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The effects of EFL course enriched with Kahoot on students' vocabulary mastery and reading comprehension skills



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Abstract

The aims of research was to know the implementation of Software kahoot in teaching learning process and whether Software kahoot could be effective tool for enhancing student's achievement on vocabulary mastery and students reading achievement on reading skill, at last, to know about response of students when applying Software kahoot in teaching learning process. The researchers used qualitative research by implementing mixed method by using classroom action research. The results show that the use of Software kahoot using observation form in student's activity and teachers' activity of 82% from 80% based on that percentage the using of Software kahoot in learning activity is very good. Through various data in tests, it is proven probability number (1.00) is more significant in the t-table (0.05) which refers to the number 62 degrees of freedom. The value of t refers to the numeric number shows the number smaller than the t table in the range of (1,000 <2,000). The alternative hypothesis (H₁) proves the rejected results and the null hypothesis (H₀) gives a tendency to be accepted. Thus, it can be said that the probability value is small (0.04) from significance level of t-table (0.05). The result of the posttest reached 83 from the Minimum Mastery Criteria (MMC) 75. The secondary data were questioner showed that Software kahoot is able to increase students' comprehension in reading activities by 76.3% and increase vocabulary mastery by 77.4%.

Keywords: English as Foreign Language; software kahoot; vocabulary mastery; reading comprehension; teaching vocabulary mastery; teaching reading comprehension

1. Introduction

Vocabulary has a role in the process of teaching and learning English. As a fundamental components in reading, when she/he troubled in understanding what he read if he doesn't know enough words (Nist, S. L. And Mohr C, 2002). Vocabulary is a fundamental element that the students must study first. English vocabulary is a different form of language component compared with pronunciation, spelling, and the used of words. In addition to articulate the word and it's different from skill in composing the words. In other words, English learners sometimes find out difficulties in learning vocabulary. Based on researchers' observation found that there were several problems occur in learning vocabulary and reading comprehension in First semester of Postgraduate of Sultan Ageng Tirtayasa University. Students felt hard in memorizing the vocabulary, they sometimes forgot the

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vocabulary which has already given, when they will use the text. Lack of vocabulary is a dominant problem facing by students when they tried to understand the text. From the teacher side, researchers observed that teacher tend to use more Bahasa Indonesia during in learning process; She also does not apply various of media to stimulate students motivation for learning, and the internet access that the school has been facilitated still not maximized to be used for teaching process. Furthermore, another Singaporean researcher mentions that a beneficial role of vocabulary mastery in reading comprehension has been established in learners (L1) situations. It means that the significant of mastering vocabulary will enable learners to understand text and reflect to the language recognition (Zhang, 2008).

To solve the problem, the researchers considered that one alternative to overcome students' problems in teaching vocabulary and reading comprehension was by using *Software kahoot!*. It is a digital game by using a tablet, smartphone, or computer as a media to play it. This game has been introduced since 2013 in Norway. It can be used as a medium for exercising English. Researchers made a question of reasearch, the first one is how the process of implementation *Software kahoot* is in the teaching-learning process at the tenth-grade students' First semester of Postgraduate of Sultan Ageng Tirtayasa University, Second, how *Software kahoot* can be beneficial in assessing the students achievement on vocabulary and students achievement on mastering a text at first semester of Postgraduate on Sultan Ageng Tirtayasa University, Third, can *Software kahoot* be enhanced students' vocabulary and reading comprehension assessment scores at the tenth-grade students First semester of Postgraduate of Sultan Ageng Tirtayasa University.

1.1. Literature Review

1.1.1 Software Kahoot

Kahoot is game-based learning as an ICT product. (software kahoot, 2019). Software kahoot released in 2013, the game was launched experts and colleagues at the High School for science and tech. Software kahoot can be to integrate them as part to improve learning, motivation, and engagement (Wang, 2015). From the explanation above it can be inferred that Software kahoot is a game that integrated allow teachers easy to assess student learning and it can be used to described the concept, delivered the content, and and as a media in focusing a sharing an ideas. (Sumarsono, 2019). In addition it can enhance the process of learning became joyful, innovative, involve actively the students 'participation in the classroom activity. (Zaky Farid Luthfi, Atri Waldi, 2019).

