

Applying Kahoot to Improve the Senior High School Students' Vocabulary Achievement

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Abstract

This research was a classroom action research which intended to improve the senior high school students' vocabulary achievement by applying Kahoot as learning media in the teaching and learning process. The research was conducted to 40 students of grade X at Islamic Senior High School (Madrasah) in Kota Blitar. The procedure in this research followed some steps based on Kemmis and Taggart model namely; 1) Planning, 2) Acting, 3) Observing and 4) Reflecting. The data collection of this research were taken from tests and questionnaire. The research showed that the use of Kahoot as media in teaching and learning vocabulary particularly in "introducing oneself" could improve the students' vocabulary achievement. The pre-test showed that the students' score was 59.23. That score was under the minimum criterion mastery set by the school (75.00). After 1st cycle, there was an improvement on the students' score became 71.23 but it was still under minimum criteria. Therefore, it needed the 2nd cycle in which the score improved into 84.58. The improvement on the students' achievement was supported by the students' positive attitude toward the use of Kahoot in teaching and learning.

Keywords: Kahoot, Vocabulary Achievement, Classroom Action Research

1. Introduction

English is an international language that is widely used and studied in the world, in learning English 4 skills must be learned by the students, namely: Reading, Speaking, Writing, and Listening. In addition to those 4 skills students are also required to master sub-skills such as Vocabulary and Grammar. Vocabulary is an important element to master those four skills in English.

Schmitt and McCarty (1997: 6) explain that vocabulary has an important role for students to master 4 skills in English. For example in Listening, with sufficient vocabulary mastery will make the students easier to understand what is conveyed by others. In reading and writing, having sufficient vocabulary will help the students write their ideas smoothly and understand the text they are reading easily. In speaking, having sufficient vocabulary will make the students express their idea or communicate with others fluently. Therefore,

mastering vocabulary cannot be ignored by those who are learning English as a second or foreign language.

In line with the opinion above Solikhah (2015) states the limitations of mastering vocabulary will cause students to have difficulty in expressing ideas and intentions of expressions towards certain goals. Therefore mastering vocabulary is necessary to support students in mastering the target language they learn.

However, in reality, English learning of vocabulary in class X MIA 1 MAN 1 Kota Blitar still needed improvement, especially in the mastery of vocabulary about introducing yourself. Based on the results of the pre-test conducted by the researchers on July 20, 2018, the average value of students was not satisfied (59.23). The students' result was still far below the Minimum Learning Completion (KBM) set by the school which is equal to 75.00.

In addition, based on the results of preliminary observations that had been conducted by the researchers when teaching learning took place, most of the students were less interested in the lessons which teachers convey conventionally, they tended to be passive when the teacher asked the questions, only a few students could answer the questions from the teacher correctly, many students looked sleepy due to the English hours at the end of the session.

Therefore, the researchers realize that there must be an attempt to overcome the problems that occurred in the class, the teacher must teach the students with creative and fun methods to improve the students' achievement and motivate them in joining the lesson. One fun way to learn English is through game-based learning. Fadhilawati (2012: 51) said that the success of students in mastering vocabulary depends on whether or not vocabulary is permanently embedded in their brains, therefore efforts are needed so that students can review what has been studied continuously both at school and at home. One of application that facilitate the students to review the material in interesting and fun way is Kahoot.

Kahoot is one of game-based learning that could be applied by the teacher in teaching English. It can be used by the teachers for creating interesting quizzes, discussions, and surveys. In education, we can use Kahoot in our classrooms to make our learning more interesting and enjoyable. Kahoot provides a suitable learning situation for combining inquiry-based learning and games. In researchers' opinion, the use of Kahoot is also suitable to be integrated with learning in the current curriculum of Senior high School (The 2013 Revised Curriculum).

The advantages of Kahoot, among others for examples: on this web tool allows teachers to make quizzes, discussions, and surveys by including various elements such as video, images, and text. Then students can access using a variety of different devices such as smartphones, tablets, laptops and other devices easily. The teacher can also add a time limit for answering quizzes or surveys that have been given so that not only the correct answers are needed but also the timeliness is the main point in answering the quiz or survey given by the teacher. As one of the game methods, Kahoot has fulfilled the requirements as stated by Ginnis (2008: 214) including: 1) Creating flexible working relationships between students, 2) Breaking the ice between students and teachers, 3) Increase or decrease in energy levels, and 4) Refocusing attention.

