

THE EFFECT OF BOGGLE GAMES ON THE VOCABULARY MASTERY OF THE SEVENTH GRADE STUDENTS' AT MTS. NURUL HIKMAH

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Abstract

The research is aimed to investigate whether there is an effect of the Boggle game on vocabulary mastery of seventh-grade students at MTs. Nurul Hikmah. The design used was quasi-experimental method with Nonequivalent control group design. The subject of population in this research is seventh-grade students of MTs Nurul Hikmah. The sample of this research were 60 students, who were classified into 30 students of experimental class and 30 students of controlled class. The technique of collecting data with used the research instrument was a test consisting of a pre-test and post-test. The results of this research stated that the used of Boggle games in learning vocabulary affected students' vocabulary mastery. This can be seen from the t-test results of pre-test and post-test at a significance level of 5% (0.05) alpha and degrees of freedom of 2.00, where the t-count of pre-test is higher than the t-table ($2.03 > 2.00$) with the average pre-test score of the experimental class was higher than the average pre-test score of the control class ($49.47 > 42.60$) and the t-count of post-test is higher than the t-table ($5.75 > 2.00$) with the average post-test score of the experimental class was higher than the average pre-test score of the control class ($83.50 > 73.10$). It can be concluded that there is significant effect of Boggle game on the seventh grade students' vocabulary mastery at MTs. Nurul Hikmah. It means that the Boggle game is effective in learning vocabulary mastery for the seventh-grade students of MTs Nurul Hikmah. By using the Boggle game, the teaching and learning process becomes more interesting.

Key words: Boggle Game, Vocabulary Mastery

INTRODUCTION

Education is a very important thing that is absolutely obtained by every individual in accordance with human rights. In the world of education there are various types of languages, one of them is a foreign language such as English.

English is one of the most common international languages used by everyone in the world. In the global era, people are expected to master English as an international communication tool so they can communicate with others who live in other countries. In Indonesia, English is a foreign language that still needs to be learned. To support Indonesians to be able to communicate with others throughout the world, the Indonesian government incorporates English into the education curriculum as one of the compulsory subjects ranging from elementary school to high school or university.

English as a foreign language has four skills. There are listening, speaking, reading and writing. This means that listening, speaking, reading and writing require a lot of vocabulary mastery, because vocabulary mastery is the most important part in learning a foreign language. According to Alqahtani stated that "Vocabulary knowledge is often viewed as a critical tool for second language learners because a limited vocabulary in a second language impedes successful communication." It means that lack of knowledge in the vocabulary can make interactions not going well. Vocabulary mastery for students is the main component for learning English successfully. Vocabulary is very important and must be owned by anyone who is learning English. Vocabulary is not something that can be controlled completely, it must be learned throughout life. Teaching in vocabulary involves more than just looking at words in a

dictionary and using words in sentences. In every school, most of the English teachers have problems in teaching vocabulary.

In learning English students cannot listen, speak, read and write well if they do not know vocabulary well. There are various categories of vocabulary. One of them is the content of words. The contents of words are the main parts of speech, including nouns, verbs, adjectives, adverbs, and several pronouns. Based on observations that the researcher have observed in MTs Nurul Hikmah, there are some problems found in the field when providing vocabulary material to students, especially in the category of content words.

The first problem is many mistakes especially in vocabulary, spelling and pronunciation. The second problem is that most the students do not know the meaning of the words spoken by the teacher. Another problem is the students' interest in learning vocabulary is very low because according to them it is very difficult to memorize it, especially in verbs and nouns the students always forget the meaning of words. In addition, the researcher find that the students have a lack of vocabulary mastery, they often find difficulty in getting a good understanding of vocabulary.

This fact invites the researcher to investigate the causes of problems faced by students in learning vocabulary. As it is known, that vocabulary is very important in teaching and learning English. To help students improve vocabulary mastery, the researcher uses Boggle games as a vocabulary teaching technique.

Actually, there are many techniques in improving vocabulary such as: using songs, pictures, games, and so on. However, in this study the researcher will use game technique which is a hopefully be better choice for junior high schools. Classes will be more cheerful and students will not be easily bored. Hopefully, it could be easier for them to master and improve their vocabulary.