1.1.2 Notion of Vocabulary

Vocabulary is formulated as "list of words that the communicator mastered to communicated smoothly; words on expressing (utterances) and terms as a (required of terminology)".(Syafrizal, Syafrizal, Haerudin Haerudin, 2018). Vocabulary mastery as a whole form and meaning which have been known and become the key component in reading skill. (Julia M., 2011). From the statements above researcher focuses to assess how well students vocabulary mastery using multiple-choice format through the word meaning (synonym, antonym), word formation and grammar that can support student's reading comprehension using *Software kahoot!*

1.1.3 Reading Comprehension

The ability or competence of the reading process is very important in learning English for both beginners and advanced learners or adults. (Brown, H. Douglas, 2001). The process of interpreting information with pre-existing knowledge to form understanding (Nunan, David., 2003). So it can be concluded that the ability to understand the information obtained through vocabulary and also to build understanding by using previously available information will greatly affect the meaning and ability to understand the text (P Sulistami, J Pahamzah, W Baratayaomi, S Syafriza, 2018).

1.1.4 The Previous Study related to Software Kahoot!

This investigation or observing the effect of Kahoot Software on vocabulary comprehension, with the research subjects being seven students in sixth grade with special needs between the ages of eleven and twelve (Ciaramella, Kathryn Elizabeth, 2017). Primary level students in a remote area of southern New Jersey are made up of grades four, five, and six. These students are classified into groups of students who are classified as less. Researching the understanding of words that are not understood and their application in reading activities. Kahoot software was also investigated using a Likert Scale questionnaire. Focus on the effects of media in supporting vocabulary comprehension and health reviews that hinder learning abilities. It only emphasizes Kahoot software to improve skills, while in this study the researchers also developed Kahoot to develop students' vocabulary and reading skills.

Another research article shows that the effect of using Kahoot! The kahoot was importance for the students in special needs, the process in the classroom, the pupils and the student's responses. The study involved 93 respondents, and as the main conclusion showed that Kahoot! Can be bifacial for improving student's responses, achievement and as the positive pupils for the teachers (Wang & Tahir, 2020).

1.2. Research questions

Main Problem of Study: Is there any effects of EFL Course enriched with Kahoot on students' vocabulary mastery and reading comprehension skills?

Sub-problem 1: is there any effect of EFL course enriched with Kahoot on students' vocabulary mastery?

Sub-problem 2: is there any effect of EFL course enriched with Kahoot on students' reading mastery?

2. Method

The researchers used qualitative research as the way to answer the question by implementing classroom action research (Creswell J., W., 2003). The researchers conducted the action research in investigating and solving unresolved problem occurred in the classroom concerning by applying software *kahoot* as a medium to develop student's achievement on skill and language components. In this research, the researcher used an action research design that consisted of plan, do, check, and act (Kemmis, S, and Taggart, Mc, R., 1988).

2.1. Subject of the Research

As the subject of the research were students of Postgraduate Program of Sultan Ageng Tirtayasa University. The researchers conducted collaboratively with the school management, the English teacher and the main subject as a participant of the research, the students consisted of 26 students with 6 female students and 20 male students (M Masrizal, 2012).

2.2. Instrument(s)

Researchers used research instruments through reading and vocabulary tests (Mohammad Zohrabi, 2013). The reading test tested students' understanding using a multiple choice test of 30 tests. Validity was conducted through the T-test, homogeneity and reliability of the test.

2.3. Data collection procedures

The researchers employed observation, document analysis, as well as questionnaires. There are some steps for collecting data. Doing or delivering the material. The second, administering the questionnaire. And then, collecting the document of students' results in using *Software kahoot* for more detail descriptions for each such as classroom observations, tests, questionnaire, and documentation.

