

The Effectiveness Of Using Kahoot Application As Media Of Vocabulary Mastery At Tenth Grade Of SMAN 1 Bukittinggi

Nurfajrina¹, Eliza²

^{1,2}IAIN Bukittinggi

E-mail: nurfajrina.agam@gmail.com¹, lizachio89@yahoo.com²

Article History:

Received: 20 Januari 2023

Revised: 25 Januari 2023

Accepted: 23 Februari 2023

Keywords: Using Kahoot Application, Media, Vocabulary Mastery.

Abstract: *The aim of this research was to know how the effectiveness of using Kahoot as media of vocabulary mastery at tenth grade of SMAN 1 Bukittinggi. The design of this research was descriptive quantitative research. The instrument of this research was documentation for collecting students vocabulary scores of the students after using Kahoot application. The population of this research was all students at tenth grade of SMAN 1 Bukittinggi which consists of 12 classes. The sample was 68 students which were taken from two classes by using purposive sampling technique. Based on the results of this research, it was concluded using Kahoot application as media of vocabulary mastery at tenth grade of SMAN 1 Bukittinggi was on good category where the students' mean scores was 77,31 lies on the percentage 66-79 which was effective on rating quality. Furthermore, using Kahoot application was effective to be used as media of vocabulary mastery at tenth grade of Bukittinggi.*

INTRODUCTION

Vocabulary is one of the important aspects in learning a language. It is learned to support communication in a language. In other words, if the students learn a language without mastering the vocabulary then they will be difficult to communicate with others. Rivers as quoted by Nunan (1991) stated that it would be impossible to learn a language without vocabulary because learning language means learning its vocabulary. It means that a language will be meaningful because of its vocabulary. In addition, mastering vocabulary does not only ease the students in communication but also help students in gaining, understanding and enhancing knowledge of a language. Thus, vocabulary has primary role in learning a language.

In learning English, vocabulary is one of language components that must be taught to the students because it can develop students' English skills comprehensions. According to Richard and Renandya (2002) vocabulary is the basic component that must be reached by the students in order to comprehend English skills, namely listening, speaking, reading and writing. In listening, students' vocabulary mastery influences their understanding toward teachers' speech, class discussion, and other speeches. In speaking, the words that they choose in speaking affect how well they deliver a message. In reading, students' vocabulary affects their ability to understand and comprehend a text. In addition, dealing with writing, students' vocabulary also influences how clear they deliver their messages to the reader. Indeed, vocabulary is the language components that

should be mastered in order to reach English skills comprehension.

As a basic component of learning English, vocabulary is taught from primary level until high level of educational institutions. In elementary school, the teaching of English is focused on students' vocabulary mastery. The teacher introduces the vocabulary to the students and the students try to understand meanings of the vocabulary, for instance name of animals, name of fruits, etc. In junior high school, students learn how to create sentences by using the vocabulary that they have acquired. However, in senior high school, vocabulary is not a specific subject that is taught in the class. In fact, vocabulary is not taught separated but it is taught integrated into four English skills. Indeed, vocabulary is taught and learned by the students from primary level until high level of educational institutions (Darren, 2017).

In the senior high school, vocabulary is not a specific subject that is taught in the class but vocabulary should be needed to be taught before teaching English skills because vocabulary is the component to learn English skills. Furthermore, a good teacher should be able to find a good way, technique and method to ease the students to remember and to be master in vocabulary which it makes students more enjoyed and interested in teaching vocabulary. Besides, the teacher has to create and use the instructional media and creative technique which can motivate students and influence students' engagement in the process of learning. The instructional media can be used by the teacher to achieve the goal to increase students' vocabulary. Hence, teaching students vocabulary mastery is not taught as the specific subject but the teacher should create creative technique and instructional media that can enhance students' motivation and ease students to be comprehend in learning English skills.

Instructional media is one of the important elements in learning process that used to stimulate students' interests in learning process. According to Gagne in Sadiman et al (2010), instructional media is defined as the tools that used in the process of learning to deliver the materials which can arise learners' curiosity and encourage them to learn more active. Thus, the teacher should consider the use of instructional media to encourage students' motivation in the process of learning.

Generally, there are several types of instructional media which classified by some experts. Harmer classified the various instructional media that are pictures, course book, boards, OHP (Overhead Projectors), flipchart, and computer based-technology. By the integration of technology and internet, some experts stated that there are many types of instructional media namely print technology media, audio-visual technology, media technology based on computer and the combination of between print and computer technology. There are some applications that represent media based on the computer such as, quizzes, duolingo, kahoot, etc. In brief, there are several types of media that can be applied in the process of learning.

