously looking for exercises that will improve students' ability to learn foreign languages. Teachers need to be aware of the students' circumstances and conditions right now. Contrarily, method is crucial to the teaching-learning process. Students will be encouraged to love learning through the teacher's teaching style. In order for students to quickly learn new terminology, the instructor must employ an efficient teaching strategy. One strategy for encouraging students to value the teaching-learning process is to use games. Students will participate in activities and pick up new vocabulary. Because words are the foundation of all languages, acquiring them is crucial (Thorburry, 2002). A language cannot be learned without words because even human communication depends on words. According to Walters (2004), learning a language's vocabulary is a key component. This is true for both teachers and students.

Several games can be used to facilitate learning. Educational gaming is the practice of using games to advance learning and teaching (Houghton et al., 2013). One type of game is word cross. Thus, the researcher suggests employing a word cross game to teach vocabulary. By playing a word cross game, the student can train their brain to memorize new words. To finish the word cross game, the children shared and learnt with their peers, which helped them learn English. For controlling student activity in the classroom, there are many different word cross games available. The word cross game is useful for both teaching and learning because it keeps one's vocabulary up to date. Furthermore, expanding one's vocabulary is advantageous. Along with encouraging the use of a dictionary, it is also beneficial to aid someone with their spelling and informational abilities. In terms of teaching

and learning in the classroom, the word cross game offers enjoyable learning that can be applied to a variety of student management circumstances.

Students' vocabulary should increase as a result of playing the word cross game, the researcher and collaborator anticipate. Additionally, this move is expected to tackle problems with instructional methods, poor student motivation and trust, as well as vocabulary acquisition. The researcher is interested in finding out how far the word cross game can improve students' vocabulary at SMA Muhammadiyah 4 Makassar.

LITERATURE REVIEW

Vocabulary

a. Definition of Vocabulary

A language is built up of words, which make up the vocabulary. According to Jackson (2013:11), the terms vocabulary, lexis, and lexicon are interchangeable. That speaks to a language's whole word stock. Moreover, The essential units of language are words, according to Brown (2015:377). Moreover, words are undoubtedly vocabulary, according to Nunan (2014:130). In addition, she says that word families, word combinations, and fundamental meaning are all included in the definition of vocabulary.

Words can have subtle, even contradictory, meanings, according to Kamil and Hiebert (2014:1). She continues by pointing out the significance of comprehending these elaborate and numerous definitions of terms in light of the other words that are used in sentences and paragraphs of texts. Words in context are used. Jackson (2013) agrees with Kamil and Hiebert (2014:1). the English language's vocabulary should be viewed as a collection of terminology used in various settings. The contexts of geography, society, occupation, and future events are all present.

The term "vocabulary" refers to words and their subsets, which are significant components of language development. In a number of circumstances, it uses words to express meaning.

b. Kinds of Vocabulary

The general word group can take many different forms, according to Thornbury in Zahro' (2013). Most words are interpreted differently by different people. It is possible to classify the various meanings that we assign to words. The vocabulary used in English is divided into four categories. Nouns, adjectives, verbs, and adverbs make up the four word categories. The sections that follow will go over each of these vocabulary subcategories.

1) Noun

Mew and Seaton (2013) nouns can be divided into two groups: proper nouns and generic nouns. Examples of nouns include countable and uncountable nouns, proper nouns, collective nouns, abstract nouns, single nouns, and concrete nouns.

2) Adjective

A noun or pronoun's meaning can be changed by an adjective by defining, distinguishing, or quantifying concepts. The word that comes before a noun or pronoun and qualifies it is called an adjective. Adjectives like "smart," "thin," "simple," "fat," "heavy," "sad," "happy," etc. are examples. Additionally, they are the words that give your writing and speaking character, provide linguistic commentary, and convey

information about nouns (such as black, lovely, obedient, intelligent, modest, etc.). When employing two or more descriptors, scale, consistency, colour, provenance, and content are normally employed in that order. Consider a tiny black plastic box as an illustration. In that statement, the words "small" and "black" relate to size, colour, and material, respectively.

