



ENGLISH VOCABULARIES ENRICHMENT THROUGH “HELLO ENGLISH” ANDROID BASED EDUCATIONAL GAME FOR YOUNG LEARNERS CLASSROOM

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Abstract

Android based educational game is something new to introduce in EYL learning. This software is believed to assist teachers in delivering knowledge effectively (Megawati & Sultoni: 2016). This research is an endeavour to examine the improving of young learner's ability in learning English vocabulary towards the use of android based educational game. Using a quasi-experimentasl study, the android based educational game has been implemented for 4-week term with two meetings per week in an English class of fifth grade students' at elementary school in Karawang. Two classes are determined as sample for this research. Research findings reveal that there is significant differences in learning English vocabulary between experimental group and control group after the intervetion is implemented. The use of educational game from Android improved the student's English competence in learning vocabulary. Furthermore, the game greatly encourages the students in giving active participation during the classroom activities. The use of android based educational games is one of joyful alternative teaching to support the creative young learner's teachers. It is recommended for English Teacher to use android based educational game as alternative to improve quality of teaching.

Keywords: Android based educational games, vocabulary, young learners

INTRODUCTION

English as one of an international language has a significant position in Indonesia. It has been taught at various levels of education from the lowest level up to the highest. For schools in Indonesia, there are four language skills that have to be mastered by the students to learn the English subject. The four language skills are listening, speaking, reading and writing, with all its aspects such as grammar, vocabulary, and sounds as the elements of language, which support the development of those skills. Therefore, one of the points to learn by students is vocabulary. Vocabulary is the first stage in any language learning. Vocabulary can be defined, roughly, as the words we teach in the foreign language. Based on Cameron (2001:72) that: “Vocabulary is a base to learning of language at initial level”.

There are several reasons why students have difficulties in learning vocabulary. First, students were difficult to understand the meaning of vocabulary. Second, students were difficult to remember all of the vocabulary materials. The last, students were often confused about how to organize the vocabulary. The second problem was from the teacher. To overcome the problems, the teacher should be more creative in creating a vocabulary in order to make the teaching learning process fun, interesting and also easier.

The role of the teacher is important to provide motivation for students to understand the meaning of vocabulary that have been learned in the classroom, not only to be understood at that moment, but will be remembered onwards and used in a sentence. Therefore, in teaching and improve

students' need of vocabulary, teachers have to motivate the students with some instructional media and make the students learn more. The teacher should use the suitable and also interesting instructional media to help students improve their vocabulary understanding. Although there are so many interesting instructional media to improve students' vocabulary understanding, one of instructional media that the researcher used is "Hello English Games" from Android. Hadfield, Jill (1999:4) stated that: "A game is an activity with a rule, a goal and an element of fun". It can make students feel fun when they learn English vocabulary. Furthermore, this game also can make students memorize new vocabulary easy because they are able to apply it directly in spoken or written form.

Android is a mobile operating system (OS) currently developed by Google. It has become the popular OS for tablets and smart phones. Android based educational game is something new to introduce in EYL learning. Usually parents seem to complain on their kids' activities on their gadgets. However, after conducting this study, it is hoped that the young learners' action on playing their gadgets is meaningful for their language learning exposure (Megawati&Sultoni, 2016:662).

LITERATURE REVIEW

Implementation of educational games stems from the development of video games very rapidly and making it an effective media, interactive and developed in industrial companies. Seeing the popularity of the game, the educators think that game design components can be used as an introduction to learning materials, and can be applied to the educational curriculum. Game should have an interactive interface design and an element of fun (Hurd and Jenuings 2009 in Robbani, 2016: 10).

