

The Effect of Using Kahoot Game on Students' Vocabulary

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Abstract

Today we come to the Industrial revolution 4.0 era. This period is considered as technology period. Everyone in this world use technology in their everyday life and so do the students. Students are getting difficult to be engaged into the learning condition. Teaching in the classroom is affected by the cyber era.

Therefore, teaching in the classroom should concern to the use of technology. Teachers should be able to attract the students's attention by using technology in the classroom. Kahoot provide teachers and students a facility in assessment and help the student to memorize the vocabulary. Students can enjoy kahoot and learn vocabulary competitively.

Key words: Kahoot, Students' Vocabulary

Introduction

Now we come to Industrial Revolution 4.0. It leads to the use of machines. Human power is getting less usable. It is changed by machine day by day.

Technology is getting advanced and it has already come into the classroom. Teachers should realize the condition. Kahoot stimulates the student response,engage the students' attention, and practical method to introduce new vocabulary.

Teachers can create their own quizzes on kahoot based on the current curriculum. It also involves student in learning activities through their gadget by answering the quizzes in the available time. Using kahoot, the students participate in learning enthusiastically and make the lesson more effective for them. It make the retention of the vocabulary better.

By using kahoot, teachers can attract the student's attention to focus on the lesson and increase their focus on task behavior (Joseph Pede, 2017). Most students prefers attractive game rather than paper-pencil activity.

Research Design

This research used the design of quasi-experimental research because it is impossible for the researcher to take the sampling randomly. The school determined the subject of this research. Taking the sample randomly is considered to bother the school schedule.

The implementation of the research design is pre-test-treatment-post-test. In the pre-test phase, the experimental class and the controlled class do the pre test. In the treatment phase, the experimental class got kahoot game whereas the controlled class doesn't. Kahoot game in the experimental class is given in the pre-teaching whereas for the pre-teaching in the controlled class, the researcher gave picture. The material for the treatment and the controlled class is similar. The classes talked about describing animal, place and things.

This research was done to answer the question of, "Do the students taught using Kahoot Game have better achievement in vocabulary mastery than those taught not using Kahoot game?"

This study was conducted on the second semester of 2018/2019 academic year in SMPN 1 Ngunt. The experiment class consist of 32 students and the control class consist of 32 students. The treatment of kahoot was implemented in about two months. It was done in 10 meetings.

The condition of the classes are considered almost the same. Both classes have 32 students and the mean score at the pre-test are almost the same. The mean score of the experimental class is 75,250 whereas the controlled class has the mean score at the point of 75,000. So, the researcher considered that both classes have the same condition before the treatment.

What is Kahoot?

Kahoot is an internet platform that facilitate teachers and students to do a prominent assessment in particular determined time. The teacher can set the time for students to answer the test items. In this research the teacher set the time for each test item for 20 second.

If you want to know better about kahoot you must try it. To come into the kahoot website, the teacher/researcher must make an account in kahoot.com. He/she just prepare his/her email account and password for kahoot account.

For this research, researcher choose to make some quizzes in her kahoot account. The researcher make 10 questions for each kahoot quiz. The researcher prepare 10 quizzes for ten meetings. Each item is set to be answered in 20 second.

When we access the kahoot.com we find the front appearance as follow:

