

USING MODIFIED GAME JEOPARDY! AND HOP-SCOTCH TO IMPROVE ENGLISH VOCABULARY MASTERY OF SEVENTH GRADERS IN SMP NEGERI 1 BONDOWOSO

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Abstrak

Kosakata adalah aspek utama dan mendasar (dari sebuah bahasa) yang harus dikuasai penuturnya. Oleh karena itu, pembelajaran kosakata yang tepat akan mengoptimalkan hasil belajar siswa dalam belajar bahasa. Berdasarkan pengamatan awal yang dilakukan, pembelajaran kosakata membuat siswa menjadi bosan dan akhirnya, siswa tidak dapat memperoleh hasil yang maksimal. Untuk itu, penggunaan media dalam bentuk permainan bahasa dipercaya efektif untuk menciptakan sebuah pembelajaran kosakata yang dapat membantu kesuksesan hasil belajar siswa (Huyen dan Nga, 2003). Penelitian ini menggunakan metode dua grup eksperimental dengan *pretest* dan *posttest* untuk mengetahui efektivitas penggunaan permainan modifikasi *Jeopardy!* dan *engklek* dalam meningkatkan hasil belajar pembelajaran kosakata bahasa Inggris di kelas VII SMP Negeri 1 Bondowoso. Kuesioner digunakan untuk mengetahui respon siswa setelah diajar menggunakan permainan tersebut. Hasil analisis uji *t* menjelaskan bahwa siswa di kelas eksperimental mendapatkan hasil yang lebih tinggi secara statistik dibandingkan dengan siswa di kelas kontrol, dengan nilai *t* 3.6, nilai *p* .001 (*df*=66), dan *eta squared* .16. Ini menunjukkan bahwa penggunaan permainan modifikasi *Jeopardy!* dan *engklek* secara statistik dapat meningkatkan kemampuan siswa dalam mempelajari kosakata. Data dari kuesioner juga menunjukkan bahwa lebih dari 80% siswa menyukai permainan ini dan setuju bahwa permainan yang digunakan telah memenuhi 5 kriteria desain permainan oleh Hill, et. al (2013).

Kata Kunci: kosakata, *Jeopardy!*, *engklek*, kelas VII

Abstract

Vocabulary becomes the first and the foremost aspect of a language which should be mastered by every language learner. That is why; a good vocabulary instruction will result in the success of learning achievement. Preliminary observation done showed that the existing vocabulary teaching made students feel demotivated and thus they could not achieve a satisfying result. Thus, the use of media in the form of language game is believed to create a more motivating instruction which leads students to be a successful learner (Huyen & Nga, 2003). Using a two-group pretest and posttest experimental design, this study aimed to explore the effectiveness of using modified game *Jeopardy!* and *Hop-scotch* to teach vocabulary in reading descriptive text about things around to the seventh graders in SMP Negeri 1 Bondowoso and investigate the response of the students after being taught by using the game. Using independent samples *t*-test analysis, the scores of posttest of the two groups were compared and the result showed that by using the game, students in the experimental group scored significantly higher than students in the control group, with the *t* value of 3.6 and *p* value of .001 (*df* = 66, mean difference = 11.2), *eta squared* of .16. This shows that the modified game *Jeopardy!* and *Hop-scotch* was effective to improve students' vocabulary mastery. Furthermore, data from the questionnaire which was analyzed by using descriptive statistics showed that more than 80% of the students gave positive responses and agreed that the game fulfilled the five criteria of game design proposed by Hill, et.al(2013).

Keywords: Vocabulary, *Jeopardy!*, *Hop-scotch*, Seventh graders

INTRODUCTION

If the ability to use a certain language can be analogized to a car, vocabulary is the fuel. Without having enough fuel, the car will not work. Vocabulary is an important element which constructs a language and it can be used to show the degree of mastery of the speakers

or students (Schmitt, Schmitt, & Chaplam, 2001). Experts agree that developing vocabulary, both theoretically and practically, is very essential in the language learning process in which students at every level should focus on strengthening their vocabulary because it can determine the success of learning. Students are still able to communicate without the correct form of grammar; but

not without vocabulary because without syntax or grammar, students can still maintain the meaning; but without vocabulary, students cannot find the meaning of certain word or sentence (Folse, 2003). In addition, most students are having difficulty to say what they want to say because of their insufficient vocabulary (Chastain, 1988). It can be said that vocabulary is the key to be a successful language speaker.