3) Verb

Verbs are used to explain or illustrate actions. Verbs are absolutely required since without them, a statement cannot be understood. Verbs are also described by Colman (2014) as "doing, being, and possessing words." Verbs come in a variety of forms, such as auxiliary, transitive, and intransitive.

4) Adverb

Seaton and Mew (2013) state a term that characterizes a verb, an adjective, or another adverb is what is meant by the definition of an adverb. Adverbs are words or phrases that answer the questions "when," "where," "how," and "to what extent" to modify a verb, an adjective, another adverb, or an entire sentence. The five different types of adverbs are adverbs of manner, adverbs of location and course, adverbs of time, adverbs of frequency, and adverbs of degree.

c. Teaching and learning vocabulary

The methods employed for teaching and learning will have an impact on the vocabulary growth of the students. Before beginning to teach vocabulary, the instructor will put instructional techniques to the test. A method is a set of actions that leads to a specific learning objective. Learning and teaching vocabulary must be interwoven into a language course's general structure in order to be successful, states Nation (2013:133). Consider a language course as having four strands as one way to make sure there are a range of learning opportunities. The specifics are as follows:

- 1) Reading and listening to feedback with a focus on meaning
- 2) Purposeful language study, which includes learning vocabulary, grammar, and conversational skills.
- 3) As a result of learning with a meaning-focused output, the need to produce language in speaking and writing.
- 4) Fluency, or the ability to speak, listen, read, and write with confidence and ease, is the fourth skill to develop.

These four strands will include conscious learning (input) and intentional learning (output), as well as learning and fluency production. According to Hedge (2014), textbook authors and educators are currently in a position to try to create rules and guidelines for teaching vocabulary based on the knowledge we have learned about the lexical system of the English language and vocabulary acquisition. As was already mentioned, the teacher should work to develop a unique way of teaching vocabulary.

d. The Effective Way of Teaching Vocabulary

The entire class period is not dedicated to vocabulary instruction. According to Nunan (2014:135), one of the difficulties in creating vocabulary-based course components is making sure they don't dominate other crucial course components. Brown (2015:377) offers several ideas. He provides the following suggestions for approaching vocabulary instruction in a communicative way:

- 1) Allocate specific class time to vocabulary learning.
We can get caught up in the frenzy of action in our stimulating classrooms and forget to pay attention to language as we get caught up in engaging group work and meaningful conversation. It is therefore highly advised to set aside time to learn new words.
- 2) Help students to learn vocabulary in context.
The strongest internalization of language occurs when word experiences—whether comprehension or production—take place within the context of nearby discourse.
- 3) Play down the role of bilingual dictionaries.
Helping students resist the urge to use their bilingual dictionaries excessively is a logical extension of the previous.
- 4) Encourage students to create word-meaning deciphering methods.
- 5) Engage in “unplanned” vocabulary teaching.
When a student asks about a term or when a word surfaces that you think deserves some thought, much of the time spent on vocabulary learning will be unplanned.

Word Cross Game

a. Definition of Word Cross Game

One method of educating and teaching students is the word cross game. A word cross game, according to Dhand (2014:55), is a puzzle containing rows and columns of squares that must be filled in with letters or numbers, one for each square. The definitions or synonyms of the sentences are indicated by the numbers in the squares. In response to hints, letters or words are arranged into a pattern of numbered squares.

The word cross game is a well-known puzzle where the player must finish a certain cognitively challenging task or find a specific solution, claims Moursund (2013:8). According to the aforementioned assertions, players of the word cross game fill in grids with words or letters. This game is currently one of the most well-liked teaching-learning exercises that integrates language acquisition. This game has a high degree of difficulty.

b. Types of Word Cross Game

A word cross game that is great for spoken activities was recommended by Nation (2014:45). He asks students to collaborate in pairs while giving the following directions. They are all engaged in a word game. Despite the fact that the puzzle has no suggestions, learners A and B have each filled in half of the words. They exchange requests for the missing words in their version. They must have paraphrases of the terms because they cannot utter the words aloud or demonstrate to one another how to answer the puzzles. A is another person who queries, "What is 5 down?" It will be B's responsibility to explain it, something along the lines of, "It's what you use to turn on or off the switch." Its objective is to give a general overview of how communicative word cross games might be used in the teaching and learning process.