Besides, Kahoot in learning can also help teachers to gather informal feedback from students, assess students' understanding of learning, and make polls about matters relating to learning that occur in class. In terms of creativity, Kahoot allows students to not only answer questions but also make their questions.

Kahoot has been used as a game method in learning by educators. Dellos (2015) reports that the students felt very enthusiastic in learning by using Kahoot since they were first introduced to the game. Learners can easily use this application to learn both mentally and independently. Furthermore, Rofiyarti and Sari (2017) report that Kahoot can be used as an alternative to foster children's competitive and collaborative spirit, in this case, Kahoot is multiplayer so that children can collaborate and compete through games. Gheza (2016) also reports that students gave positive responses to the use of Kahoot as an ice breaker in film interpretation classes.

Based on the situation and problems faced by students of class X MIA I MAN I Kota Blitar which has been described above, as well as the superiority of Kahoot, and previous experiences of educators in using Kahoot in learning, the researchers were interested in conducting a research with the title "Applying Kahoot to improve the Students' Vocabulary Achievement at MAN 1 Kota Blitar in the 2018/2019 Academic Year" In this research, the researchers had 2 questions to be answered: 1) Can the use of Kahoot increase the students' vocabulary achievement on the topic of introducing yourself?, 2) How do the students respond to the use of Kahoot in learning English vocabulary on the topic of introducing yourself?

Furthermore, the scope of this research is limited to the use of strategies (Kahoot) to improve the 40 students' vocabulary achievement, especially on the topic of introducing yourself, which is stated in Basic Competency 3.1 (Asking and giving information related to identity) in Class X MIA 1 MAN I Kota Blitar in the first semester of the 2018/2019 academic year.

2. Method

Because there were problems that occurred in the classroom and must be solved immediately, the research design used by the researchers was CAR (Classroom Action Research). Classroom Action Research is a research design that is specifically designed to improve the quality of learning in the classroom (Latief: 2010: 81). In other words, classroom action research can be a vehicle for teachers to reflect and act systematically in their teaching to improve students' learning processes and outcomes.

In this case, classroom action research was carried out by the researchers to improve the students' vocabulary achievement, especially on the topic of introducing yourself by applying Kahoot in the teaching and learning process.

2.1 Participants

This research was a classroom action research to overcome the problems that exist in the Classroom (X MIA I) at MAN Kota Blitar. This school is located on Jalan Jati Number 78 Blitar. The subjects of this research were 40 students from class X MIA 1 consisting of 12

male students and 28 female students. The students of Class X MIA 1 were selected as research subjects because their vocabulary mastery, especially on the topic of introducing yourself, was still low, this was proved from the average pre-test scores which were still very far from the minimum criterion mastery set by the school. The pre-test score was (59.23).

2.2 Data Collection

2.2.2 Instrument of collecting data

In collecting the data, the reserachers used test and questionnaire.

a. Test

The test was used by the researchers to determine the students' improvement on vocabulary achievement after applying Kahoot in teaching and learning process, especially on the topic of introducing yourself which consists of 20 multiple choice questions related to the topic given.

b. Questionnaire

Questionnaire was used by the researchers to find out the students' responses after they have been taught vocabulary using Kahoot application. This questionnaire was given to the students at the end of the study. The questionnaire consists of 10 statements that must be answered by students by choosing 5 options namely; AA = Absolutely Agree, A = Agree, D = Doubtful, NA = Not Agree, and ANA = Absolutely Not Agree.

2.2.3. Techniques for Collecting Data

a. Give Tests to the Students

In this research, there were 2 types of test, the first is pre-test, Pre-Test was conducted on 24 July 2018. The researchers gave Pre-Test to the students to know the students' ability in understanding vocabulary about introducing yourself after they were taught by using a conventional method. The second test is Post-Test; it was conducted on 31 July 2018 (Cycle 1) and 21 August 2018 (Cycle 2). The post-tests were done by the researchers to know the students' ability in understanding the vocabulary of introducing yourself after they were taught by using Kahoot.

b. Give Questionnaire to the Students

The questionnaire was given to the students to know the students' responses toward the use of Kahoot in teaching and learning vocabulary. It was given at the end of cycle 2 after the students did their post-test (21 August 2018)