Android is a software stack which is open source which includes an operating system, middleware and key applications along with a set of Application Programming Interfaces (APIs) that are used to design a mobile application using the Java programming language. Android-based applications can be created, developed independently, and can be easily downloaded and used in accordance with user needs. Linux-based Android version 2.6. System services such as security, memory management and process management is controlled by Linux (Holla et al., 2012 in Robbani, 2016: 35). Android is a mobile-based operating system that can be applied to an electronic device such as smartphones, tablets, laptops and gaming devices. Android provides the freedom for application developers to create their own applications. Android is an open source platform that allows it to be used in solving the problems associated with the help of special applications, data processing connected with the database on the server, game media, communication media, and so forth.

Vocabulary consist of words that construct a language. Based on Suyanto (2007:43) stated that, "Vocabulary is a collection of words that belong to a language". Brown (2001:377) also stated that, "Words are basic building blocks of language". Vocabulary is the main factor that is very important and basic thing in language learning. Therefore, students must master the vocabulary of English as a foreign language.

The use of android based educational game gave influence towards the students' vocabulary mastery and their interest in learning English (Megawati & Sultoni, 2016:666).

METHOD

The researcher used a quasi-experimental method with one experimental class and one control class. The population of this research is the fifth-grade students of elementary school in

Karawang. There are 100 students in total and it divided into three classes, which are V-A, V-B, and V-C. The sample of this study is V-A as a controlled class and V-B as an experimental class which each class consist of 35 students. The research instrument is a test.

To obtain the data, the researcher used tests, which is pre-test and post-test. The test was used to see the result of students' vocabulary mastery. The test was applied in experimental and controlled class to find out the score of students' achievement. The researcher compared the score of pre-test and post-test in the treatment and controlled class. Afterward, the researcher analyzed the gained score between the pre-test and post-test. Before analyzing the hypotheses, the researcher had to analyze the normality of the data. This analysis is used to see whether the data got in the research normally distributed or not. The researcher used the SPSS V.16 for windows to test the normality and homogeneity tests. Next, the researcher used Independent T-test formula in SPSS to calculate the data. It is because the researcher wanted to find out the degree of significant different between the growth score of pre-test and post-test from both classes also between the achievement in experiment class and control class.

FINDINGS AND DISCUSSION

The Description of The Data

The validity and reliability instrument test was conducted before the researcher administered the test to both classes. There were 40 numbers of questions given to the 30 students of fifth grade of elementary school in Karawang. From the validity and reliability test, there were 25 valid questions from 40 questions which were gained.

Based on the result of pre-test and post-test on the experimental class, the lowest and the highest score could be seen from 35 students in the experimental class. The lowest score in pre-test was 56 and the highest score was 84. After the researcher gave the treatment using "Hello English Games" from Android, the researcher gave them a post-test. As the data showed that the lower score of post-test was 60 and the highest score was 92.

On the result table of pre-test and post-test on the controlled class, the lowest and the highest score could be seen from 35 students. The lower score in pre-test was 52 and the highest score was 84. In post-test of controlled class the data showed that the lower score of post-test was 56 and the highest score was 84.

The Analysis of Testing Requirements

Before analyzing the hypothesis, the researcher had to analyze the result of the data. This analysis is used SPSS V.16 for windows program.

Result of Pre-test of Experimental Class and Controlled Class.

The result of pre-test of experimental class and controlled class based on SPSS V.16 for windows program was gained from the step as follows: Analyze - description statistic - frequencies statistic. The results are presented in a Table below:

Table 1. Data Description of Pre-Test Result of Experimental Class

N	Valid	35
	Missing	0
Mean		70.97
Std. Error of Mean		1.385
Median		72.00
Mode		76
Std. Deviation		8.194
Variance		67.146
Range		28
Minimum		56
Maximum		84
Sum		2484

The Table above showed that the mean of 35 students is 70,97. The median score from the table is 72.00. The mode score from the table is 76. The set of scores constitute a population determined as variance score is 67,146. Standard deviation is a quantity calculated to indicate the extent of deviation for a group as a whole and the standard deviation is 8,194. The highest score of the experimental class is 84 and the lowest score is 56. The sum gained from the total score is 2484.