Students can utilize phrases to help them understand words on their own. Johnson (2013:43) suggests that students look at the context of the sentence or paragraph while looking for an unknown or missing word. Cloze sentences, which are contextual sentence constructs, are also added by him. The sentence is deficient in one letter. Give a one-letter tip to readers who are very new to reading. An example would be, "At school, I sit in my _____."

The teaching-learning of vocabulary in English can be improved with the help of a variety of word cross games, including communicative word cross games, word cross games with pictures or cloze phrases, and other varieties.

c. The Benefit of Using Word Cross Game

According to Dhand, (2014:55)), word cross games aid students in their learning in the following ways:

- 1) Since the definitions or synonyms of the terms are readily available to serve as reinforcement, the term cross game strategy is a successful method for vocabulary development.
- 2) Using a dictionary or thesaurus while playing a word cross game might help students learn terms related to a subject. At the end of a unit, chapter, or lesson, they might be utilized as an exam or assessment.
- 3) Creating a word cross game and giving it to the students is easy for the teacher to do.

d. The Making Process of a Word Cross Game

Crossword puzzle creation is now possible on a large number of online portals. The creation of a word cross game that satisfies our specifications is also covered by certain websites. The making word cross game is provided by Vega-Singer (2014) as follows:

- 1) Make a decision regarding the degree of effort the teacher wants to put into the word cross game. A straightforward word cross game may only contain ten clues and answers that share one or two letters. Many "across" and "down" clues that partially or entirely overlap would be present in a word cross game that was more challenging. (The size of the problem has less of an impact on the difficulty of the puzzle than do the clues.)
- 2) Write the longest topic phrase in the center of a piece of graph paper. In the grid, arrange the remaining theme words so that their letters overlap in the appropriate places. When two "across" words are placed adjacent to one another, each location the words touch must also yield "down" words. Number the first box under each expression.
- 3) Look at the grid to see if the instructor can cram as many words as feasible while yet keeping it as compact as possible. Fill in some of the blank spaces between the main words with a few brief words that don't relate to the theme.
- 4) Outline your grid in black, then fill in any blank spaces. When you have done the puzzle, it will look like this. On a fresh sheet of graph paper, carefully copy the grid, retaining only the black numbers and gaps and omitting the wording.
- 5) Make the clues. The numbers in the problem should be divided into two lists: one for "down" clues and one for "across" clues. The theme word suggestions must be sufficiently specific in order for the receiver to comprehend them. (If the answer is "Nirvana," for example, the hint may be "Your favorite band in college.") If required, look up the meanings of the filler terms in a dictionary.
- 6) Before giving the puzzle to the intended recipient, double-check that the clues correspond to the correct numbers and that each answer has the right number of spaces.

e. Step of Word Cross Game

- 1) The teacher assigns the same crossword to each student. They each work on a puzzle individually using textual hints.
- 2) The teacher assigns four distinct assignments to each of the four groups, and she divides the students into these groups. The students will confer and assist one another in completing their crossword puzzles collectively.
- 3) The teacher writes no written clues for the crossword puzzle she sets on the board. A crossword puzzle is solved step-by-step with the class as the teacher provides oral hints. Each class of students writes the words on the board one by one after being separated into smaller groups.

METHOD

Research Design

In this study, the pre-experimental research design was used. It sought to ascertain whether student vocabularies had improved as a result of playing the word cross game.