The instructional media that has been applied by the English teacher of SMAN 1 Bukittinggi, to improve students' vocabulary mastery is kahoot. Kahoot is one of the digital game based learning which is played as an instructional media. According to Dello (2015), Kahoot is one of attractive instructional media that can be used to foster students' participation and involvement because of its game-based platform. In addition, game based learning potentially can be an effective instructional media because of its stimulation from visual and verbal components. Furthermore, the games which are delivered on kahoot can be created by the teacher based on appropriate material and curriculum which can be played using smartphone or computer in individual mode or team mode. The advantages of using kahoot, besides strengthen students' understanding in mastering vocabulary, the students can also see the video or picture while join the game. Although, kahoot has several advantages, but still the teacher needs to be aware with some features of kahoot which can give disadvantages such as, students should provide internet data

connection to play kahoot. In short, kahoot is one of digital game based learning its used as instructional media in teaching vocabulary.

Based on preliminary research which was conducted by the researcher at tenth grade of SMAN 1 Bukittinggi, by doing interview with English teacher about the using of Kahoot application as media of vocabulary mastery at tenth grade of SMAN 1 Bukittinggi. The English teacher said that she used Kahoot as media of mastery vocabulary but not all of students could access Kahoot. Moreover, by doing the observation in the class and collecting the documentation of students' score after using Kahoot. Talking about the scores after using Kahoot, some students got the score reaching the criteria of standard minimum completeness (KKM), but there were some students whose score under the KKM. In using kahoot, the teacher created quizzes which opened competition among the students. During kahoot was used, some students enjoy it but some of them were not serious. They did the quizzes fast without thinking of the right answer.

Based on background of the problem, the purpose of this research is to find out whether using Kahoot application is effective or not for the students' vocabulary mastery the effectiveness of at tenth grade of SMAN 1 Bukittinggi.

RESEARCH METHOD

In this research, the researcher used descriptive quantitative research. Descriptive research is a research that is used to establish the existence of the phenomena by explicitly describing them. According to Gay (1990) descriptive involved collecting data in order to answer the question concerning the current status in the subject of study. In the other word, descriptive research may be defined as a purposive process of gathering, analyzing, classifying, and tabulating data.

According to Margono (2007) quantitative research is a process to find knowledge using the numeral data as the instrument and to find information about everything that would be found. It means that quantitative research refers to the systematic empirical investigation of social phenomena via statistical, mathematical, or numerical. Furthermore, in this research, the researcher wants to get information, to find out, or to know how the effectiveness of using Kahoot as media of vocabulary mastery at tenth grade of SMAN 1 Bukittinggi.

The population from this research was 424 students that was the total of the students in twelve classes of the tenth grade at SMA N 1 Bukittinggi. There are some purposes and considerations why the researcher used purposive sampling technique. The first consideration, the researcher was allowed to conduct the research in class X IPS 1 and X IPS 2. The second, the English teacher suggests to use purposive sampling technique to ease the researcher for collecting the data. The teacher suggested class X IPS 1 and X IPS 2 because the classes are homogeny based on the students' vocabulary scores.

Instrumentation is the whole process of collecting data by using the instument. The instrument which was used in this research was documentation. The documentation is the score of students' vocabulary mastery after using Kahoot application as media of vocabulary mastery. The researcher used documentation to collect data about students' vocabulary score. The students' score was gotten by the researcher from English teacher at tenth grade of SMAN 1 Bukittinggi where the students' score is known as documentation. The documentation was taken from students' daily score of vocabulary after practicing Kahoot as media of learning.

The reseacher used the documentation of students' score to analyze the data. In this research, the researcher analyzed the data by using several steps:

- 1) The researcher collected the students' scores.
- 2) The researcher analyzed the students' scores by arranging scores from the lowest to the highest.
- 3) The researcher found the interval of the data. It could be seen as the following below:

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$$I = \frac{R}{B}$$

$$R = (H-L) + 1$$

$$B = 1 + (3,3) \text{ Log } n \text{ (n = total sample)}$$

The formula were illustrated as follows:

I : Interval of the data

R : Highest score – lowest score + 1

B : $1 + 3,3 \log n$ (n= total sample)

- 4) The researcher put the score into distribution table.
- 5) The researcher found out the frequency of the data.
- 6) The researcher determined the mean, median, modus of the data.
- 7) The researcher arranged the score of percentage into the table of rating scale. In addition, the researcher used rating to arrange the level of. The researcher would give interpretation of the result by using table.
- 8) The researcher presented the data using score distribution bar chart in using kahoot as media of vocabulary mastery.
- 9) The researcher concluded the effectiveness of using Kahoot application at class tenth grade of SMAN 1 Bukittinggi.