2.4. Data analysis

The procedures carried out were: first, the researcher chose a class and observed students' vocabulary and reading abilities, then carried out learning using kahoor media to improve students' reading skills, third, which used action research with three cycles (Krathwohl, DR, 1998). Each cycle has 4 meetings. Pre-test was conducted to know the ability of students. The researcher also conducted an end-of-cycle test to know the impact of Kahoot software on improving students' achievement (Taylor-Powell, E. & Renner, M., 2003). Post-test was carried out in each cycle. The researcher also uses the principle of combined research by considering qualitative data as process data and students' knowledge in vocabulary mastery and reading comprehension (Miles, M.B, Huberman, AM, 2014).

3. Results

Main Problem of Study: Is there any Effects of EFL Course enriched with Kahoot on Students' Vocabulary mastery and reading comprehension skills?

Sub-problem 1: Is there any effect of EFL course enriched with Kahoot on students' vocabulary mastery?

The researchers observed the teacher taught English and the media he or she used. They got the opportunity to conduct a pre-test on November 2^{nd} 2018, the aim to know their ability in component and language skill. The result of the average of the pre- test is 40 from the standard of Minimum Criteria 75. It means that students' achievement were still low. Through various data in the pre-test and post-test it is proven that the probability number (1.00) is more significant in the t-table (0.05) which refers to the number 62 degrees of freedom. The value of t refers to the numeric number that shows the number smaller than the t table in the range of (1,000 <2,000). The alternative hypothesis (H1) proves the rejected results and the null hypothesis (H0) gives a tendency to be accepted. Thus, it can be said that the probability value is small (0.04) from the significance level on the t-table (0.05).

Regarding the learning activities carried out by teachers and students in this research, it can be seen in figure 1, that student learning activities have increased from the first cycle to the second cycle to the third cycle as follows: in the first cycle the intensity of student learning activities was 72 in the second cycle, it increased to 77 and increased to 82 in the last cycle or third cycle. Meanwhile, teacher learning activities increased from 76 first cycle to 77 in the second and 84 in the last cycle.

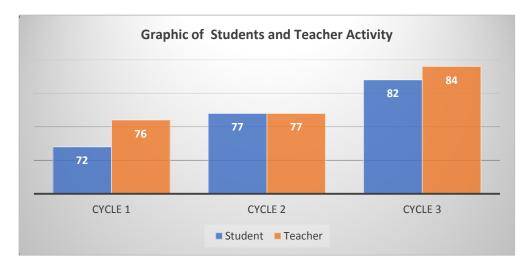


Figure 1. Graphic of Students and Teacher Activity

Sub-problem 2: Is there any effect of EFL course enriched with Kahoot on students' reading mastery?

From the explanation above, it was found that the average percentage of the use of *Software kahoot* media in improving reading comprehension and vocabulary skills at First semester of Postgraduate of Sultan Ageng Tirtayasa University showed 84% shows good success in the range of 80-89%. The results of posttest for the students achievement in reading comprehension and vocabulary was increased from the first cycle 65, and in the second cycle became 73 and for the last cycle, it was improved 83. It can be seen from figure 2. The use of Software kahoot in teaching reading and vocabulary is implemented in teaching reading and vocabulary at the first graduate of post graduate tenth grade of SMK Information Kota Serang. The implementation of Software kahoot flow covers a bunch of activities such as reading, asking the question, answering the question, arrange the word or sentences. Seeing how limited time allocation for learning, *Software kahoot* particularly given efficient services for students in learning English outside by *Software kahoot* challenge that can be done by students at home.