In teaching vocabulary, the teacher nowadays uses drillings and other repeated written exercises to enable the students memorize the vocabulary. He gives the students a certain text and asks them to find the synonym, antonym, or the meaning of a word which is stated in the text. The students find that this kind of teaching activity is not enjoyable, yet de-motivating (Hill, Sumarningsih, & Lestari, 2013). Moreover, the teaching-learning processes are mostly teacher-centered, where the teacher talks all over the time, explains the material and the students sit and listen to the teacher (Huyen & Nga, 2003). As a result, students are very passive during the teaching and learning process.

As regard to the explanation above, it can be inferred that the on-going teaching and learning process could not give the students positive experience since the way the teacher conduct the instruction is likely to be de-motivating and teacher-centered. Thus, the teacher as a director and facilitator of learning experiences should find a solution for this problem; the teacher should create an instructional design which enables students to acquire the language effectively as well as gives the students positive experience (Bortoluzzi, 2003).

Therefore, applying instructional media in the classroom may be a key to manage the poor condition since instructional media can set up conditions in which the students acquire knowledge, skill, and attitudes more easily. There are numerous kinds of instructional media which can be used in teaching and learning process. Hence, the teacher should choose one among those kinds of media which is the most suitable for the teaching-learning process, the condition of the students and school, and the availability and practicality of the media (Gerlach & Ely, 1980). Experts have classified the various instructional media into several categories. The most common classification is made based on its form; whether it is visual, things that can be seen; audio, things that can be heard; audiovisual, things that can be both seen and heard; or multimedia, things that combine all form of media and mostly uses computer.

So far, the use of multimedia is being a trend in teaching. The use of multimedia has been broadly used by the teacher due to the fact that most of people nowadays, especially school-aged children and teenagers, are very familiar with the use of technology. Moreover, it

is believed that the use of multimedia technology can change the old classroom setting which tends to be teacher-centered and de-motivating to become a sophisticated classroom setting which engage and give positive experience to the students during the teaching-learning process (Abdelraheem & Rabame, 2005).

One of the implementation of multimedia is the use of computer game. Game is used as a media based on the consideration that game can engage the students in an enjoyable and challenging activity so that the students can actually practice the language (Shaptoshvili, 2002). They will concentrate on how they win without having to be worry whether they use the correct structure or pattern of the language. But still, soon or later, their fluency and accuracy in using the language will be increased, thus they can attain the communicative competence. Game also provides the students the knowledge of language in a meaningful context of a language (Chen & I-Jung, 2005). By engaging in a game-context activity, students give good responses and show their positive attitude (Uberman, 1998). Furthermore, a result of an action research confirm the effectiveness of the game since students likely to need relatively short period to learn and attain the materials in an enjoyable and comfortable environment than those activities in traditional classes (Huyen & Nga, 2003).

One of the games which can be used in vocabulary teaching is *Jeopardy!*, which is actually an American quiz television show, a quiz in which the participants choose one question with a certain score and will achieve the score if they are success or lose the score if they are failed answering the question ("*Jeopardy!*," 2002). A study by Jones in 2005 had proved that *Jeopardy!* helped the students review vocabulary word and idiom (Jones, 2005). Moreover, the game fulfilled the five criteria of game design; enjoyable, educational, English promoting, engaging, and easy to use (Hill, et al., 2013).

However, in *Jeopardy!* game, there is a table with several columns and rows, each of the cells contains a question with certain score. Indonesian students do not familiar with this and there are too many questions to be answer in one game. To cope with this, there is a need to modify the game to make it simpler and suitable for Indonesian context, especially for seventh graders.

One of the ways to meet the need was by combining the game with an Indonesian traditional game, *Hop-scotch*. In *Hop-scotch* game, there is a pattern which is usually drawn on the soil ground and the players should hop over the boxes in the pattern with one foot. The decision to combine the game with a traditional game of Indonesia, which was *Hop-scotch*, was made since Indonesian students were very familiar with this

traditional game. Moreover, this game is also able to promote and preserve Indonesian culture.

In the modified game *Jeopardy!* and *Hop-scotch*, the basic rule of win 100 or lose 100 of *Jeopardy!* was maintained, but the number of questions were decreased. The table of questions in *Jeopardy!* was not used; instead, the pattern of *Hop-scotch* was used. Moreover, the two games were modified into a computer game. The teacher did not need to prepare many things which would be considered as a time consuming; they just needed to prepare the power point presentation which was easy to obtain, create, or modify (Fisher, 2003). No papers would be wasted; no big space would be needed. Moreover, the game was engaging since it involves all of the students in the class; all of them would participate and be active during the teaching and learning process (Deesri, 2002). So basically, the two games were combined, modified, and used to create a more motivating, engaging, and effective vocabulary teaching.