Games are entertaining and interesting activities, often challenging, where students play and usually interact with others. Teaching using games can be an alternative technique in teaching, especially in teaching vocabulary to junior high school students. Games are also activities that bring pleasure to those who play them. The game can be played by one person or more than one person or also in groups. By using games, students will be energetic and will not be bored, therefore it will be easier for them to understand and increase their vocabulary. Improve vocabulary by using games like doing adventures. First, children generally they always play games in their lives. Second, the game offers a natural communication context between them. Third, the game can motivate children to speak in the English they learn. Relating to the background above, the researcher is interested in conducting research on "The effect of Boggle games on the vocabulary mastery of the seventh grade students' at MTs. Nurul Hikmah".

THEORITICAL FRAMEWORK VOCABULARY

Vocabulary is one of the fields of knowledge in languages, plays a big role for students in acquiring language. Vocabulary development is an important aspect for developing language skills in mastering language.

There are several definition vocabulary according to experts. According to (Ur, 2009, p. 60) "Vocabulary can be defined, roughly as the words we teach in the foreign language". Moreover, (McCarthy, O'Keeffe, & Walsh, 2010) also state that "Vocabulary is all about words" (p.1).

The other definition of vocabulary is stated by (Hiebert & Kamil, 2005, p. 3) describe vocabulary as "The knowledge of meanings of words". In addition, (Richards & Renandya, 2002) stated that "Vocabulary is a core component of language proficiency and provides much of the basis for how learners speak, listen, read and write. Without extensive vocabulary and strategies for acquiring new vocabulary, students often reach their potential and may be advised to take advantage of language learning opportunities around them such as listening to

music, listening to native speakers, using language in different contexts, reading or watching television or movies” (p. 255).

From the explanation above, the researcher can conclude that vocabulary is words. The word is very important because people use words all the time in everyday life to communicate with other people referring to all the words we get, understand, and use. Vocabulary means the foundation or the first step to understanding something. Without words, the people cannot communicate with others and their vocabulary will increase if they read more words.

a. Kinds of Vocabulary

Vocabulary is considered as one of language the elements. This is an important role in mastering English skills such as listening, reading, speaking and writing. There are many kinds of vocabulary stated by several experts.

According to (Thornbury, 2002, p. 3) explains that there are six types of vocabulary:

1. Word class; the term may be better known in the fields of morphology and syntax, but we know this as part of that speech; nouns, pronouns, verbs, adverbs, prepositions, conjunctions.
2. Word families; the term is also more popular in the fields of morphology and syntax, the type of vocabulary one uses about additives or shifting terms from a word.

Example:

- a) Play – plays – played: inflected
- b) Play – replay – playful: derivatives.
3. Word formation; in English there are several types of formations or combined from words such as:
 - a) Compounding: second-hand, word processor, typewriter
 - b) Blending: information + entertainment = infotainment
4. Multi-word units; most of these types of vocabulary that one form of phrasal verbs and idioms, for example:
 - a) Look for, look after, wipe off, throw on: Phrasal Verbs
 - b) Famous last word, eat your words, jack me around: Idioms
5. Collocation; this one kind of vocabulary that can be interpreted as the frequency of two or more words together.

Example: this week, once more, once again, as well.
6. Homonyms; homonyms are words that have the same shape but different in meaning.

Example: well = well, healthy.

Based on these statements, it can be concluded that there are so many types of vocabulary from many experts, so we know that many experts emphasize vocabulary on words that can be used by students with a series of words that can be used when writing or speaking and used to determine meaning when listening or reading. So that the students can do it correctly in speaking, writing and can be understood in the context of reading and listening.

b. Assessing Vocabulary

Vocabulary is part of the assessment, vocabulary assessment aims to assess the students' vocabulary knowledge. With vocabulary assessment, students can seriously review and study vocabulary, thus creating beneficial effects on learning.

According to (Harmer, 2001, p. 16) stated that “There are some aspects that have to be discussed in vocabulary, namely: word meaning (synonym, antonym, connotation, and denotation), extending word use such as idioms, word combination or collocation, and the grammar of words which comprises noun, verb, adjective, and adverb”.