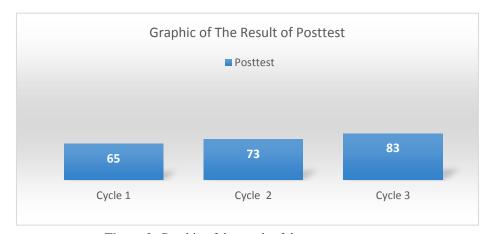


Figure 2. Graphic of the result of the posttest

Researchers distributed questionnaires with 50 questions to 26 students in the tenth grade of the RPP class. This is the result of the questioner. The researchers concluded that the statement from the questioner as follows:

- 1. Student interest in English lessons
- 2. Obstacles in learning English

- 3. The role of the teacher in determining the success of English learning
- 4. The teacher's role in determining the right media also determines the success of students in learning English
- 5. Students 'understanding of text and vocabulary determines students' success in learning English
- 6. Software kahoot is an alternative media that can improve students' understanding of reading
- 7. Software kahoot is a learning medium that helps improve students' vocabulary skills
- 8. Software kahoot is a fun learning media and makes students interested in learning English
- 9. Obstacles in using media *Software kahoot*

The Questionnaire results answered by students with positive responses (yes) (see table 1) as follows:

No.	Statement	Percentage
1.	Student interested in English lessons	7.8 %
2.	Obstacles in learning English	6.56 %
3.	The role of the teacher in determining the success of English learning	63.5 %
4.	The teacher's role in determining the right media also determines the success of students in learning English	89.25 %
5.	Students 'understanding of text and vocabulary determines students' success in learning English	76.3 %
6.	Software kahoot is an alternative media that can improve students' understanding of reading	76.3 %
7.	Software kahoot is a learning medium that helps improve students' vocabulary skills	77.4 %
8.	Software kahoot is a fun learning media and makes students interested in learning English	86.6 %
9.	Obstacles in using media software kahoot	78.6 %

Table 1. The Result of Questioner

From the results of this questioner, it can be concluded that as many as 78% students have an interest in English language learning and understand the importance of mastering English in international relations, however, they also recognize barriers to learning English, one of which is the obstacle of their teacher who is less able to stimulate them to be interested in English. As many as 89.25% of students consider the teacher's role in choosing the right media in learning English to determine success. There was 86.6% of students consider Software kahoot as an alternative media that makes learning fun and makes them interested in learning English. As many as 76.3% of students answered that students 'understanding of text and vocabulary determined students' success in learning English. Students also believe that Software kahoot can increase their understanding of reading activities by 76.3% and increase vocabulary mastery by 77.4%. However, students also realize there are obstacles in the use of *Software kahoot* as a learning medium such as the necessity of having a smartphone to support learning and a good internet network will support the success of software kahoot as a medium to improve students 'understanding of reading and improve students' vocabulary skills.

4. Discussion

This study was in three rounds with a total three meetings for each cycle. The treatment given is material. Each cycle the results are compared and seen an improvement in terms of the process and learning outcomes. The research was conducted in Semester II of Postgraduate University of Sultan Ageng Tirtayasa in the 2018/2019 academic year. The results of the learning process show that 72% of student activity and 76% of teacher activity and in the second cycle 77% of student activity and 77% of student activity, teacher activity. In cycle III 82% of student activity and 84% of teacher activity.

The results obtained that the use of kahoot has an impact on the learning process with a percentage of 75%.

The following are the results of observations on the learning process that have fulfilled aspects of the utilization of *Software kahoot* media, among others, the first aspect that has been fulfilled is *Software kahoot*media is used in the learning process where the teacher uses this media to conduct discussions and provide practice questions. Media *Software kahoot* also given during learning so that students are interested in the learning process especially reading which is considered students' saturating lessons. The second aspect that is fulfilled is the media of *Software kahoot* is used as a learning objective. The intended learning objective is to measure the increase in students' reading and vocabulary skills as seen from the scores obtained by students in the post-test in each cycle (Brown, H. D., 2004). The third aspect is that students easily use *Software kahoot* media in learning. This can be seen from the learning process where students knew exactly the steps for *Software kahoot* media.