RESULTS AND DISCUSSION

To answer the research question about how was the effectiveness of using Kahoot as media of students' vocabulary mastery at tenth grade of SMAN 1 Bukittinggi", the researcher collected the data which was the transcript of students' vocabulary mastery scores from both class X IPS 1 and X IPS 2. Based on the data which was gotten from the teacher, it was found that the students scores arranging from the highest scores to the lower scores from both classes. It can be seen in the following table.

Table 1. The students' score from the lowest to the highest both of class

Scores	Tally	Frequency
50		2
55		3
60		1
65		6
70		5
75		10
80		19
85		8
90		4
95		1
100		7
		Total (N) = 68

Based on the table above, it could be seen that the highest score was 100 and the lowest score was 50. There were three students who got 50, two students who got 55, three students who got 60, six students who got 65, five students who got 70, ten students who got 75, nineteen students who got 80, eight students who got 85, four students who got 90, one student who got 95, seven students who got 100. Furthermore, the researcher found the range (R), amount of class (B), and

interval of the data (I), the researcher must find the range and amount of class first. It could be seen as following formula below:

$$I = \frac{R}{B}$$

I = Interval of the data

R = Range

B = Amount of Class

The sample of this research was 68 students (n=68), the highest score was 100 and the lower score was 55, it could be counted as following below:

$$\text{Range (R)} = (H - L) + 1$$

$$= (100 - 50) + 1$$

$$= 50 + 1 = 56$$

$$\text{Amount of Class (B)} = 1 + 3.3 \log n$$

$$= 1 + 3.3 \log 68$$

$$= 1 + 3.3 (1.8)$$

$$= 1 + 6.05$$

$$= 7.05 = 7$$

$$\text{Interval (I)} = \frac{R}{B} = \frac{56}{7} = 8$$

Based on the result of calculated above, it could be seen that the range (R) of the data was 46, the amount of class was 8, and the interval of the data was 8. After that it was calculated into the distribution frequency table, it could be seen as below:

Table 2. The distribution table of students' vocabulary score

Interval class (Score)	<i>f</i>	<i>x</i> (Mid Point)	<i>f · x</i>
93 – 100	8	96,5	772
85 – 92	12	88,5	1062
77 – 84	19	80,5	1529,5
69 – 76	15	72,5	1087,5
61 – 68	6	64,5	387
53 – 60	5	56,5	282,5
45 – 52	3	45,5	136,5
	N = 68		$\sum f(x) = 5257$

Based on the table above, the researcher has arranged the data into the distribution table, then the researcher has got the sum of midpoint $\sum f(x) = 5257$ and the amount of the data (n) = 68. Then, the researcher found out the mean of the data or the mean of the students' vocabulary mastery score. It can be seen as following:

$$\text{Means } (\bar{x}) = \frac{\sum f(x)}{n} = \frac{5257}{68} = 77,31$$

Based on the result of calculated above, it could be seen that the mean of the data was **77,31**. Then, the researcher got the mean of the data or the mean of student's vocabulary score, the researcher needed to find out the median. Where to find out the median as following below:

Tabel 4.5: The distribution table of vocabulary mastery result

Interval	<i>f</i>	<i>f(kb)</i>	<i>f(ka)</i>
93 – 100	8	68	8
85 – 92	12	60	20 → <i>f(ka)</i>
<i>l=76,5</i> 77 – 84	19 → <i>fi</i>	48	39
69 – 76	15	29 → <i>f(kb)</i>	54
61 – 68	6	14	60
53 – 60	5	8	65
45 – 52	3	3	68
	N = 68		

