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The Effectiveness of Collect and Exchange Vocabulary Game on Students' Vocabulary Mastery

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Abstract

One of the difficulties faced by students in learning English is vocabulary mastery. This study aimed at enriching the student's vocabulary mastery using the Collect and Exchange Vocabulary Game adopted from Intermediate Vocabulary Games written by Jill Hadfield (1999). A quantitative approach research and quasi-experimental design with nonequivalent control-group design was adopted. 40 students from the eighth grade of SMP Negeri 14 Banda Aceh were chosen as the sample. To collect the data, the researchers used some procedures; pre-test, treatment, and post-test. The test consists of 20 questions related to vocabulary. The data were analyzed using descriptive analysis, inferential analysis, and SPSS Statistics 20.0 application as the tool. The descriptive analysis result shows that the mean score of the post-test of control class was 55 and 95 for experimental class. Then the inferential analysis result was smaller than the alpha significant ($0,00 < 0,05$), that means H_a was accepted and H_o was rejected. As a conclusion, the use of Collect and Exchange Vocabulary Game has effectively enriched the vocabulary mastery.

Key Words : Collect and Exchange Vocabulary Game, Vocabulary Mastery.

1. INTRODUCTION

As the best medium to build communicate, all of the schools in Indonesia undertake English language learning for their students as the lesson. Unfortunately, many students feel that learning English is difficult especially in mastering the new words (Susanto, 2021). The preliminary that the researchers found was supported that the average number of students in grade eight of SMPN 14 Banda Aceh seem did not know much about vocabulary in English. Some students always responded the questions in Indonesian and the other half have no response or are just silent. Whereas according to Lehr et al. (2004) vocabulary knowledge have a strong correlation to comprehend the English language.

However student at a teenage age have a great interest in a game. As Chen and Hwang (2014) stated, the advantages of applying games as a learning media are increasing students' knowledge, getting knowledge in different contexts, and

stimulating practical activities. One of the games related to vocabulary building is Collect and Exchange Vocabulary Game that proposed by Jill Hadfield (1999). This game uses vocabulary as the medium for learning and Collect and Exchange as an approach.

2. LITERATURE REVIEW

2.1 Game

Games and play are ways of learning through analysis with groups of players or individually through the application of rational strategies (Leyton & Shoreham, 2008). Referring to Huyen (2003), the benefits of the application game when learning vocabulary are relaxation and enjoyment, allowing students to recall words more readily, engaging and motivating the students, and providing real-world context in the classroom.

2.2 Part of Speech

Part of speech is a classification of words according to word form and divided into eight forms, namely noun, pronoun, verb, adjective, adverb, preposition, conjunction, and interjection (Nurzaenab & Purnawansyah, 2016).

2.2.1 Noun

A noun is a word that identifies or points to names of, persons, animals, places, things, or it can be inanimate objects (Mahlberg, 2005). In this study, the types of noun used were; concrete noun, common noun, compound noun, and countable noun.

a. Concrete noun

Concrete noun is a noun that can be perceived through the five senses. For example: ticket, lemonade, computer, etc. The used of concrete noun for example: I installed the program on the computer.

b. Common noun

Common noun is a noun that undefined or generic people, places, or things. For example: restaurant, teacher, avocado, etc. The used of common noun for example: they serve delicious food at that restaurant.

c. Compound noun

Compound noun is a noun that combines two or more words into one. For example: golf course, beach holiday, etc. The used of compound noun for example: I will join the golf course

d. Countable noun

Countable noun is the noun that can counted. For example: car, teacher, skates, etc. The used of countable noun for example: Willy got a skate from his mother.

2.2.2 Pronoun

Pronouns are grammatical workhorses that stand in for nouns, preventing us from cluttering our sentences with repetitive noun phrases. The example words of pronoun are; me, us, you, him, her, she, he, it, them, etc. The used of noun in the sentence for example: Rama is a man who got lost in the forest yesterday. He is trying to find his way out.