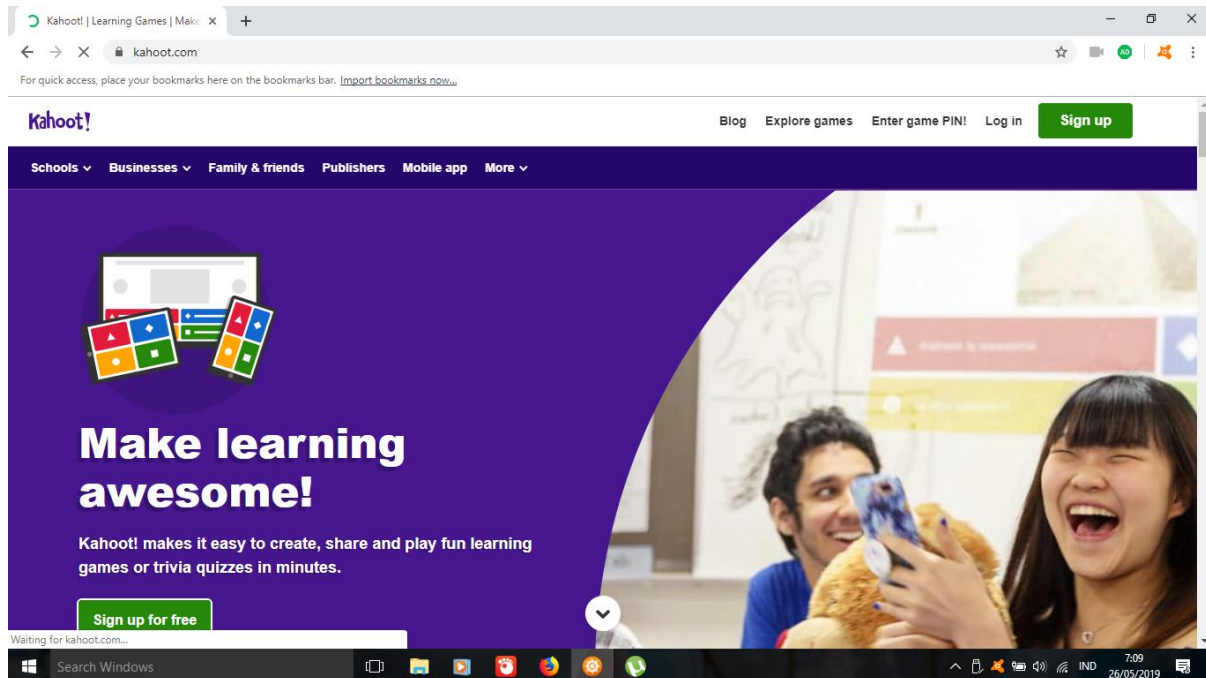


Fig. 1 The appearance of Kahoot.com

(Source: Kahoot.com accessed on 26 May 2019, 14.00)

Then we can make an account bu clicking the “sign up”. We can input our email account, name, and make the password. After having an account, we can log in to our account by clicking “log in”.

After we come into our account, we will find the appearance as follow:

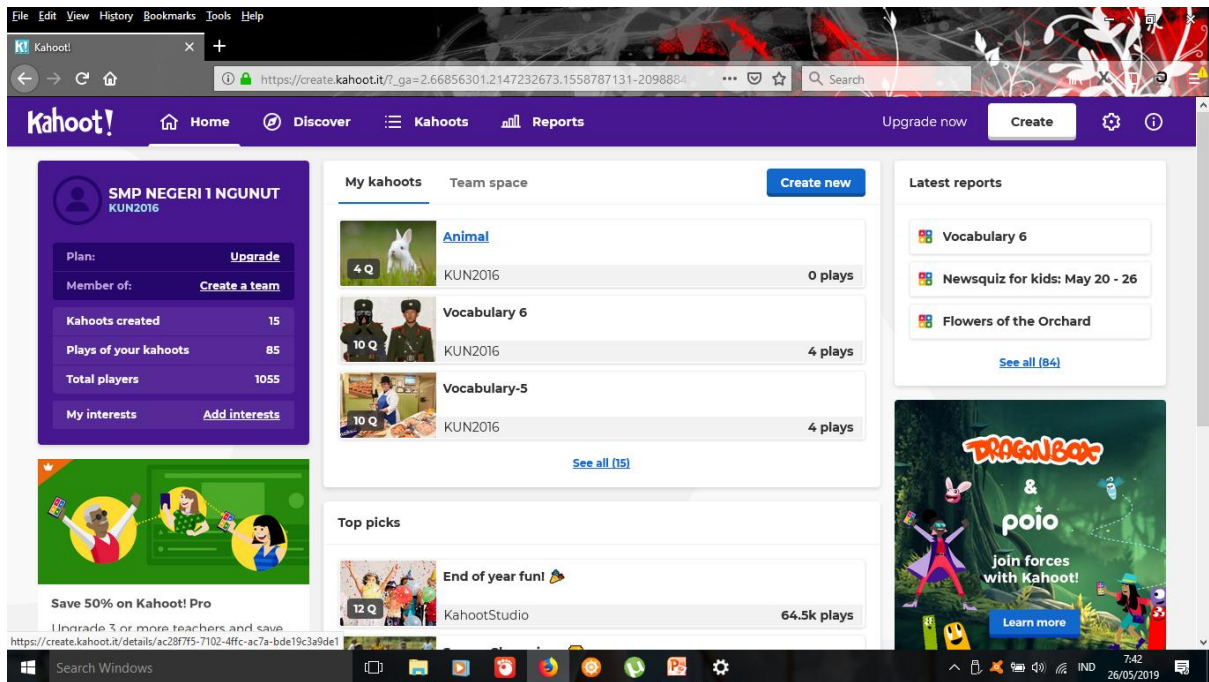


Fig. 2 The appearance of Kahoot account

(Source: Kahoot.com accessed on 26 May 2019, 14.00)