2.3 Data Analysis

To analyze the data taken from the test result, the researchers using formula 1 and 2 while formula 3 is used to analyze the questionnaire. The formulas are described below:

a. Formula to determine the individual score of the students:

$$\text{Score} = \frac{\text{Correct answer}}{\text{Total items}} \times 100\%$$

b. Formula to determine the mean score of the class:

$$M = \frac{\sum X}{N}$$

c. *Formula to obtain percentage from the questionnaire*

$$\dots\% = \frac{\text{Number of students choosing a certain option}}{\text{Total number of students}} \times 100$$

2.4 Research Procedures

The Classroom Action Research Procedure used by the researchers is based on the Kemmis and Taggart model (1994: 27) which consists of Planning, Acting, Observing and Evaluating and Reflecting. This research was carried out from July to August 2018 which covered 2 cycles as described below:

2.4.1 Cycle 1

a. *Planning*

In this planning stage, the researchers conducted activities including: 1) Identify the problem and identify alternative solutions to the problem, 2) Prepare RPP (lesson Plan), 3) Prepare material in Kahoot application, 3) Prepare resources, materials, and learning aids, learning needed, and 4) Preparing Test

2. *Acting*

In this case, the researchers implementing the action of cycle 1 on 31 July 2018 by applying these following procedures: 1) The teacher makes apperception related to the material to be delivered, 2) The teacher asks students some expressions related to the identity they already know, 3) The teacher conveys that a quiz will be conducted to find out the extent to which students know the vocabulary associated with self-identity, 4) Learners are instructed to open the Kahoot application via smartphone or laptop, 5) The teacher displays the quiz that has been prepared previously through the projector screen, 6) Students enter the PIN displayed on the screen and then guided by the teacher working on the quiz, 7) The quiz is held once in a learning activity for 15 minutes, and 8) At the end of the quiz, the teacher asks the students which parts are still difficult for students and tells them to practice vocabulary again at home.

3. *Observing and Evaluating*

In this stage, researchers conducted activities including: 1) Conducting open observation on the students' responses toward the teaching-learning process by using Kahoot, and 2) Evaluating the students by giving Post- Test to find out whether there was an increase in students' mastery of vocabulary or not after they were taught by using Kahoot (Post-Test Cycle I)

4. *Reflecting*

Reflection is a very important part in classroom action research, in this case, the researchers consulted the results of Post- Test of cycle 1 with the criteria for success that had been set to know whether it has met the criteria or not, if it does not meet the criteria, it will be continued in the next cycle. This is in line with Mistar (2010: 31) which states that reflection in CAR is an attempt to evaluate whether the implementation of learning is successful or not based on the predetermined success criteria.

In cycle 1 the average post-test results of students were 71.23. It did not meet the target or success criteria 75.00 so it must be proceed to cycle 2.

2.4.2 Cycle 2

a. Planning

In this planning stage, the researchers conducted activities including: 1) Identify problems in cycle I that have not been resolved and determine alternative solutions to problems and 2) Develop an action of cycle II

2. Acting

The implementation of the action cycle II which refers to the identification of problems that arise in cycle I by going through several alternative problem solving, including: 1) The teacher does apperception, 2) The teacher explains the material to be discussed with the objectives of learning to be achieved, 3) The students are asked to open the Kahoot application as was done at the previous meeting. (The students are more skilled using the application of Kahoot), 4) The students learn vocabulary in Kahoot with a longer time than in cycle 1, 5) The teacher explains the material that is still difficult for the students. 6) The teachers ask the students to do the exercise in group work.

3. Observing and Evaluating

In this stage, the researchers conducted activities including: 1) Conducting open observation which is observing students' to the learning process by using Kahoot. 2) While the evaluation, in this case, is done by giving tests to students to find out an increase in mastery of vocabulary or not (Post-Test Cycle II) and provide a questionnaire to determine students' responses after they are taught by using Kahoot.