Based on the table above, it can be seen that the $l = 76,5$, $fi = 19$, $f(kb) = 29$, $f(ka) = 20$, $i = 8$, and $n = 68$, so it was put into the formula of median as following below:

$$\begin{aligned}
 \text{Median (Me)} &= l + \frac{\frac{1}{2}n - f_{kb}}{f_i} \times i = 76.5 + \frac{\frac{1}{2}(68) - 29}{19} \times 8 \\
 &= 76.5 + (0,26) \times 8 \\
 &= 76.5 + (2.1) \\
 &= \mathbf{78.6}
 \end{aligned}$$

Based on the result of calculated above, it can be seen that the median (*Me*) of the data was **78,6**. Beside that the researcher needed to find the mode (*Mo*) of the data. To find the *Mo*, the researcher needed to find out the *l*, *fa*, *fb*, and *i*. It can be seen on table below:

Table 3. The distribution table of vocabulary mastery result

Interval Class (Score)	Frequency (F)
93 – 100	8
85 – 92	12 → <i>fa</i>
<i>l=76,5</i> 77 – 84	19
69 – 76	15 → <i>fb</i>
61 – 68	6
53 – 60	5
45 – 52	3
i = 8	N = 68

$$\begin{aligned}
 \text{Modus (Mo)} &= l + \frac{f_a}{f_a + f_b} \times i = 76.5 + \frac{12}{12 + 15} \times 8 \\
 &= 76.5 + 0.44 \times 8 \\
 &= 76.5 + 3.52 \\
 &= \mathbf{80.02}
 \end{aligned}$$

Based on the result of calculated above, it can be seen that the mode (*Mo*) of the data was **80,02**. Furthermore, based on the calculated of mean, median, modus the data above, it was gotten that the mean (*X*) of the data was **77,31**, the median (*Me*) of the data was **78,6**, and the mode (*Mo*) of the data was **80,02**. Moreover, the result of the students' mean score of percentage was arranged into the rating scale table where the rating scale table was used to arrange the level of the

students' vocabulary category on using Kahoot as media of learning. Beside that this rating scale in this research was used by purposing to know and to find out the the effectiveness of using Kahoot as media of vocabulary mastery at tenth grade of SMAN 1 Bukittinggi. In addition, the researcher gave interpretation of result by using rating scale table. It could be seen as following below:

Table 4. The interpretation of students' ability category in mastering vocabulary using Kahoot application

Percentage of Rating Scale	Students' Mean Score	Rating Quality
80 – 100		Very effective
66 – 79	77,31	Effective
56 – 65		Sufficiently effective
40 – 55		Not effective
30 – 39		Less than effective

Based on the table above, it can be seen that the students' mean score (**77,31**) was in rating quality effective. Furthermore, the researcher presents the data using bar chart to know the students rating scale (students' scores) and the students frequency who got the score: very good, good, enough, less and fail.