The investigation was designed with a single group pretest-posttest. After receiving treatment (X), the students take the posttest (O2) and the pretest (O1). The effectiveness of the treatment is evaluated by comparing the results from the pretest and posttest. The design can be described as follows :

Pretest	Treatment	Posttes
O1	X	O2

(Gay, 2006:252)

Population and Sample

1. Population
 Students from SMA Muhammadiyah 4 Makassar's first grade class participated in this study. There were 20 students in the class.
2. Sample
 Only first grade students from SMA Muhammadiyah 4 in Makassar made up the sample for this study. Since there was only one class in first grade, with 20 students, the researcher employed the complete sampling technique.

Research Variables and Indicator

1. Variables
 There are two variables in this research :
 - a. Independent variable refers to the game's implementation, which divides the players into four groups and has each group present in two sessions. During the first class, the teacher instructed students to finish the first word by examining the initial letter, which was used as a clue and was placed above the word. The group that wins attempts to predict the word in the second session.
 - b. The improvement of the students' vocabularies is the dependent variable. Students are aware of the definitions of words (nouns, verbs, adjectives, and adverbs).
2. Indicator
 Noun, verb, adjective, and adverb were the four indicators used in this study.

Research Instrument

Pre-test and post-test data were collected using the research's instrumentation. However, in the post-test, the researcher was given a different assignment for the students that still used the same topic but had different content from the pre-test announcement-related tasks that involved playing word cross games to connect various types of vocabulary (nouns, verbs, adjectives, and adverbs). A 50-item pre-test contained 18 nouns, 13 verbs, 13 adjectives, and 6 adverbs, while a 50-item post-test contained 15 nouns, 14 verbs, 14 adjectives, and 7 adverbs.

Procedure of Data Collection

The procedure of data collection used the following steps :

1. Pre-test

To determine the students' vocabulary before the treatment, a pre-test was administered during the first meeting. Using a word cross game, the researcher was given an assignment for the students that involved an announcement and various types of vocabulary (noun, verb, adjective, and adverb) about 90 minutes.

2. Post-test

After treatment, a post-test was administered to see whether student vocabulary had improved. A 90-minute post-test was conducted by the researcher.

Technique of Data Analysis

The data analysis in Pre-experimental design from the test analyzed with :

1. To find out the mean score, the researcher use the formula :

$$\bar{x} = \frac{\sum x}{N}$$

\bar{x} = Mean Score

$\sum x$ = the sum of all score

N = the total number of sample

(Gay, 2006:320)

2. To find the students' improvement, the formula as follows :

$$\% = \frac{x_2 - x_1}{x_1} \times 100$$

Notes:

%: the students' improving

X1: the mean score of the pre-test

X2: the mean score of the post-test

3. To classify the students' score, there are five categories standard of evaluating as follows :

Table I the classify the students' score

No.	Score	Categories
1	90-100	Excellent
2	80-89	Very Good
3	70-79	Good
4	60-69	Fairly Good
5	50-59	Fair

Adapted from Jacobs in Saleha (2008:29)

4. Finding out differences between pre-test and posttest by using the formula:

$$t = \frac{\bar{D}}{\sqrt{\frac{\sum D^2 - (\frac{\sum D}{N})^2}{N(N-1)}}}$$

Notes:

\bar{D} = mean score

$\sum D$ = the sum of all the scores

N = the total number of students

t = test of significance

(Gay, 1981:177)

FINDINGS AND DISCUSSION

Findings

According to the results of the tests, the research concludes that using word cross games to increase students' vocabulary in the first grade at SMA Muhammadiyah 4 Makassar has improved results.

I. The Use of Word Cross Game to Improve Students' Vocabulary in SMA Muhammadiyah 4 Makassar

The word cross game was utilized to increase vocabulary among first-graders at SMA Muhammadiyah 4 Makassar, and the results of the pre- and post-tests showed an improvement. There were nouns, verbs, adjectives, and adverbs in the word cross game. It can be seen the table and figure below.