Therefore, a study of the use of modified game *Jeopardy!* and *Hop-scotch* to improve students' vocabulary mastery was conducted in SMP Negeri 1 Bondowoso. However, since vocabulary is classified as micro skill, the teaching process should be integrated into the teaching process of macro skills. Subsequently, in this study, the activity of teaching of vocabulary was a part of teaching reading, which is reading descriptive text about things around. The topic was chosen since the students who were the subject of the study were seventh graders; it was the first time for them to learn English genres in formal education. Hopefully, it would be easier for them to understand the text.

Hence, this study was intended to find out whether the use of game would help students and the teacher met the objective of the study more effectively and efficiently. In addition, this study also investigated the responses of the students after they were being taught by using the game. Hopefully, this study would be beneficial for English teachers and students and other researchers for giving them ideas, experiences and inspiration in creating a motivating and successful vocabulary instruction.

METHODOLOGY

A two-group experimental research with a quantitative approach was conducted in this study. There were two groups, experimental and control group, which were assigned randomly. Pretests and posttest were given to both groups, while the game was applied to the experimental group only. The control group was taught conventionally. The scores of both groups were then compared to explore the effectiveness of the treatment.

This study was conducted in SMP Negeri 1 Bondowoso. The decision for choosing this particular school as the population of the study was made based on the fact that each class of this school was equipped by at least a computer in the teacher's desk, a music stereo, and a multimedia projector. But then, based on the informal observation done previously, the teacher could not maximize the resources available there. Some of the teachers would simply use power point presentation, which according to most students, was not an attractive way, even de-motivating.

In this study, a cluster sampling was chosen to draw the sample of the study. The groups were assigned based on the students' original classes; from VII A to VII I, since this process helped the researcher and the teacher conduct the study in regard to the effectiveness and the efficiency. Then, a process of random assignment, a process in an experimental study in which the samples of the study to act as control or experimental group are assigned, was conducted randomly, by doing a lottery. Finally, VII D was chosen as control group while VII E was the experimental group.

This study used two instruments; tests and questionnaire. Tests, which consisted of pretest and posttest, were used to collect the data about the use of the game to improve students' vocabulary mastery. There were 30 multiple-choice items in the test and the students have 30 minutes to answer the questions. Before the tests were administered, a tryout was conducted to analyze the reliability of the test. The result of the reliability statistics from SPSS showed the value of Cronbach's Alpha of .723. Based on Pallant (2010), Cronbach's Alpha value which is greater than .7 is seen as acceptable; thus the items were reliable.

A questionnaire was used to explore the responses of the students after being taught by using the game. The questionnaire was given to students in the experimental group after they did the posttest. The questionnaire was in the form of ten closed items which contains 4 scales, from strongly disagree to strongly agree. The items were made up based on the five criteria of game design as proposed by Hill, et al (2013); enjoyable, engaging, educational, English promoting, and easy to use.

A quantitative data analysis was conducted in this study. To analyze the score of the students, independent samples t-test was used to analyze whether the means of two groups, experimental and control group, are statistically different from each other. To analyze the responses of the students in the questionnaire, descriptive statistics which includes percentage analysis, mean, mode, frequencies, and others, was calculated.

RESULTS

The effect of using modified game *Jeopardy!* and traditional game *Hop-sotch* to improve students' vocabulary mastery was investigated through comparing the mean scores of the pretest and posttest between the experimental and control group. Table 1 below showed the descriptive statistics of scores of both groups in pretest and posttest.

Table 1 Scores of Pretest and Posttest for Experimental and Control Group

Test	Class	N	Mean	Std. Deviation (SD)	Std. Error Mean
Pretest score	experimental	35	60.2886	11.78428	1.99191
	Control	33	65.5606	14.66392	2.55266
Posttest score	experimental	35	77.8971	11.82819	1.99933
	Control	33	66.6667	13.61604	2.37025

The table presented that for experimental group ($n=35$), the mean score of the pretest was 60.29 ($SD=11.78$), while the control group ($n=33$) scored higher, which was 65.56 ($SD=14.66$). However, in the posttest, the experimental group scored higher than the control one; they scored 77.89 ($SD=11.82$) while the control group scored 66.67 ($SD=13.62$). The result of the descriptive statistics shows that both group scored higher in posttest and the experimental group seemed to have a greater improvement than the control one.