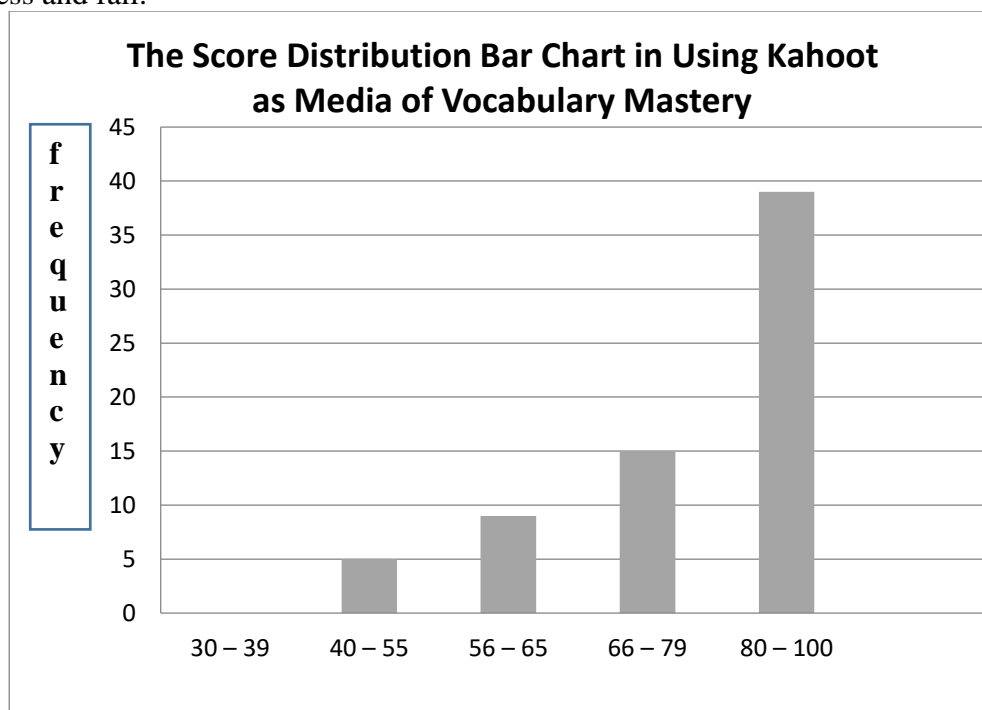


Figure 1. The Bar Chart of the Students' Vocabulary Score

Based on the diagram above, there were 39 students on the rating scale 80-100. Then, there were 15 students on the rating scale 66-79. Next, there were 9 students on the rating scale 56-65. The last, there were 5 students on the rating scale 40-55.

This research was about the effectiveness of using Kahoot as media of students' vocabulary mastery at tenth grade of SMAN 1 Bukittinggi. This section discussed the research findings based on the theories. Vocabulary is the basic of English component that must be reached by the students in order to master English skills, they are: listening, speaking, reading and writing (Ricard, 2002). According to Hornby (1995) vocabulary is the total number of words in a language and vocabulary as a list of words with their meanings.

In teaching vocabulary, there are some media, one of the media that used by the teacher is using Kahoot. Kahoot is an application that used as attractive media which can foster students' participation and involvement because of its game-based platform. Kahoot can be played by the students using smartphone or computer in individual mode or team mode. Kahoot has several feature, those are quiz, quick poll (discussion) and survey. According to Dellos (2015), Kahoot is one of attractive instructional media that can be used to foster students' participation and involvement because of its game-based platform. In addition, game based learning potentially can be an effective instructional media because of its stimulation from visual and verbal components. In addition, the games which are delivered on kahoot can be created by the teacher based on appropriate material and curriculum which can be played using smartphone or computer in individual mode or team mode. The advantages of using kahoot, besides strengthen students' understanding in mastering vocabulary, the students can also see the video or picture while join the game (Thornbury, 2002). Although, kahoot has several advantages, but still the teacher needs to be aware with some features of kahoot which can give disadvantages such as, students should provide internet data connection to play kahoot. In short, kahoot is one of digital game based learning that used as instructional media in teaching vocabulary (Mansur, 2019).

Based on the research finding above, the researcher got the precentage of students' vocabulary mastery score after using Kahoot as media of learning at tenth grade of SMAN 1 Bukittinggi. Based on the table of the interpretation of level students' vocabulary mastery, it could be concluded that the percentage mean score of students was 77,31 where it was on the percentage of rating scale 80-100 which was on the good category. Moreover, based on the percentage of learning standard that was found 72,05% from the percentage of rating scale on 72%-89% which was effective on rating quality.

It means that using kahoot as media of vocabulary mastery at tenth grade of SMAN 1 Bukittinggi was effective by seeing the percentage of rating scale. This finding is in line, Kahoot is one of game based based learning that can be used as media of students vocabulary mastery. Kahoot is an application that used as attractive media which can foster students' participation and involvement because of its game-based platform. It can be concluded that using Kahoot as media of vocabulary mastery is effective because the students' score after applying Kahoot was on effective in based on rating quality.

CONCLUSION

The purpose of this research is to describe and to know how the effectiveness of using Kahoot application as media of vocabulary mastery at tenth grade of SMAN 1 Bukittinggi. Based on the research questions, the results of the rresearch can be concluded: The researcher found the mean (**X**), median (**Me**) and modus (**Mo**). The result of mean was 77,31. The result of the median was 78,6. The result modus was 80,02. Based on the students' mean score result, it was 77,31, the mean of students ability on the rating scale 80-100 which was on effective rating quality. In brief, it showed using Kahoot application as media of vocabulary mastery at tenth grade of SMAN 1 Bukittinggi was effective.

Based on the research findings, then the researcher would like to propose several suggestions, as follows:

1. It was important for the students to know that Kahoot application can be used to improve their vocabulary mastery.
 2. It was suggested that English teacher still needed to improve and to use the other technique and media in teaching vocabulary in order to get the better result although using Kahoot as media of vocabulary mastery was effective.
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3. It was suggested that the next researcher who would like to conduct any research that was related to teaching vocabulary by using Kahoot use different design of the research in order to find more accurate data

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