The teacher gives direction to these steps by giving direction to students and then students follow the directions given by the teacher without asking questions. The fifth aspect that has been fulfilled in that the media can only be accessed through the internet. In the research area, there are wifi facilities that can be accessed by teachers and students. But at certain hours the wifi network is less supportive because of the large number of network users. This results in Software kahoot being inaccessible to students. Researchers anticipate this by providing private wifi or using each student's internet quota. The sixth aspect that is fulfilled is that software kahoot can use a smartphone besides being played on a PC or laptop. Using a smartphone is the main choice of students. Students feel more comfortable accessing software kahoot through smartphones than in PC. The seven aspects of software kahoot can be used in learning to read individually and in groups. This can be seen in the learning process where students are formed in several groups but for group use, this is still used in a username that can contain the names of group members in one group. The eighth aspect that is fulfilled is Software kahoot. It can be used as an evaluation instrument in reading learning and to complete assignments, this can be seen from the learning process where the teacher gives practice reading and vocabulary questions through Software kahootmedia. This practice question is given after the teacher explains the subject matter. Questions are given by teachers in the form of multiple-choice so that students more easily understand the material being taught.

In addition, questions were also given to check the students' vocabulary skills where students were able to form random words into the right words or overlapping sentences made into correct sentences. The ninth aspect of *Software kahoot* can be used to establish communication between group members where students discuss with one another helping each other. The tenth aspect of *Software kahoot* media can foster students' courage to think and increase student self-confidence. This can be seen when students ask the teacher or the group. From the aspects of the above aspects, there are several aspects of the learning process that have not been maximally fulfilled in the learning process such as the aspects of the steps of using *Software kahoot* by the teacher very clearly while students are more likely to focus on *Software kahoot* media rather than listening to the teacher's explanation. *Software kahoot* but in the first cycle and both students were still hesitant and shy to express opinions or ask questions to the teacher but they dare to express opinions when in the group and ask the teacher when having difficulties in understanding the material.

First semester of postgraduate students was considered minimum mastery criteria for English lessons in 75 for a student in tenth grade. Based on the results of the posttest conducted for three cycles, in the first cycle 65, there were 9 students who did not complete the criteria and 16 students who completed it. Meanwhile, there was one student out of 26 students who did not take the post-test because they did not enter school. This score was below from the minimum mastery criteria of 75. The results of the post-test were 73 obtained with an increase in 19 students complete the Minimum Mastery Criteria with 7 students not completed it from 26 students who attended the post-test. The

score of the posttest in this second cycle has not yet obtained results that are in accordance with the Minimum Mastery Criteria. For this reason, the posttest was repeated in the third cycle and the data showed that there were still 4 students who were not yet finished as many as 4 of the students who attended the post-test were 24 people and the remaining 20 students had reached the Minimum Mastery Criteria. This is the result is positive for students, marked by the results of observations with descriptors that improve it and the posttest scores increase. This indicates that, in this study, the learning materials which explained by the teacher using the media of *Software kahoot* can be well received by students so that the use of *Software kahoot* media can improve students' abilities in reading comprehension and vocabulary improvement. This is the result can be seen from student learning outcomes with the minimum mastery criteria of 75%.

5. Conclusions

Software kahoot is an alternative media in teaching vocabulary and reading comprehension at SMK Informatics class X RPL, especially on descriptive text. The score of reading and vocabulary mastery reached 83 from the minimum criteria of 75. Thus it is concluded that Software kahoot is a learning media that is able to improve achievement of Postgraduate Program students. software kahoot also makes students active, enthusiastic, and able to compete and work in a group cooperatively. The results of observations of student and teacher activities in a score of 82% from 80%. As a conclusion the use of Software kahoot learning medium can increase enthusiasm and give motivation for learning English and make it easier to understand the material, especially reading that considered hard to understand and bored. The use of technology as an innovative in English learning media such as Software kahootcan facilitate the learning process for teachers and students.

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