Table 2 The Improvement of the Students' Vocabulary

No	Indicators	Pre-test	Post-test	Improvement (%)
1	Noun	58,88	76,33	29,63
2	Verb	53,84	87,14	61,84
3	Adjective	50,76	80,71	59
4	Adverb	65	92,14	41,75
	$\sum X$	228,48	336,32	192,22
	\bar{X}	57,12	84,08	48,05

According to table 2, the noun category scored higher than expected, going from a pre-test mean of 58.88 to a post-test mean of 76.33 (an improvement of 29.63%). The verb score improved (61, 84%) between the mean pre-test (53, 84) and post-test (87, 14). Affine performance increased by (59%) between the 50, 76 and 80, 71 pre- and post-test mean scores. The average adverb score improved (41, 75%) to 92, 14 between the pre-test and post-test. After calculating the outcome, it was found that vocabulary had increased by 48, 05% and that the mean vocabulary score in the pre-test was (57,12), but it was (84,08) in the post-test, as is more clearly seen in Figure 4.1.

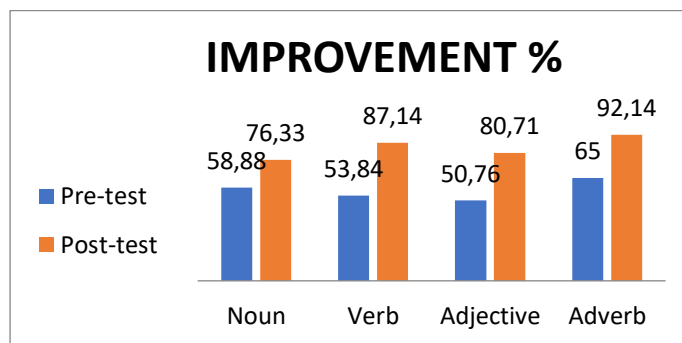


Figure 1 The Improvemnet of the Students' Vocabulary

From figure 1, the mean score was (48.05%), with improvements in the noun category of 29.63%, the verb category of 61.84%, the adjective category of 59%, and the adverb category of 41.75%. It is evidence that vocabulary skills among students in SMA Muhammadiyah 4 Makassar's first grade have improved.

2. The classify the students' score of pre-test and post-test with the categories below:

Table 3 The rate percentage of the pre-test and post-test students

No	Categories (Score)	Frequency			
		Pre-test	%	Post-test	%
1	Excellent (90-100)	0	0	7	35
2	Very Good (80-89)	0	0	7	35
3	Good (70-79)	2	10	2	10
4	Fairly Good (60-69)	2	10	4	20
5	Fair (50-59)	12	60	0	0
Total		16	80	20	100

The vocabulary of the students before and after treatment is described in table 3. The data shows that out of 20 students, 12 (60%) had fair scores on the pre-test, two (10%) received reasonably good scores, two (10%) received good scores, and none received very good or excellent scores. It indicates that students' vocabulary was adequate in the vocabulary categories of noun, verb, adjective, and adverb, according to the pre-test's means score. Following the post-test, no students received a fair grade, four (20%) students received a fairly good grade, two (10%)

students received a good grade, and seven (35%) students received a very good or excellent grade. The vocabulary of the students was very good to excellent in the vocabulary categories of noun, verb, adjective, and adverb, according to the post-test's means score.

1) The Classify of Noun

The mean noun score in the pre-test was 58,88, indicating that the students' vocabulary was fair, while the mean noun score in the post-test was 76,33, indicating that the students' vocabulary was good. It was more clearly shown in the figure 2.

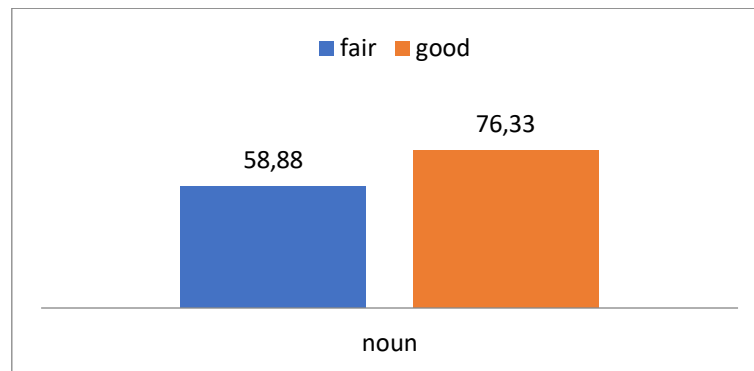


Figure 2 The classify of Noun

2) The Classify of Verb

The pre-test mean verb score of 53,84 indicated that the students' vocabulary was fair, whereas the post-test mean verb score of 87,14 indicated that the students' vocabulary was excellent. It was more clearly shown in the figure 3.