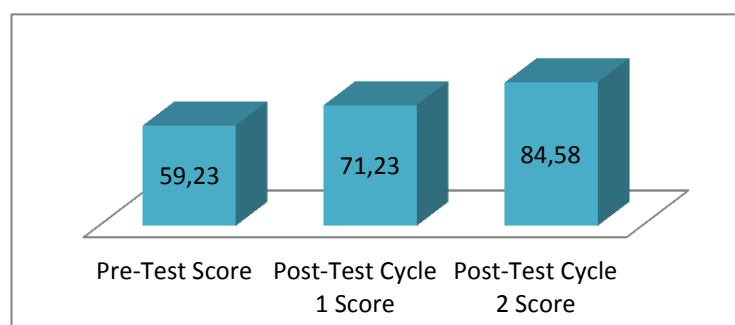
4. Reflecting

In the Second cycle, the students already could use the application of Kahoot more smoothly. And the results of the vocabulary mastery were also good, all students had already met the specified success criteria, the class average has reached 84.58. That result was higher than the minimum score set by the school (75.00). Besides that, the students also gave a positive response toward the questionnaire given. From the result above it can be concluded that the next cycle is not necessary to be done.

3. Results

3.1 The Students' Vocabulary Achievement before and after Using Kahoot

Based on the tests did by the researchers after teaching and learning activity using Kahoot on the topic "Introducing Oneself", the following was the result:



From the data above it can be concluded that an increase in the average value of the pre-test, to the post-test in the first cycle is from 59.23 to 71.23, but the increase has not met the established success criteria that each student gets the same value or more than 75.00. In the first cycle, there were still many students whose score did not meet the minimum mastery learning of 75, namely as many as 25 students, and there were 15 students who had exceeded the minimum learning completeness limit. Therefore it can be concluded that learning in cycle 1 still needs improvement so cycle 2 is carried out with results that have reached above the Minimum Learning Completeness. In cycle 2 the students are already familiar with Kahoot because after the first cycle the teacher tells the students to practice at home and after the post-test in cycle 2 they all meet the criteria for success even all students got the score above the KBM (Minimal Learning Completion) of the school. The average grade in the Post Test Cycle 2 was 84.58, this means that the use of Kahoot has succeeded in increasing the students' vocabulary achievement.

3.2 The Results of the Students' Responses toward the Use of Kahoot in Vocabulary Learning

Data regarding students' responses in learning vocabulary using Kahoot was obtained through a questionnaire consisting of 10 statements. It was given to 40 students in class X-MIA-1 MAN 1 Kota Blitar. The questionnaire consisted of four variables: (1) learning motivation, (2) learning outcomes, (3) completion of tasks, and (4) social relationship. The results of the questionnaire given by the researchers can be seen in the table 1 below:

Table 1: Students' Attitude toward the Use of Kahoot in Vocabulary Learning

No	Variable	Indicator	Questionnaire number	Question type	AA	A	D	NA	ANA	Total
1	Learning motivation	Motivated to learn vocabulary	1	Positive	35	5	0	0	0	40
			2	Positive	37	3	0	0	0	40
			6	Negative	0	0	6	5	29	40
			7	Negative	0	0	0	11	29	40
2	Learning outcome	Easy to learn new vocabulary and be more confidence	3	Positive	32	8	0	0	0	40
			4	Positive	34	6	0	0	0	40
			5	Positive	30	8	2	0	0	40
			10	Positive	29	11	0	0	0	40
3	Assignment completion	Motivated to do Homework on time	8	Positive	31	9	0	0	0	40
4	Social collaboration	Improving social relationship with friends	9	Positive	29	11	0	0	0	40

Note:

AA: Absolutely Agree

A: Agree

D: Doubt

NA: Not Agree

ANA: Absolutely Not Agree

Based on the data in table 3.1 above, we can know that the first variable (Learning Motivation) indicated by the students' eagerness to learn vocabulary shows very good results. It can be seen from the four questions given to students, namely: Statement 1: I was eager to learn vocabulary using Kahoot, there are 35 students (88%) stated strongly agree and 5

students (12%) agreed to the statement. Statement 2: Using Kahoot make learning vocabulary became more interesting and not boring, there are 37 students (93%) stated strongly agree and the remaining 3 students (7%) agreed. Statement 6: I find it difficult to learn vocabulary using Kahoot, there are 29 students (73%) stated strongly disagree, 5 students (13%) stated disagree, and the remaining 6 students (14%) expressed doubt. The last statement that became the indicator of the first variable was statement 7: I think using Kahoot in learning vocabulary is very boring because it is a waste of time and energy, there are 29 students (73%) stated strongly disagree, and 11 students (27 %) stated that they did not agree.