According to (Hughes, 2003, p. 180) that assessment of vocabulary including “Recognize synonym, recognize definition, recognize antonym and appropriate word for context”. The aspect above can be used to test students’ vocabulary mastery in foreign language classroom.

According to (Ur, 2009, p. 71) there are some techniques for vocabulary testing among others:

1. Multiple-choice

Note that only denotative meaning is tested, the testee does not need to know the words’ connotations, spelling, pronunciation, grammar, or how they would be used in context. Multiple-choice questions are tricky and time consuming to compose, but, if the answers are clear, very quick and easy to mark.

2. Matching.

Matching items are quicker and easier to compose than multiple-choice, but note that the last option - if the learner has all the others right becomes obvious. This problem can be corrected by the provision of more items in Column B than in A.

3. Odd one out.

Only meaning is being tested, and you have no way of being sure that all the items are known. But this is at least more interesting to do, and usually easy to mark.

4. Writing sentences.

Spelling and pronunciation of the items are not tested, but most other aspects. This is a bit boring to do, and difficult to mark objectively, but does check the testee’s knowledge fairly well.

5. Dictation.

Dictation tests aural recognition and spelling only. However, if learners can recognize and spell an item correctly they probably also know what it means: it is extremely difficult to perceive, let alone spell, words you do not know, a relatively easy test to administer and check.

6. Dictation-translation.

This checks if students know meaning and spelling only. There is the problem that the mother-tongue translation may be inexact or misleading; but if it is a reasonable equivalent, then this is very quick, easy and convenient test to administer and check.

7. Gap-filling

This tests meaning, spelling, to some extent grammar and collocation. But testees may write down possibly acceptable items that are not in fact the originals, or what you intended.

8. Gap-filling with a “pool” of answers

Meaning is tested here, also to some extent grammar and collocation, this version is easier to do and mark.

9. Translation

Translation can test all aspects of an item, but there is the usual difficulty of finding exact equivalents across language, and it may be tricky to mark.

10. Sentence completion

This tests denotative meaning only; but is ‘personalized’ and interesting to do and read.

From the techniques above, the researcher choose a Multiple Choice tests for assessing vocabulary with the words meaning aspect of synonym and antonym type, because this test is able to assess objectively and the material tested can cover most of the teaching material that has been taught. So that, the students' answers can be corrected easily and quickly.

1. BOGGLE GAME

a. Definition of Boggle Game

In the process of learning vocabulary, one of gamethat can be applied by teachers in learning is the Boggle game or which is famous for word search games.Boggle game is one of a board games. This game is a game thatincluded in the activity of selecting or arranging random words. Boggle game isgenerally as word search games. There are several definition of Boggle game according to experts.

According to (Toma, Alexandru, Dascalu, Dessus, & Matu, 2017, p. 607)“Boggle is a word game in which players connect neighboring letters in a 4x4 grid. The game is won by the player who finds the longest word”.

According to (Hermansen, Hvring, & Killerud, 2013, p. 4) stated that “Boggle is word game played using a four by four grid of lettered dice. The object of the game is to find words spelled out by adjacent dice in the grid”. The minimum length of a word is three characters, with longer words granting more points, up to eight characters long (even longer words do not grant more points). Abbreviations and names are not allowed.

In addition, according to (Caputo & Dunning, 2004) stated that “Boggle is a hidden word game. Each puzzel contained a 4 x 4 array of latters, and participant were asked to identify as many English words that could be found by connecting adjacent letters. Participant were instructed about the roles of boggle and given a few examples. The rules state that words can only be formed from adjoining letters. Letters must join in the proper squence to spell a word, but they may join horizontally, vartically, or diagonally to the left, right, or up-and-down. However, no letter cube may be used more than once within a single word. Words must be at least ththree letters long, and participants were given 3 minutes for each puzzle” (p. 4).