Results gained from a pre-test in class V-A as a controlled class of this research are presented in a Table below:

Table 2. Data Description of Pre-test Result of Controlled Class

N	Valid	35
	Missing	0
Mean		69.14
Std. Error of Mean		1.578
Median		68.00
Mode		76
Std. Deviation		9.334
Variance		87.126
Range		32
Minimum		52
Maximum		84
Sum		2420

The Table above showed that the mean of 35 students is 69,14. The median score from the table is 68.00. The mode score from the table is 76. The set of scores constitute a population determined as variance score is 87,126. Standard deviation is a quantity calculated to indicate the extent of deviation for a group as a whole and the standard deviation is 9,334. The highest score of the controlled class is 84 and the lowest score is 52. The sum gained from the total score is 2420.

Results of Post-test of Experimental Class and Controlled Class

The result of post-test of experimental class and controlled class based on SPSS V.16 for windows program was gained from the steps as follows: Analyze – description statistic – frequencies statistic. Result gained from a post-test in class V-B as an experimental class of this research is presented in a table below:

Table 3. Post-test Result of Experimental Class

N	Valid	35
	Missing	0
Mean		76.00
Std. Error of Mean		1.420
Median		80.00
Mode		80
Std. Deviation		8.402
Variance		70.588
Range		32
Minimum		60
Maximum		92
Sum		2660

The Table above showed that the data of the controlled class is 35 with sum 2660. Mean score of post-test from the experimental class is 76,00. The median is 80.00 and the mode is 80. The variance score is 70,588 and deviation standard is 8,402. The highest score is 60 and the lowest score is 92.

Results from a post-test in class V-A as a controlled class of this research are presented in a table below:

Table 4. Post-test Result of Controlled Class

N	Valid	35
	Missing	0
Mean		71.89
Std. Error of Mean		1.327
Median		72.00
Mode		72
Std. Deviation		7.851
Variance		61.634
Range		28
Minimum		56
Maximum		84
Sum		2516

The Table above showed that the data of 35 students in controlled class with mean is 71,89. The highest score in controlled class is 84 and the lowest score is 56. The median score is 72.00. The

mode is 72 and the variance is 61,634. The deviation standard is 7,851 and the sum of the data is 2516.

Normality Test

Pre-test Normality Test

The normality test in this research use *Shapiro-Wilk*¹ method is SPSS v.16 for windows with criteria $\rho > 0.05$. The results of normality test of the data are presented as follows:

Table 5. Normality Pre-test Result between Experimental Class and Controlled Class

	Shapiro-Wilk		
	Statistic	df	Sig.
Control_Class	.941	35	.058
Experimental_Class	.943	35	.068

From the Table above it can be seen that the significance of normality pre- test score in experimental class is 0.068. It can be concluded that the data are normally distributed because $0.068 > 0.05$. Meanwhile, the significance of pre-test score in controlled class is 0.58. Therefore, the data are normally distributed because $0.058 > 0.05$. In other words, the pre-test result in both experimental class and controlled class are normally distributed.

Post-test Normality Test

The normality test in this research use *Shapiro-Wilk* methods in SPSS V.16 for windows with criteria $\rho > 0.05$. The results of normality test of the data are presented as follows:

Table 6. Normality Post-test Results between Experimental Class and Controlled

	Shapiro-Wilk		
	Statistic	df	Sig.
Control_Class	.939	35	.053
Experimental_Class	.951	35	.121

From the Table above it can be seen that the significance of post-test score in experimental class is 0.121. It can be concluded that the data are normally distributed because $0.121 > 0.05$. Meanwhile, the significance of post-test score in controlled class is 0.053. Therefore, the data are also normally distributed because $0.053 > 0.05$. In other words, the post-test result in both experimental class and controlled class are normally distributed.

Homogeneity Test

Pre-test Homogeneity Test

Based on the calculation of normality, the researcher got the result that all data in pre-test and post-test both experimental class and controlled class have been distributed normally. The next step of the calculation was finding the pre-test and post-test homogeneity of the data by using SPSS V.16 for windows, specifically by using *Shapiro-Wilk* method.