Though, to make sure whether the implementation of modified game *Jeopardy!* and *Hop-sotch* really gave a significant effect on the experimental group, a statistical testing of independent-samples t-test was conducted. It is a statistical testing which is used to compare scores of two groups under one condition (Pallant, 2010). In this study, the scores of posttest between the experimental and the control group was used to explore the effect of the game by using SPSS. Below is the output of independent-samples t-test from SPSS.

Table 2 Independent Sample T-test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.397	.531	3.637	66	.001	11.23048	3.08795	5.06519	17.39577
Equal variances not assumed			3.622	63.487	.001	11.23048	3.10087	5.03481	17.42614

The table provides Levene's test for equality value of 0.531. This value was greater than 0.05. This means

that the variances of the two groups were equal (Pallant, 2010). So, the first line of the table was used. The result shows that the t value of the independent samples t-test was 3.6 with p value of 0.001 ($df = 66$, mean difference = 11.2) and 95% of confidence interval ranging from lower bound of 5.07 to the upper bound of 17.4. The two groups were said to be statistically different if the p value was lower than 0.05 (Pallant, 2010). Since the p value of this test was 0.001, it means that the mean score of posttest between experimental and control group was significantly different. To ensure whether the difference of the two groups did not occur only by chance, a calculation of effect size by computing eta squared formula was done. Below is the calculation.

$$\eta^2 = \frac{t^2}{t^2 + (N1 + N2 - 2)} = \frac{3.6^2}{3.6^2 + (35 + 33 - 2)} = 0.16$$

Cohen (1988) in Pallant (2010) proposed that the value of eta squared which greater than 0.14 as a large effect; thus for this study, the eta squared of 0.16 was seen as large effect. This means that there was a significant difference between the mean score of posttest of experimental and control group and the magnitude of the difference between the mean score of posttest of experimental and control group was large. To sum up, the hypothesis which said that students who are taught using the modified game *Jeopardy!* and *Hop-sotch* in learning vocabulary score higher than those who are not was accepted.

To explore students' responses of after being taught by using modified game *Jeopardy!* and *Hop-sotch*, a questionnaire was used. The questionnaire was given to students in the experimental group after they did the posttest on 7th of December 2013.

Table 3 Results of the Questionnaire

The Five E's	Strongly disagree (%)	Disagree (%)	Agree (%)	Strongly agree (%)
Enjoyable (Q1, Q2, Q3)	0	4.8	32.4	62.9
Engaging (Q 4, Q5)	0	8.6	20	71.4
Educational (Q6)	4.3	1.4	24.3	70
English promoting (Q7)	2.9	0	22.9	74.3
Easy to use (Q8,Q9,Q10)	0	4.8	33.3	61.9

The results of the questionnaire showed that 62.9% of the students strongly agreed that the game was enjoyable; they convinced that they liked the game

because the game was fun and created a relaxing and motivating atmosphere in the classroom. The rest of them; 32% agreed and there were 4.8% of them who disagreed if the game was enjoyable.

They also said that the game was engaging; the game made them feel more motivated and confident to work together with their group and compete with the other groups to be the winner. There were 71.4% of students who strongly agreed, 20% of them who agreed, while 8.6% of them disagreed if the game was engaging.

Furthermore, most of the students were strongly agreed that the game was educational. They thought so since they believed that the game helped them learn English and recall English vocabulary better and easier. There were 70% of them who strongly agreed, 24.3% of them agreed, while 1.4% of the students were disagreed and 4.3% were strongly disagreed.

Moreover, the students convinced that the game was English promoting. Since the slides of the game were written in English and they answered the question also in English, they said that they had a lot of chances to practice and use English more frequently during the classroom. There were 74.3% of them who strongly agreed, 22.9% who agreed, while the rest 2.9% of the students strongly disagreed.

The last, the students thought that the game was easy to use. They said that they loved the game more because the rules of the game were simple and easy to use; the power point slides were clear, understandable, and attractive; and the use of multimedia such as computer, LCD projector, or power point slides were very effective and efficient. There were 61.9% who strongly agreed and in line with the statement, 33.3% agreed, while there were 4.8% of the students who had different opinion and convinced that they were disagreed if the game was easy to use.

In conclusion, the result of the questionnaire showed that the majority of the students convinced that the game fulfilled the five criteria of game design as proposed by Hill, et. al(2013) since for each aspect of the five criteria, there were always more than 80% of the students who strongly agreed and agreed. There were only less than 10% of them who disagreed or strongly disagreed. It means that most of the students had a positive response toward the game.