Based on the explanation above, the researcher can conclude that the boggle game is a hidden word game where players connect neighbor letters in a 4x4 box. Boggle games can be joined horizontally, vertically, or diagonally to the left, right, or up and down. Word games where people have to make minimum words of three characters, with longer words giving more points, up to eight characters from a collection of random letters in a certain period of time. The object of the game is to find spelled words that are close together in the grid. The player forming the most words in 3 minutes is the winner.

b. The Rules of Boggle Game

The rules of a game in teaching learning process, there are several steps to play Boggle game. According to(Caputo & Dunning, 2004, p. 4) stated that participants were run in groups and all experimenters were blind to condition and the specific hypotheses of the study. Boggle is a hidden word game made by Parker Brothers. Each puzzle contained a 4x4 array of letters, and participants were asked to identify as many English words that could be found by connecting adjacent letters. Participants were instructed about the rules of Boggle and given a few examples. The rules state that words can only be formed from adjoining letters. Letters must join in the proper sequence to spell a word, but they may join horizontally, vertically, or diagonally, to the left, right, or up-and-down. However, no letter cube may be used more than once within a single word. Words must be at least three letters long. Participants were given 3 min for each puzzle.

In addition, (Dickman, 2013, p. 66) stated that Boggle board is defined to be a 4x4 array letters, where words are formed by tracing paths from letter to adjacent (i.e., horizontal, vertical, diagonal) letter, with the one caveat that the same entry cannot be used more than

once. Finally, Boggle like game is one in which the goal is to find Boggle words on a Boggle board. For clarity's sake, when discussing words within a given board we will use majuscules (i.e., capital letters). As an example, consider the following array of letters:

A	M	D	F
E	S	I	G
R	T	N	L
S	A	B	E

Thus, the above Boggle board contains RAT, DIM, and STARE, but does not contain BASS or INTEREST.

According to (Vancouver, 2011, p. 3) stated that the game consists of four parts, in the following sequence:

1. Choose the difficulty level and lesson number,
2. Make word on the Boggle word,
3. Score board, entering the winning team name, wathing the top scorers list, and
4. Suggestion words.

To make the game more challenging, there are three difficulty levels: Easy (3x3 Boggle board, duration: 2.5 minutes), Medium (4x4 Boggle board, duration: 5 minutes) and Hard (5x5 Boggle board, duration: 7.5 minutes). Within each difficulty level, there were 3 to 9 different Boggle boards (referred to as lessons) to choose from.

(Needleman, 2013, p. 293) stated that "To form a word in Boggle, consecutive letters in the word must be adjacent on the board, horizontally, vertically, or diagonally, and each boxed letter on the board cannot be used more than once. All words must be at least three letters long". To clarify this, examine Figure 1. The word EXAMPLE is on the board because of the path shown. However, DINED is not there as only one box contains a D, and RIPE is not there because I and P are not adjacent.

A	X	R	I
E	M	D	N
L	O	P	E
M	N	L	S

According to (Hermansen, Hvring, & Killerud, 2013, p. 4) "Boggle is a word game played using a four by four grid of lettered dice. The object of the game is to find words spelled out by adjacent dice in the grid". The minimum length of a word is three characters, with longer words granting more points, up to eight characters long (even longer words do not grant more points). There are a list of in-game scores:

<i>Word length</i>	<i>Points</i>
3, 4	1
5	2
6	3
7	5
8+	11

From the explanation above, the researcher can conclude that the rules of playing boggle games is to select the difficulty level there are three difficulty levels: Easy (3x3 Boggle board, duration: 2.5 minutes), Medium (4x4 Boggle board, duration: 5 minutes) and Hard (Boggle 5x5 board, duration: 7.5 minutes). In each difficulty level, there are 3 to 9 different Boggle boards to choose from. The game is played in groups, where participants are asked to identify as many

English words as can be found by connecting adjacent letters by tracing the path from letter to letter horizontally, vertically, or diagonally, to the left, right, or up and down. There is one admonition that the same entry cannot be used more than one. The words on the board are given using capital letters. All words must contain at least three letters with a minimum word length of three characters, with a longer word giving more points, up to eight characters.

c. The Kinds of Boggle Game

Boggle game is a game suitable for vocabulary learning. According to (Wikipedia, 2020) there are several types of Boggle games, such as:

1. Boggle standar is a version of the standard 4×4 set that included a special red “Boggle challenge cube,” featuring six relatively uncommon letters. Bonus points are awarded for all words making use of the red cube.
2. Boggle Junior is a much simplified version intended for young children.
3. Boggle CD-ROM, a version for Windows, produced and marketed by Hasbro Interactive, including both 4×4 and 5×5 versions, several 3-D versions, and facilities allowing up to four players to compete directly over the Internet.
4. Body Boggle, which is more akin to Twister than it is to standard Boggle. Two players work together as a team, using their hands and feet to spell words on a large floor mat containing pre-printed Boggle letters.
5. Boggle Bowl, in which players roll their own dice and compete to build longer words in order to move their token toward their goal on a (bowl-shaped) playing area. Similar to Scrabble, the play area has special spaces, but here they alter the play for the next round.
6. Boggle Flash, An electronic version of Boggle, but consists of 5 tiles in which 1–10 players make words by swapping tiles. This product is sold in the United States under the name Scrabble Flash.

The several types of Boggle Games above, researcher chooses the Boggle Standard. Because the Boggle Standard is a version of the 4 × 4 standard set that includes a cubic that contains words for the relatively unusual red Boggle challenge. So, if students use all the words in the red cube, bonus points will be given and the chance of victory will be higher. In addition, the Boggle Standard is also very easy and effective to apply in learning to students in the class.

d. The Implementation of Boggle game

The implementation of a game in teaching learning process, there are several steps to play Boggle game from (Caputo & Dunning, 2004, p. 4), such as:

1. The participants divided into groups.
2. The Participants are instructed about Boggle rules and given a few examples. The rules state that words can only be formed from contiguous letters. Letters must join in the right order to spell words, but they can be joined horizontally, vertically, or diagonally, left, right, or up and down. However, there are no letters that can be used more than once in one word.
3. Each puzzle board contains a 4x4 array of letters and participants are asked to identify as many English words as possible that can be found by connecting adjacent letters. The word must be at least three letters long.
4. The participants are given 3 minutes for each puzzle.

In addition, According to (Vancouver, 2011, p. 4) stated that the game consists of four steps, in the following sequence:

1. Choose the difficulty level and lesson number,
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To make the game more challenging, there are three difficulty levels: Easy (3x3 Boggle board, duration: 2.5 minutes), Medium (4x4 Boggle board, duration: 5 minutes) and Hard (5x5

Boggle board, duration: 7.5 minutes). Within each difficulty level, there were 3 to 9 different Boggle boards (referred to as lessons) to choose from.

RELEVANT STUDY

There are many techniques to improve students' vocabulary, one of which uses games. In this time, the researcher will use games that are rarely found in the process of learning vocabulary, the game is Boggle Game. There are many researchers who say that teaching vocabulary with games is effective and very helpful.

The first researcher is from Amanda Fauziah (2018) from Faculty of Teachers Training and Education at University Tanjungpura Pontianak with the title *"The Use of Boggle Game to Improve Students Vocabulary in Writing Descriptive Text"* to students of class VII C grade of SMP Negeri 1 Mempawah Hilir in academic year 2015/2016. The research design of this study is classroom action research. Total sample of this research are 28 students who belonged to class VII C, it was found that the use of boggle games increased students' vocabulary in spelling aspects by connecting letters. In conclusion, the students' vocabulary in descriptive text has improved by using boggle games. It means that using boggle games can help students in the spelling and meaning aspects that help them in writing descriptive texts.

The second researcher is from Alipi Suciati (2010) from Faculty of Tarbiyah and Teachers Training State Islamic College of Tulungagung with the title *"The Effectiveness of Using Hidden Word Game to Improve Vocabulary Mastery of the Seventh Grade Students of SMPN 1 Munjungan"*. The research design of this research was experimental method and quantitative approach. Methodology of the research, pre-experimental research with pre-test and post test design. The researcher took two classes as sample of this research; there were E-class and F-class. Data collecting methods used in this research were interview and test. This research found that there was significant effect of the using Hidden Word Game on the students vocabulary. It means that the using Hidden Word Game there is significant effect in the vocabulary between thought by using hidden word game and those thought without using hidden word game.