2.2.3 Verb

Verb is an action word that tells what people, animals, or things are doing (Seaton, 2007). The types of verbs that used were only action verbs. Action verbs is the verb that express or indicate an action.

For example: dance, skate, play, etc.

The used of action verbs in the sentence for example: We skate at the park.

2.2.4 Adjective

Adjectives are descriptive words that paint a picture by adding details about nouns, pronouns, or noun phrases (Ahmad, 2022). The examples of adjectives are big, small, honest, lie, foolish, hard, easy, etc. An example of an adjective used was: The Arabic language is not hard to learn.

2.2.5 Adverb

An adverb is a word that modifies a verb, an adjective, or another adverb. It provides us with further information about a verb, adjective, or another adverb. The example of adverbs are; quickly, slowly, yesterday, annually, today, never, and so on. The used of an adverb was: This topic is extremely important.

2.2.6 Preposition

Prepositions are the words that we put before nouns or pronouns. Without prepositions, sentences would lack essential details and connections, making it difficult to understand how things relate to each other (Ahmad, 2022). The examples of prepositions are; at, on, for, beside, between, from, etc. The used preposition in the sentence for example: The deadline of your task was at 10 am.

2.2.7 Conjunction

Conjunctions are grammatical rules used to connect words, phrases, and sentence to complete the intended meaning (Ahmad, 2022). There are three types of conjunctions; coordinating conjunctions, correlative conjunctions, and subordinating conjunctions.

- a. Coordinating conjunctions used to link two words or phrases that are equally important and complete. The coordinating conjunctions word are: for, and, but, or, etc. The used of coordinating conjunctions in a sentence for example: Michael is not ready for surgery.
- b. Subordinating conjunctions create complex sentences by joining an independent clause (can stand alone) and a dependent clause (cannot stand alone). The subordinating conjunctions word are: before, once, whether, until, etc. The used of subordinating conjunctions in a sentence for example: Once you see her, you will recognize her.
- c. Correlative conjunctions used to join different words or group of words in a sentence together. The correlative conjunctions word are: not only/but also, both/and, just as/so, etc. The used of correlative conjunctions in a sentence for example: She is not only a novelist but also a poet.

2.2.8 Interjection

Interjections is the words that contain emotional punctuation, adding bursts of feeling to sentences without affecting their grammar (Ahmad, 2022). The example of interjections are; woops, oops, ouch, wow, oh my God, etc. The used of conjunctions in the sentence for example: Oops! I just spilled my coffee.

2.3 Collect and Exchange Vocabulary Game

Collect and Exchange Vocabulary Game is the games that combine of collect and exchange activities. Collect means to do gathering or bringing, and exchange means the act of giving or taking in return for another. In the collect activity the players must collect cards in order to complete the goals of the game, and in the exchange activity the players must barter certain cards, other object, or ideas (Tuan, 2012). The Collect and Exchange Vocabulary Game is one of techniques that the researchers adopted from Jill Hadfield in her book *Intermediate Vocabulary Games*. The book was published by Longman in 1999.

2.4 Vocabulary Mastery

Vocabulary mastery mentioned in this research is the student's knowledge of certain vocabulary to support students in learning to understand English subjects. According to Xiqin (2008), Vocabulary is the vast reservoir of words that make up a specific field of knowledge or an individual's understanding. Amalia (2020) stated that mastering vocabulary is crucial for every language learner because vocabulary is the basis for someone to master a language. The methods that have been discovered by researchers and have been applied to junior high school students with the goal of improving their vocabulary, such as Problem-Based Learning (PBL), Project Based Learning (PjBL), and Game Based Learning (GBL):

2.4.1 Problem Based Learning (PBL)

Problem-based learning is an approach to learning that presents problems to be solved by students, either individually or in groups. Students are encouraged to understand the concepts of the problem at hand in order to understand the essence of the material and stimulate students' critical thinking to solve the problem in a way that they understand.