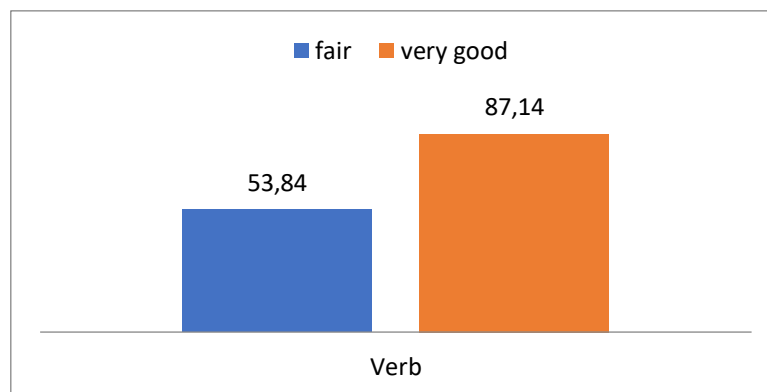


Figure 3 The classify of Verb

3) The Classify of Adjective

The pre-test mean score for adjectives was 50,76, indicating that the students' vocabulary was only fair; the post-test mean score for adjectives was 80,71, indicating that the students' vocabulary was good. It was more clearly shown in the figure 4.

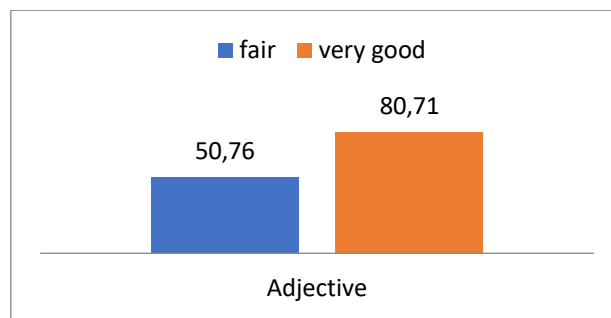


Figure 4 The classify of Adjective

4) The Classify of Adverb

The students' vocabulary was fairly good, as evidenced by the mean Adverb score of 65 on the pre-test, while it was exceptional, as indicated by the mean Adverb score of 92 on the post-test. It was more clearly shown in the figure 5.

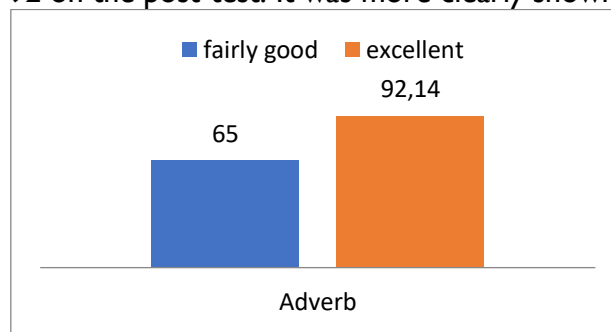


Figure 5 The classify of Adverb

3. T-test Value

T-test analysis was done to determine whether there was a significant difference between the pre- and post-test scores of the students. The T-table value was discovered to be 2,093 in order to determine the level of significance of 5% (0,05), degree of freedom $df=N-1$ (df is $N - 1$ $20-1=19$), and the calculation's outcome is shown as follows:

Table 4 T-test Value of the Students' Vocabulary Skill

Variables	t-test	t-table
Vocabularies	25,09	2,093

Table 4 compares the results from the t-test and t-table scores. The t-test's value is greater than the t-table's. The vocabulary score of the students ($25,09 > 2,093$).