The third researcher is from Dwi Arumningsih (2017) from Faculty of Teachers Training and Education at Purworejo Muhammadiyah University with the title *"The Effectiveness of Using Spelling Bee Games in Teaching Vocabulary Mastery at the Seventh Grade Students of Mts Al-Hidayah Nusawungu in the Academic Year 2016/2017"*. This research was conducted by using quantitative technique. In this research, the researcher used 60 students' of seventh grade of MTs Al-Hidayah Nusawungu as the sample. The researcher used pre-test and post-test to find out whether using spelling bee game is effective or not to improve students' vocabulary mastery at the seventh grade of MTs Al-Hidayah Nusawungu in the academic year 2016/2017. The result shows that the mean score of the post-test experimental group is higher than the mean score of post-test control group. It can be concluded that "spelling bee games is effective in teaching vocabulary at the seventh grade students of MTs Al-Hidayah Nusawungu in the academic year 2016/2017. By using spelling bee games, the teaching and learning process is more interesting.

From the explanations of researchers who have examined vocabulary learning using the game above, the researcher can conclude that the researcher will use a quantitative Quasi-Experiment research with design using pre-test and post-test. In this study, researcher used a sample of 58 students from two classes, namely the experimental class and the control class in examining the effect of the Boggle game on students' vocabulary mastery.

RESEARCH METHODOLOGY

This research used quantitative research in processing the data and getting the result. The researcher used Quasi-Experimental Method, it is an experiment that has a treatment, measurement and impact that has a change caused by the treatment. The researchers used the Non-Equivalent control group design as a research design with using pre-test and post-test.

Non-Equivalent control group is a design where research subjects are not randomly chosen to be involved in the experimental group and the control group.

In this research, involving two different classes, the first class is chosen as an experimental group which is give Boggle game as a technique while the second class is chosen as a control group which is give conventional technique. The researcher used this design because it can show the differences between a group that will be given a treatment and a group that is not given a treatment. In this research, the researcher used Boggle games as the learning method to improve the students' vocabulary mastery.

RESEARCH DESIGN

Group	Pre-test	Treatment	Post-test
Experimental	YE	X	YE
Controlled	YC	-	YC

YE = The result of pre-test or post-test of experimental class.

YC = The result of pre-test or post-test of controlled class.

X = Treatment.

According to (Dowdy, Weardon, & Chilko, 2004, p. 25) stated that "A population is commonly understood to be a natural, geographical, or political collection of people, animals, plants, or objects". It means that a population is a group of living beings or residents who are in a certain place or space. The population of this research is Eighth grade students of MTs NURUL HIKMAH in academic year 2020/2021. The total students are 56 students.

According to (Dowdy, Weardon, & Chilko, 2004, p. 25) stated that "A sample is (a portion of the population), obtain measurements or observations from this sample (the sample data), and then use statistics to make an inference about the entire set of values". It means that the sample is a portion of the population whose characteristics are to be examine and the results of the research are then subject to the population. The sample of this research is Eighth grade students there are two classes, the classes is VIII-A with 30 students as experimental group and VIII-B with 30 students as control group.

According to (Sugiyono, 2016, p. 85) "Purposive sampling is a technique of determining samples with certain considerations". So, the researcher used purposive sampling technique for this research. The researcher choose the purposive sampling technique because the researcher wanted to use a class that had difficulties in learning English.

In collecting data, the researchers choose a multiple choice tests. It is a test where each item has more than one alternative answer. Usually there are two to five alternative answers given. the researcher use multiple choice tests is related with words meaning to find a word of synonym or antonym. This test was given to get the objective data on students' achievement in vocabulary with Boggle game in classroom experiment. The researcher applied two tests to collect data, there are pre-test and post-test.

RESULT AND DISCUSSION

Before analyzing the data, the researcher will provide an explanation. The researcher reported the result of the research for both experimental class and controlled class about the effect of boggle game on the seventh grade students' vocabulary mastery at MTs Nurul Hikmah to find out whether there is significant result or not. In conducting this research, two groups from two classes were taken as samples in the research, namely class VIII-A as Experimental class that consists of 30 students using Boggle Game and VIII-B as Controlled class that consists of 30 students using conventional technique.

The researcher collected the data by using a multiple choice test online using Google Form. The data were collected from students' pre-test and post-test. This research was

conducted for 3 meetings with descriptive text material. To find out the learning outcomes of the two groups, before being given treatment, both groups were given a pretest. The test is given to determine the extent of student learning outcomes. After being given different treatments for the experimental class and the control class, the two groups at the end of the lesson were given a posttest to find out which group had better learning outcomes for the material presented.