2.4.2 Project Based Learning (PjBL)

Project Based Learning Model (PjBL) is a student-centered learning model that requires students to work independently to solving real-world problems. Students have to produce a product that they wanted to present to their teacher. This allows the teacher to assess the students' understanding of the problem and how well they can apply their knowledge to solve it.

2.4.3 Game Based Learning (GBL)

GBL is a learning model that applies a combination of games and learning, thus providing a positive impact on the development of student learning. Game-based learning is also a learning model designed to combine learning materials with education so that learners can engage in learning activities.

2.5 Learning English in Junior High School

Junior High English aims to equip students with the skills to communicate effectively in English, both orally and in writing, understand and analyze English texts in a variety of genres, appreciate and understand the culture and traditions of English-speaking countries, and develop confidence and the ability to learn foreign languages independently. The implementation of English language lessons certainly has its own goals and objectives.

3. METHODS

In this study, the researchers used quantitative approach research. Quantitative research stated by Creswell (2002) is the method that includes the process of gathering, analyzing, interpreting, and writing the findings of the study. The design of study was quasi-experimental with non-equivalent control-group design. This design was take a pre-test and post-test in control and experimental class, and only the experimental group receives the treatment (Creswell, 2014). The population was the eighth-grade students of SMP Negeri 14 Banda Aceh in the academic year 2022/2023. The sample was the whole of the population that is 40 students in total. The instruments of this study was a test and collected the data from pre-test, treatments, and post-test during five meetings.

4. RESULTS AND DISCUSSION

4.1 Results

This research was conducted at the eighth grade of SMP Negeri 14 Banda Aceh. To get the data, the researchers started the study with a pre-test and ended with a post-test. The following are the data of pre-test and post-test in the experimental and control class are shown below:

Table 4.1 Pre-test and post-test of the experimental and control class

| No. | Students | Pre-test of E.C | Pre-test of C.C | Post-test of E.C | Post-test of C.C |
|---------------|----------|-----------------|-----------------|------------------|------------------|
| 1 | SE-1 | 50 | 35 | 95 | 65 |
| 2 | SE-2 | 50 | 30 | 100 | 65 |
| 3 | SE-3 | 40 | 30 | 95 | 50 |
| 4 | SE-4 | 40 | 45 | 100 | 55 |
| 5 | SE-5 | 15 | 10 | 85 | 35 |
| 6 | SE-6 | 20 | 15 | 100 | 35 |
| 7 | SE-7 | 40 | 20 | 100 | 60 |
| 8 | SE-8 | 35 | 20 | 100 | 65 |
| 9 | SE-9 | 40 | 35 | 100 | 65 |
| 10 | SE-10 | 20 | 20 | 100 | 60 |
| 11 | SE-11 | 35 | 85 | 90 | 90 |
| 12 | SE-12 | 30 | 10 | 100 | 30 |
| 13 | SE-13 | 30 | 30 | 100 | 65 |
| 14 | SE-14 | 55 | 10 | 90 | 50 |
| 15 | SE-15 | 15 | 55 | 90 | 55 |
| 16 | SE-16 | 0 | 30 | 75 | 60 |
| 17 | SE-17 | 35 | 50 | 100 | 45 |
| 18 | SE-18 | 20 | 20 | 100 | 55 |
| 19 | SE-19 | 35 | 5 | 90 | 45 |
| 20 | SE-20 | 45 | - | 100 | - |
| 21 | SE-21 | 25 | - | 80 | - |
| Amount | | 675 | 550 | 1990 | 1050 |

Based on the data of pre-test and post-test that was collected, the researchers needs to know the descriptive data statistics score containing the mean, minimum, and maximum. The result of descriptive statistics was analyzed using the SPSS 20 version was shown below:

Table 4.2 Descriptive statistics analysis result

| | N | mean | minimum | maximum |
|----------------------|----|------|---------|---------|
| Pre-test experiment | 21 | 32 | 0 | 55 |
| Pre-test control | 19 | 29 | 85 | 5 |
| Post-test experiment | 21 | 95 | 75 | 100 |
| Post-test control | 19 | 55 | 30 | 90 |

To determine the type of hypothesis test that will be used, the researchers have to find the normality and homogeneity score. The result of normality test was shown below:

Table 4.3 The result of normality test of pre-test and post-test of control and experimental class

| Class | Test | Average | St.dev | D | K |
|------------------|----------|---------|--------|-------|-------|
| Pre-test Control | Pre-test | 29,2 | 19,4 | 0,172 | 0,301 |

| | | | | | |
|------------------------|----------|------|------|-------|-------|
| Pre-test Experimental | Pre-test | 32,1 | 13,7 | 0,097 | 0,287 |
| Post-test Control | Pre-test | 55,3 | 13,9 | 0,189 | 0,301 |
| Post-test Experimental | Pre-test | 94,8 | 7,5 | 0,242 | 0,287 |

From the table above, the normality test result of pre-test of control class showed that D value was smaller than K value ($0,172 < 0,301$), which means the data population was *normally distributed*. Then, the normality test result of pre-test of experimental class showed that D value was smaller than K value ($0,097 < 0,287$), which means the data population of pre-test experimental class was *normally distributed*. In the post-test, the normality test result of control class showed that D value was smaller than K value ($0,189 < 0,301$), which means the data population was *normally distributed*. Then, the normality test result of post-test of experimental class showed that D value was smaller than K value ($0,242 < 0,287$), which means the data population of pre-test experimental class was *normally distributed*.

To find the result of homogeneity, the researchers used the data of pre-test and post-test of control and experimental class. The result for homogeneity test was shown below.

Table 4.4 The result of homogeneity test

| English Learning Outcomes | Levene Statistic | df1 | df2 | sig. |
|---|------------------|-----|----------|-------|
| Based on Mean | 3,740 | 1 | 38 | 0,061 |
| Based on Median | 3,685 | 1 | 38 | 0,062 |
| Based on Median And With Adjusted of Based on Trimmed Mean | 3,685 | 1 | 36, 7 | 0,063 |
| | 4,046 | 1 | 38 | 0,051 |

Based on the result of homogeneity test above, the sig. value based on mean was smaller than the significance value ($0,061 > 0,05$). Which means, the data from pre-test and post-test of control and experimental class was *homogeny*. Based on the result of normality and homogeneity test, the hypothesis test in this study was refers to T-test. The researchers used SPSS as tool to analysis the data. The data that analysis was pre-test and post-test score of control and experimental class. The Alpha significance was 5%, with basis decision was:

- If Sig. (2 tailed) < Alpha significance, then Ha was accepted and Ho was rejected.
- If Sig. (2 tailed) > Alpha significance, then Ho was accepted and Ha was rejected.

To determine whether the research hypothesis is accepted or not, the hypotheses must be tested. The statistical hypothesis are:

- Alternative Hypothesis (Ha): The use of Collect and Exchange Vocabulary Games is effective to enrich the student's vocabulary mastery at SMPN 14 Banda Aceh.
- Null Hypothesis (Ho): The use of Collect and Exchange Vocabulary Games is not effective to enrich the student's vocabulary mastery at SMPN 14 Banda Aceh.

Table 4.5 T-test result

| Class | Test | T | df | Sig. (2 tailed) |
|--------------|------------------------|-------|----|-----------------|
| Control | Pre-test and Post-test | -7,7 | 18 | ,036 |
| Experimental | Pre-test and Post-test | -23,7 | 20 | ,000 |

From the table above, it is shown that the Sig. (2 tailed) of control class was bigger than the Alpha significance ($0,36 > 0,05$). Then there is no significance difference between students' results of the pre-test and post-test. Meanwhile the Sig. (2 tailed) of the experimental class showed that is smaller than the Alpha significance ($0,00 < 0,05$) and there is a significance different from students' results of the pre-test and post-test.