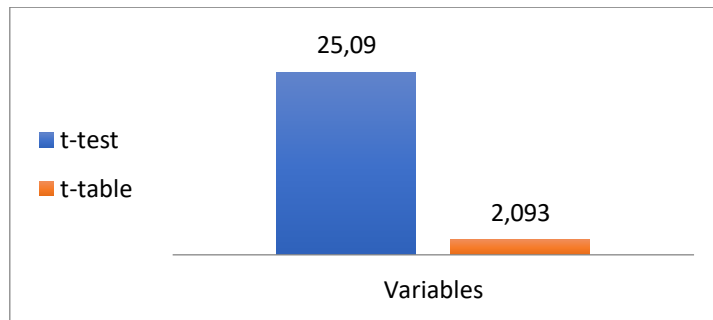


Figure 6 The Comparison between the Students' T-Test and T-Table

The outcomes of the students' vocabulary before and after utilizing word cross game can be inferred to show a substantial difference. Additionally, this indicates that the alternative hypothesis (H1) was accepted while the null hypothesis (H0) was rejected.

Discussion

This section's discussion of the findings' interpretation focuses on the noun, verb, adjective, and adverb of detail vocabulary of students.

I. The Use of Word Cross Game to Improve Students' Vocabulary in SMA Muhammadiyah 4 Makassar

According to McMillan (2012) that students enjoy playing and learn best when they are having fun. A word search puzzle game might help students gain more vocabulary. This is due to the fact that word search puzzle games can motivate children to study vocabulary more actively, effectively, and joyfully. According to the results of this study, word cross games can also help students in SMA Muhammadiyah 4 Makassar's first grade improve their vocabulary. The outcome of the test's data analysis is visible. There was a significant difference between the students' noun, verb, adjective, and adverb scores on the pre-test and post-test, as evidenced by the results of the data analysis from the test, which were shown in the finding section that came before it. The observation that the post-test test value was higher than the pre-test test value supported it. The kids' vocabulary increased between the pre- and post-test. The mean word scores for the students were 58,88 for the pre-test (\bar{x}) and 76,33 for the post-test (\bar{x}), indicating improvement following testing. The improvement was increased by 29.63%. The students mean verb scores were 53,84 on the pre-test and 87,14 on the post-test. A 61,84% improvement was made. The mean adjective score for the students was 50,76 on the pre-test and 80,71 on the post-test. The improvement was 59%. The students' average adverb score for the pre-test (\bar{x}) = 65 and post-test (\bar{x}) = 92,14. The increase was 41.75%. It indicates that the mean score on the post-test was greater than the mean on the pre-test. Following treatment, the researcher found that the number of nouns in the pre-test was 212 and in the post-test was 229, the number of verbs in the pre-test was 140 and in the post-test was 244, the number of adjectives in the pre-test was 132 and in the post-test was 226 while the number of adverbs in the pre-test was 78 and in the post-test was 129. It shows that there are now more words of each type than before.

According to the discussion above, the word cross game is useful to improve students' vocabulary in SMA Muhammadiyah 4 Makassar's first grade. It covers nouns, adjectives, verbs, and adverbs.

CONCLUSION AND SUGGESTION

The word cross game's success in helping students learn more words was shown by the percentage improvement for each word type, which was 29,63% for nouns and raised the number of vocabulary improvements from 212 to 229. From 140 to 244 verbs were improved, with a verb improvement rate of 61,84%. Improvements in adjective were made in numbers ranging from 132 to 226 and at a rate of 59%. Adverb improvements ranged from 78 to 129, with a 41.75 percent improvement percentage. Students might get more engaged in their education by playing word cross games. Playing word cross games with the students in first grade at SMA Muhammadiyah 4 Makassar can considerably improve their vocabulary. One of the other instructional ideas and methods that an English teacher could employ is the Word Cross Game.

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