After giving pre-test, the researcher conducted direct teaching in the class by giving material to the experimental class conducted for 2 meetings and the control class conducted for 3 meetings, because at that time the school gave permission to researchers to research directly in the class. However, considering that the situation is still not normal due to the covid-19 virus, finally the school closed again. So, that it makes researchers choose online teaching using WhatsApp application conducted for 1 meeting in the experimental class. The researchers choose that application because the WhatsApp application is already owned by many people and easy to access by all students. Then, in the experimental class the researcher made a video explaining treatment the steps of boggle game to be shared via whatsapp application only with the experimental class. In the end of the research, the researcher giving post-test for both classes whether to find out which group had better learning outcomes for the material presented.

Based on the research calculation, in this research the first giving pre-test for experimental class and controlled class the research calculation result of pre-test data from experimental class and controlled class by using T-test with significant level of 5% ($\alpha = 0,05$). The hypothesis test of pre-test was carried out which showed the results of $t_{count} (2.03) > t_{table} (2,00)$ the meaning that t_{count} is higher than t_{table} which showed that there was a significant difference between the experimental class and the control class.

After giving the pretest, the researcher gave learning treatment in the experimental class using the Boggle game. In the control class, researchers used conventional methods. After that the researcher conducted a post-test for the two classes. Based on the results of the calculation of the post-test data research from the experimental class and the control class using the t-test, it was found that the vocabulary mastery of students in the experimental class taught using the Boggle game media was different than those in the control class, the class taught by conventional methods.

The post-test data analysis begins with calculating the central tendency of the post-test data. From the calculation results, the central tendency shows that the post-test mean score of the experimental class is (83.50), while the post-test mean score is the control class (73.10). The post-test standard deviation score for the experimental class was 58.379, while the post-test standard deviation score for the control class was 39.897. After that, the researchers tested the hypothesis using Fisher's test where the results showed $t_{count} (5.75) > t_{table} (2.00)$, which means that t_{count} greater than t_{table} which indicated that H_1 was accepted where there was a significant difference between the experimental class taught using Boggle game media and controlled class taught by conventional methods.

Based on the second test hypothesis above, it shows that the use of the Boggle game media is more effective in increasing students' vocabulary mastery in the experimental class than in the control class. Boggle game has a good effect on students' vocabulary mastery. The use of the Boggle game can make students disciplined in obeying rules, behaving honestly, increasing the meaning and spelling aspects so that it is easy to remember words and also easy to spell vocabulary. Not only that, this game can also make students interact socially and cooperate with fellow students so that students can hone their brains or good minds to train concentration and memory, solve problems, think creatively, critically, and make decisions in learning strategies.

Based on the explanation above, the researcher can conclude that the Boggle game media can improve students' vocabulary mastery. The use of these games is useful for students to improve the spelling aspect so that it is easy to remember vocabulary and students can hone their brains or good minds to train their concentration and memory. This can be proven in

statistical calculations in testing the hypothesis. The results showed that the significance score of the students in the experimental class given better treatment than the control class.

CONCLUSION AND SUGGESTION

Based on data analysis, hypothesis testing, and discussion, it can be concluded that the game of boggle has an effect on the seventh-grade students' vocabulary mastery at MTs NURUL HIKMAH. This can be seen from the results of the post-test average score of the experimental group higher than the average post-test control group (83.50 > 73.10). In addition, the t-test result is higher than t-table (5,75 > 2,00).

It can be concluded that the used of Boggle games in teaching vocabulary there is an effect on students' vocabulary mastery. This game can be improved because it is easy to play and understand by students of junior high school and fits in all material of vocabulary. So, the hypothesis was accepted.

Then, Boggle game can provide benefits and influence for learning, it is advisable for teachers to use interesting methods, techniques, or media in the teaching and learning process with a wider scope or other materials. Then, the teacher is advised to understand the needs of students, so that the teaching and learning process becomes fun, enjoyable, and interesting. And for students must be active and participate in all activities carried out in the teaching and learning process so that students can get better scores.

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