4.2 Discussion

The discussion was provided to the answers to the specific inquiries outlined in the research questions. The purpose of this study was to find out whether the use of a Collect and Exchange Vocabulary Game is effective for students to enrich the vocabulary mastery. According to the basis decision of T-test, it is indicated that H_a was accepted and H_o was rejected. As a conclusion the use of Collect and Exchange Vocabulary Games is effective to enrich the student's vocabulary mastery at SMPN 14 Banda Aceh. . This research was conducted at SMPN 14 Banda Aceh with 8th grade students as a sample (40 students in total). The population consists of two classes there are VIII-I (as control class) and VIII-2 (as experimental class). This study consisted of five meetings. The first meeting was for pre-test, the second meeting was for the first treatment, the third meeting was for the second treatment, the forth meeting was for the third treatment, and the fifth meeting was for post-test.

The data was collected through vocabulary matching test as the research instrument. The test consisted of pre-test and post-test that applied in control and experimental class. The pre-test and post-test was done for about 10 - 15 minutes for both control and experimental class. The data was analyzed trough descriptive and inferential analysis statistical form by using SPSS. The descriptive statistics analysis's result was also showed the improvement of the student's score. From the mean of post-test score for control class was 55 and 95 for experimental class. So that can indicated the mean score of post-test of control class was smaller than the experimental class. This difference resulted in a difference of 40 scores against the control group. This difference in mean scores indicated that the experimental class achieved a greater improvement than the control class.

In the T test of control and experimental showed the different. In the control class, showed that there is no significance difference from students' result of pre-test and post-test. Whereas, the experimental result of pre-test and post-test showed that there is a significance difference. The Paired Sample Test of pre-test and post-test of experimental was 0,00 and smaller than 0,05. The result conclude that H_a was accepted and H_o was rejected. Based on the research finding above, the use of Collect and Exchange Vocabulary Game is the effective to mastering the vocabulary. The results of the research above are in line with the research finding by Warni (2019). From the result of this research, it was found that the average score of the post-test in control class was 75 and the average score of the post-test in experimental class was 84,7. It indicates that the experimental class got a bigger score with a difference of 9 points compared to the control class. The result of sig. (2-tailed) score was 0.00 and smaller than 0.05. Therefore, it could be seen that $p < \alpha$ ($0.00 < 0.05$) which mean

Ho is rejected and Ha is accepted. The students also indicated that they are feeling more enjoyable in the process of teaching and learning. Student engagement and motivation were high during the Quartet card game implementation. Furthermore, the research provides clear evidence that employing this game led to significant improvements in student vocabulary acquisition, thus establishing its effectiveness as a pedagogical tool.

Even though there are several studies with different backgrounds above, the research results show similar findings. The Collect and Exchange Vocabulary Game can be used to enrich students' vocabulary. This can be indicated by the students that feel more focused, happy, interested and higher enthusiasm in learning, confident to pronounce English, and no more students who disrupt during the learning process.

6. CONCLUSION AND SUGGESTION

The student's problem in the eighth-grade students of SMP Negeri 14 Banda Aceh was lack of vocabulary mastery. The aim of this study was to enrich the students' vocabulary mastery using Collect and Exchange Vocabulary Game. After treatment, there was eighteen students in the experimental group improved from "bad" category to the "excellent", "very good", and "good" category. The game was effective to enrich the students' vocabulary mastery which was indicated by the improvement of mean score from pre-test to post-test. The mean score indicate a notable increase in the experimental group's compared to the control group. The mean increase from 55 (control class) to 95 (experimental class). Moreover, regarding to the hypothesis testing, the result of t-test was smaller than the Alpha significance ($0,00 < 0,05$), which means H_a was accepted and H_o was rejected.

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