The result of pre-test homogeneity test of the data is presented as follows:

Table 7. Homogeneity Pre-test Results between Experimental Class and Controlled Class

Levene Statistic	df1	df2	Sig.
1.348	1	68	.250

The Table above showed that the significance of pre-test homogeneity result between experimental class and controlled class is 0.250. Therefore, it can be concluded that there is no significant difference between experimental class and controlled class because $0.250 > 0.05$.

Post-test Homogeneity Test

The post-test homogeneity of the data is also done by using SPSS V. 16 for windows, specifically by using *Shapiro-Wilk* method. The results of post- test homogeneity test of the data are presented as follows:

Table 8. Homogeneity Post-test Results between Experimental Class and Controlled Class

Levene Statistic	df1	df2	Sig.
.519	1	68	.474

The Table above showed that the significance of post-test result between experimental class and controlled class is 0.474. Therefore, it can be concluded that there is no significant difference between experimental class and controlled class because $0.474 > 0.05$.

Hypotheses Test

The last calculation was testing the hypotheses. This was the crucial calculation to answer the problem formulation of this research that whether there is significant difference between students' vocabulary understanding using "Hello English Games" from Android and students' vocabulary understanding in controlled class which were not. The researcher used SPSS v.16 for windows program which is *Independent T-Test*.

The criteria for hypothesis test are:

If the significance (2 tailed) < 0.05 the H_0 is accepted

If the significance (2 tailed) > 0.05 H_0 is rejected or H_a is accepted

The table below showed the result between the experimental class which were given "Hello English Games" from Android and the controlled class which were not.

Independent Samples 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
Scores Equal variances assumed	.519	.474	-2.117	68	.038	-4.114	1.944	-7.993	-.236
Equal variances not assumed			-2.117	67.690	.038	-4.114	1.944	-7.993	-.235

From the table above showed that the score of significance value is 0.038 while the score of degree of significance is 0.05. It meant that significance value (sig. 2-tailed) was lower than degree of significance. Moreover, H_0 is rejected while H_a is accepted. It would be concluded that there is significant difference of students' score between the experimental class and the controlled class.

The researcher chose V-B as the experimental class which got treatment using "Hello English Games" android and V-A as the controlled class which did not get "Hello English Games" Android. The treatment was given four-week term with two meetings per week in an English class of fifth grade students at elementary school in Karawang. After the treatment was given, the researcher gave the post-test and the result was the score of experimental class is higher than the controlled class. It can be seen from the mean of pre-test in the experimental class is 76,00, that mean of post-test in the controlled class is 71,89. The gain score is 4,11. In the controlled class, the mean of pre-test is 69,14, that mean of post-test in the experimental class is 70,97 and that of gain score is only 1,83.

The results of the present study highlight and support the idea that used "Hello English Games" Android has a positive impact on the students' English competence in learning vocabulary. The researcher discovered that the students were enthusiastic, fun, and also enjoy while learning vocabulary. In primary education context, fun is important because one of the characteristics of young learners is easy to be bored. To keep their enthusiasm, learning activities is expected to be designed as joyful as possible (Megawati & Sul-toni, 2016: 666).

In other words, the use of educational game from Android improved the students' English competence in learning English vocabulary.

CONCLUSION AND SUGGESTION

Based on the result of the research finding, the researcher drew a conclusion that the use of educational game from Android improved the students' English competence in learning English vocabulary. It gives spirit and knowledge for students that learning English vocabulary can be

fun and interesting. The students also did not feel to be forced into learning English Vocabulary, but they felt happy to learn since they are put in an enjoyable situation. Therefore, the use of android based educational games is one of joyful alternative teaching to support the creative young learner's teachers. It is recommended for English Teacher to use android based educational game as alternative to improve quality of teaching.

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