The researcher choose kahoot for free because the research for kahoot is still at the beginning. So, the researcher starts the research from kahoot for free. Nevertheless, the menu on kahoot is still exciting for the students. It is proven that the researcher planned the meeting for five treatment meetings but the students ask the game again and again. Finally the researcher decided to add the meeting become 10 meetings for kahoot quizzes.

The researcher makes the quizzes on the menu “My Kahoot”. For this research, the researcher make 10 quizzes. Until now, the researcher already has 17 quizzes in “My Kahoot”. For the beginners and those who haven’t created the quizzes on “My Kahoot”, they can access “discoveries” menu. In this menu, they can find many kahoot quizzes in various topics. However to customize the material in the classroom, a teacher should create the quizzes.

The following is the photo of the students expressions at the end of kahoot quiz.



Fig 3. The Students expression after the quiz ends.

After the quiz ends the students scream historically especially those who win the game. The students always ask the teacher to give them kahoot quizzes again and again. They learn the language in the fun situation.

When we forget our password, kahoot has supplied “forget” menu. After clicking the “forget” menu, we should input email address and further we will receive the verification email into our email account and after clicking the link, we can reset kahoot password. Then, log in again into our kahoot account.

Why Kahoot?

Kahoot is an educational game that is beneficial for teachers, students, and parents. Kahoot gives prompt and accurate assessment for teachers. Teachers can create their assessment items on the “create” menu. Therefore, teachers can customize the material on kahoot with the material in the classroom.

Instead teachers can get an accurate assessment for their class, the students can get fun while learning something from kahoot. Competitive atmosphere appears when the teachers apply a quiz from kahoot in the classroom. Students can get retention of the knowledge in their mind because they study while playing.

Parents should be happy with the wonderful progress of their children with kahoot application in the classroom. Although in the free model of kahoot there is no facility for teachers, students and parents to communicate each other like as provided in quiper or socrative, however kahoot still applicable and beneficial for students to enrich vocabulary in English class.

Other researcher can apply kahoot in their classroom and conduct research in this field since kahoot is still new for Indonesian researcher. It is shown that when the researcher search the source about kahoot, the researcher found that there was no researcher or writer from Indonesia writes or studies about kahoot. Kahoot is an interesting topic for research.

The Material

The material used in this research is in accordance with based competence 3.5 and 3.6 on the government syllabus. Both based competences discuss about how to describe animal, people, and things. Based competence 3.5 discuss about the characteristics of animal, people, and things. Meanwhile, the habit, the activities and the function of animal, people, and things are described in based competence 3.6.

Kahoot in this teaching activity functions as pre-teaching activity in experimental class as a quiz before the main activity. Since kahoot's content is vocabulary related with the main material, that is about the characteristics of animal, people, and things, kahoot in experimental class is as the learning activity to enhance the language feature (*unsur kebahasaan*) especially the vocabulary. In the lesson plan kahoot is included in the main activity.

The content of the game is the quiz about some vocabulary related with based competence 3.5 and 3.6. It is about the characteristics of animal, people, and things. The words used in the game are taken from the students' book. So, the experimental and the controlled class have the same material and the words used in the learning activity are similar. The material used in the pre-test and the post-test is also taken from the student's book. So, the material in kahoot is in line with the material in the learning activity and so is the material for the pre-test and the post-test.

A package of kahoot quiz in each meeting contains 10 questions that relates to the topic being studied that day. It took about 30 minutes to play kahoot in each meeting. It was successful in attracting the students's attentions as well as involving the students to learn new words.

Funding

At the end of the treatment period, the researcher found the the difference of the progress of experimental group and controlled group. At the pre-test the mean of the control group and the experimental group are almost the same. The the mean of the control group is 75,000 while the mean of the experimental group is 75,250. So, the two groups have the similar condition on the pre-test.