DISCUSSION

The above results of this study proved and supported the theory that the use of game is effective to teach English, which in this case is teaching English vocabulary. The students in the experimental group showed a great progress and scored significantly different with those of control group. This is so based on the fact

that games are very helpful and effective for vocabulary presentation and revision (Uberman, 1998).

Based on students' response through the questionnaire which said that the game eased the students to learn and recall vocabulary and also the result of posttest in the experimental group, the students can obtain and learn new vocabulary better than those of control group when games are applied since games create relaxed and comfortable atmosphere. This result proved that games not only provide a non-stressful atmosphere, but games can provide the students with the educational value as well (Richard-Amato, 1996).

The findings of the National Reading Panel stated that active engagement during the lesson will make the vocabulary learning become more effective (Hiebert & Kamil, 2005). Through the responses of the students obtained from the questionnaire which said that games can engage students to be actively participated during the lesson, the theory has been proven. The students loved the game since it motivated them to be active and gave them chances to practice their skill in an enjoyable way. Moreover, games are able to motivate shy students by giving them more chance to express their opinions and feelings (Hansen, 1994).

Furthermore, one of the elements of game, which is competition, can naturally bring a competitive value into the classroom. Students will try their best to win or to beat other teams or groups (Deesri, 2002). As a result, it encourages their active participation for the activity. The implementation of the modified game *Jeopardy!* and *Hop-scotch* has supported this theory based on students' response. During the implementation of the game, the students focused on winning the game. They worked with their friends, being very anxious to be the first to answer the question to get more points. By so doing, the students can volunteer themselves to be active during the lesson.

However, this competition does not always result in active participation from the students. During the experiment, there were still some students who felt reluctant to be involved in the game. This happened mostly when they felt that they were incapable. Besides, the rules of "the fastest can answer the question" which was applied made some students feel more unconfident because they could not get the chance to answer the question since their other friends were faster.

Apart from the element of competition, the use of technology to present the game has proved the theory that the use of technology to teach vocabulary is effective and efficient (Hiebert & Kamil, 2005). Students nowadays are very familiar with technology, technology help them finishing their work faster and easier. Not only had the students, the teacher had also felt that the use of technology was efficient since the technology saved

much time and resulted the students to be more motivated since they loved it.

In short, the use of modified game *Jeopardy!* and *Hop-scotch* is effective to teach vocabulary since games help the students learn better for they provides the students with a comfortable atmosphere, element of competition, communicative context, and lots of opportunities to practice.

CONCLUSIONS AND SUGGESTIONS

Conclusions

An independent samples t-test was used to explore the effectiveness of implementing the modified game *Jeopardy!* and *Hop-scotch* in teaching vocabulary to seventh graders in SMP Negeri 1 Bondowoso. The scores of posttest of the experimental group and control group were compared to investigate whether there was a significant difference between them. The result shows that the *t* value of the independent samples t-test was 3.6 with *p* value of 0.001 (*df* = 66, mean difference = 11.2) and 95% of confidence interval ranging from lower bound of 5.07 to the upper bound of 17.4, eta squared of .16. Since the *p* value was less than .05 and eta squared was seen as a large effect, was concluded that the experimental group scored significantly higher than the control group thus the use of this game was effective to teach vocabulary to seventh graders in SMP Negeri 1 Bondowoso.

Data obtained from the questionnaires which were distributed to the students who were taught by using the modified game *Jeopardy!* and *Hop-scotch* was used to investigate the responses of the students toward the game. A descriptive statistics was used to analyze the data. The result proved that the students had a positive response toward the game. More than 80% of the students convinced that they loved the game and said that the game was also fulfilled the five criteria of game design; enjoyable, engaging, educational, English promoting, and easy to use.

Suggestions

Considering the effectiveness of the use of modified game *Jeopardy!* and *Hop-scotch* to teach vocabulary to seventh graders in SMP Negeri 1 Bondowoso, it is suggested that other researchers develop this study by exploring the use of this game for either other material, micro or macro skills, or the levels of students. Other researchers can also explore the study by creating a better-designed game so that it will be more applicable and effective.

Moreover, considering the lack of variety in teaching, it is suggested that English teachers should be more creative in creating a meaningful and successful

instruction by using all available resources at school. One of the ways is by using or applying instructional media which will motivate the students as well as help them learn the material better and easier. Hopefully by so doing, the theory of the use of game and media in teaching can be improved and developed further which later will be beneficial for the result of the teaching and learning process.

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