The second variable, namely: Learning outcomes also show very satisfying results. It has 4 statement given to students, the first is statement number 3: In my opinion learning vocabulary using Kahoot can increase vocabulary easily, there are 32 students (80%) stated strongly agree and 8 students (20%) agree. The second is statement number 4: Using Kahoot allows me to learn new vocabulary easily, there are 34 students (85%) expressed strongly agree, and 6 students (15%) agreed. The third is statement number 5: Using Kahoot allows me to learn vocabulary more meaningfully, there are 30 students (75%) expressed strongly agree, 8 students (20%) agreed, and 2 students (5%) stated doubtful. The fourth is statement number 10: Learning vocabulary through Kahoot makes me encourage to express written ideas or answer questions from the teacher, there are 29 students (73%) expressed strongly agree, and 11 students (27%) agreed.

The third variable, namely task completion also shows a very satisfying response, it proved that kahoot got positive response from students. The indicator of the third variable is statement number 8: Using kahoot makes you motivated to complete vocabulary assignments given by teachers both at school and at home, 31 students (78%) stated strongly agree, and 9 students (22%) stated agree.

The fourth variable is social relations, this variable also gets very satisfying results as evidenced from the indicators that get good responses namely statement number 9: Learning vocabulary using Kahoot can increase collaboration between friends through group activities, as many as 29 students (29 students) 73%) strongly agreed, 6 students (14%) agreed, and 5 students (13%) expressed doubt.

4. Discussion

The objective of this research was to improve the students' vocabulary achievement of introducing yourself by applying Kahoot at the tenth grade students of MIA I of MAN Kota Blitar. The result of this reserch revealed that the use of Kahoot Application in teaching vocabulary could improve the students achievement especially dealing with the topic of introducing yourself. Beside the students' achievement improved, In this case, the students were also motivated in learning vocabulary of introducing yourself prepared by the teacher in Kahoot, they loved to review the materials and did the tasks gave by the teacher at home, and the social relationship among the students were also increased.

There are 2 cycles in this research, in cycle 1 actually the students' achievement increased from 59.23 to 71.23, but it did not achieve the criterion of success set by the school (75.00), in cycle 1, many students still had difficulty in using Kahoot, so the teacher should

guide them patiently, however in cycle 2, the students had already mastered to learn the material by using Kahoot, and the students achievement improved significantly from 71.23 to 84.58. In the cycle 2 the teacher gave more additional time and opportunity for the students to work in groups, in this cycle, the students had already achieved the criterion of success of this research so, the researchers stopped their research in cycle 2.

The result of this research above agree with Dellos (2015) who said that Many students answer the quiz appropriately and are interested in being involved in discussing the content of the quiz created by the teacher in Kahoot. The students of X-MIA-1 are enthusiastic in joining the quiz. Moreover, the students asked the teacher to give more the quiz for learning at home. Furthermore, it also in line with Kurnia (2018) who argues that evaluation tools in the form of online tests by using Kahoot were very feasible as a good evaluation tool in learning. Moreover, the research results also agree with Gheza (2016) who reported that students gave a positive response to the use of Kahoot as an ice breaker in the film interpretation class. The students in this class also give positive response to the teacher giving the quiz at the beginning of the class as the ice breaking before the lesson starts. The last it also in line with Rofiyarti and Sari (2017) who reported that Kahoot can be used as an alternative media to foster children's competitive and collaborative spirit, in this case, Kahoot is multiplayer so that students can collaborate and compete through games.

From the research result above, and also the supporting result from previous researches, it is suggested for English teacher to use Kahoot as an alternative media to motivate the students to learn English.

5. Conclusions

Based on the results of the research discussed above, it can be concluded that kahoot application could improve the students' English Vocabulary achievement especially on the topic of introducing yourself, it was proved by the students' result of vocabulary learning outcomes from 59.23 to 84.58. In addition, the students gave positive attitude toward the use of Kahoot in vocabulary learning, in this case, they were more motivated and enjoyed learning English especially vocabulary through game-based applications (Kahoot), they loved to review the materials and did the tasks given by the teacher at home by using Kahoot, and they also had more opportunity to collaborate with their friends in group activities.

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