After the post-test, the experimental group shows bigger progress. The mean of the experimental group after the post-test is 87,688 while the mean of the control group is 77,688. The mean of the difference of the control group is 2,688 while the mean of the difference of the experimental group is 12,438.

The Calculation	The Experimental Group	The Control Group
Mean of the Pre-test	75,250	75.000
Mean of the Post-Test	87,688	77.688
Mean of the difference after tthe treatment	12.438	2.688
Variance	34.184	13.152
Standard Deviation	3.627	5.847
Standard Error Deviation		2.463

To decide the hypothesis, the researcher find the t-value using t-test. The researcher do the calculation manually to show the process of calculation. The following is the calculation to find the t-test.

1. Determining Mean of variabel X:

$$M1 = \frac{\sum x}{N^1} = \frac{398}{32} = 12.438$$

2. Determining Mean of variabel Y:

$$M2 = \frac{\sum y}{N^2} = \frac{86}{32} = 2.688$$

3. Deviation Standard Score of variabel X:

$$SD1 = \sqrt{\frac{\sum x^1}{N^1}} = 5.874$$

4. Deviation Standard Score of variabel Y:

$$SD2 = 3.627$$

5. Standard Error Mean of variabel X:

$$SEm1 = \frac{SD1}{\sqrt{N^1-1}} = \frac{5.874}{\sqrt{32-1}} = \frac{5.874}{5.568} = 1.055$$

6. Standard Error Mean of variabel Y:

$$SEm2 = \frac{SD2}{\sqrt{N^2-1}} = \frac{3.627}{\sqrt{32-1}} = \frac{3.627}{5.568} = 0.651$$

7. Standard Error of different Mean of variabel X and Mean of variabel Y:

$$SEm1 - 2 = \sqrt{SE\ m1^2 - SE\ m2^2} = \sqrt{1.055^2 - 0.651^2} = 0.830$$

8. Determining t0 with formula:

$$T_o = \frac{M1 - M2}{SE\ m1 - m2} = \frac{12.438 - 2.688}{0.830} = 11.747$$

9. Degrees of freedom (df):

$$\begin{aligned} Df &= (N1 + N2) - 2 \\ &= (32 + 32) - 2 \\ &= 64 - 2 = 62 \end{aligned}$$

The value of the df 62 at the degrees of significance 0.05, t-value is 11.747.

4.4 Hypothesis Testing

The hypothesis of this research is “Students’ taught using kahoot game achieve better in vocabulary than those who are taught not using kahoot game.”. Because the hypothesis of this research has more than one alternatives direction, so this research uses two tailed test.

This table is to show the critical value of two tailed t-test.

Table 4.9 The Critical Value of two tailed t-test

Df	Level of Significance		
	.05	.01	.001
26	2.056	2.779	3.707
27	2.052	2.771	3.690
28	2.048	2.763	3.674
29	2.045	2.756	3.659
30	2.042	2.750	3.646
40	2.021	2.704	3.551
60	2.000	2.660	3.460

Since the two groups of the data of this research are independent of each other, so the $df = N_1 + N_2 - 2$. The df is 62. The t table is 2.000 for the significance of 0.05.

The null hypothesis states that there is no difference between the sample. To define that null hypothesis is rejected or not the researcher checks the critical value on the t-table (Paul Anderson, 2016). The critical value of the df 62 is 2.000.

Since the t value is 11.747 with the df 62, the significance level used on two tailed t-test is 2.000 with the significance level of 0.05. It means that t_0 is higher than t-table, so the null hypothesis is rejected and H_a is accepted.

Suggestion

Technology has brought us to the use of technology in the classroom. One strategy can be introduced into the classroom is kahoot. It can be a powerful machine to attract the students' attention and retention to the new vocabulary. Studying in a fun and competitive atmosphere makes the students memorize the words better and affects to the students' achievement.

Teachers should realize the situation and find the best strategy in teaching and use technology in the classroom. Although there are many strategy can be used in the classroom to improve the students' achievement, kahoot is still attractive for students that make the students ask kahoot again and again.

To the other researcher, kahoot can be a subject for further research since there are not many research about kahoot especially from Indonesian researcher. Using internet and technology in the classroom is an interesting field to study.

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