

The Effect of Puzzle Games by Smart Phone in Vocabulary Mastery to the Student Junior High School

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ABSTRACT

Nowadays content standard junior high school students are hoped to master vocabulary about 1000 words, so they can understand the conversation. But it fact, most of the students in junior high school do not master vocabulary well. So, the teacher should be able to choose a good media to help students to increase their vocabulary. In this case, Puzzle Games by Smart Phone is media that can be used to transfer vocabulary material for the students. The objective of this research is to find out the effect Puzzle Games by Smart Phone in vocabulary. This research was true experiment design. Pre test and post test were use to collect the data. There are two problems of the study, (1) is there any significant differences between before and after treatment in vocabulary mastery for the seventh grader students in SMP N 5 Sekampung Udik Satap in academic year 2023/2024?, (2) is there any effect of using Puzzle Games by Smart Phone in vocabulary student junior high school of SMP N 5 Sekampung Udik Satap in academic year 2023/2024?. As a source of data, the researcher utilized Puzzle Games by Smart Phone to teach vocabulary for the students. The media help students to learn vocabulary easier and more interesting to understand the subject, so their vocabulary would increase. The result of the research, it was found that the mean score of Puzzle Games by Smart Phone in pre test is 53,86, in treatment is 81, and in post test 85,33. It means that the student's vocabulary has increased, and there is significant difference between before and after of using Puzzle Games by Smart Phone in vocabulary instruction.

Keywords: *Puzzle Games, Vocabulary Mastery, Smart Phone*

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INTRODUCTION

English is an international language that used as a means of communication all over the world. It has important role to attain social, science, technology, and study. Harmer (2007: 13) English function as a global lingua franca, that is a language used widely for communication between people who do not share the same first (or even second) language, it is an international language so the Indonesia student should be able to use or communicate in English. (Seidlhofer, 2005: 339). Therefore English is taught from Junior high school to university as a compulsory subject. But now English has been introduced earlier in elementary school in Indonesia as a local content.

Hiebert and Kamil (2005) explain that vocabulary is knowledge of words or word meanings. Vocabulary is one of the components of language and one of the first things applied linguists turned their attention. (Richards, 2002).

Teaching foreign language is such a complex process in Indonesia, every student in Junior high school are obligated to achieve four skills: listening, speaking, reading, and writing, and of the skills should be supported by vocabulary mastery, because beside all skills above, vocabulary as a language component is very important on it. Wallace (1988: 9) say: there is a sense in which learning the vocabulary that language not being able to find the words we need to expressed our selves is the most frustrating experience in speaking after language.

Brown (2007: 428) mentions that a vocabulary gradually based on the usage of its frequency in daily: first, 1000 words, the student expected who has begun to study English on the third years first can memorize these 1000 words. Second, 2000 words, the student expected who has learn English on the fourth years until sixth years can memorize these 2000 words. Third, 3000 words, the student expected who has learned English in University can memorize these 3000 words.

Wallace (1987:13) states that "learning vocabulary is something more than memorizing lists of words. It is the teacher's responsibility to determine the appropriate of media in order to the students can find it easier and more useful to communicate". Many students get difficulty in vocabulary. The main difficulties that usually come up are in using appropriate word in contexts, remembering the words that they have learned, and pronouncing the words correctly. At level this is student can dominate 1000 words, but to achieve level finished entire students must achieve 75% from that determined. For student not yet can achieve teacher pass level give test remedial on condition that that determined.

Brown (2000: 12) "the material that will be taught to mastery is broken down into small discrete lessons that follow a logical progression. In order to demonstrate mastery over each lesson, students must be able to overtly show evidence of understanding of the material before moving to the next lesson". One of the important roles of the language teacher is to help their students find the easiest way of conveying new information into the already existing system of the mental lexicon (Thornbury, 2004: 93).

In this level should student get of best of 1000 words, but practically student at seventh grade of SMP N 5 Sekampung Udik Satap only little students known about all of everything exist in around them. Average score final test of the students at seventh grade in SMP N 5 Sekampung Udik Satap, academic years 2023 still low. Because, from the data the researcher get just 30% students get high score. And 50% student get medium score and 20% from all of the students in this grade did not get standard score. Celce (1969: 49) says that the teaching must planned in such a way that learning will become interesting. It can be done by using songs, movies, stories, drawing, pictures, or group of work or playing games".

There are many technique and media to teach vocabulary mastery, but in this research the researcher use Puzzle Games by Smart Phone. Vocabulary mastery in this grade is still low, because of these problems; the teachers must have a good technique and media in teaching vocabulary. Using Puzzle Games by Smart Phone for teaching vocabulary to the student is good strategy to overcome these problems. The students feel enjoy and interest to study vocabulary. The evolution of technology smartphone has become necessity of people. Smartphone consumption among the young population has become broadly popular for different purposes aside from communication including playing games as well as internet browsing. The presence of game applications such as puzzles by smartphone will make it very easy for junior high school children to learn vocabulary quickly.

Puzzle Games by Smart Phone can be applied to teach in the Junior high school student. The Puzzle Games by Smart Phone use concrete object to demonstrate the meaning of new language items. The researcher use Puzzle Games by Smart Phone in teaching, because this media can help students to remember vocabulary.

METHOD

Research design is a plan or program made by a researcher, as the activity target that will be done (Arikunto, 2002: 45). Research design that will be used in this research is quantitative research and focus on true experimental. The researcher use pre test and post test to collect the data. In quantitative research, the aim is to determine the relationship between one thing (an independent variable) and another (a dependent or outcome variable) in a population. Quantitative research is either descriptive (subjects usually measured once) or experimental (subjects measured before and after a treatment). A descriptive study establishes only associations between variables. An experiment establishes causality (Ary: 2006, 49).

RESULT AND DISCUSSION

In this research there are two variables, x and y. The variable x that is manipulated in order to affect a dependent variable. The predicted outcome is the dependent variable which is the y-variable. In a time series analysis, the dependent variable is observed over time for any changes that may take place (Creswell, 2008: 40). Once the variables have been identified and defined, a procedure should then be implemented and group differences should be examined.

$$\frac{G_1 : T_1 X \dots T_2}{G_2 : T_1 X \dots T_2}$$

G₁ : Experiment class

G₂ : Control class

T₁ : Pre test, it will be given before treatment

X : Treatments, it will be given after pre test of vocabulary by Puzzle Games in Smart Phone

T₂ : Post test, it will be given after the treatment.

The population is a sample in a research. According to Gay (1990:102) "A population is the group to which a research would like the result of a study to be generalize". A defined population has at least one characteristic that differentiates it from other group. The research uses purposive technique to get the populations. The population of the research is students' class seventh grade of SMP N 5 Sekampung Udik Satap in academic year 2023/2024, which consists of 97 students and divided into 3 classes. They were as follow Class VIIB: 33 students, Class VIIC: 32 students, Class VIID: 32 students. The researcher chooses these classes because class VIIB, VIIC and VIID has same level, there are different level with VIIA class. It is an excel class and for VII E, F, G and H are regular class.

Gay (1990:103) says "a good sample is one that is representative of the population from which it was selected". Sample is a part of population that has all main characteristic from population. Sample is the subject of the population that will be taken by researcher to be researched.

The sample technique in this research is stratified random sampling. The first, the researcher divides the students into three groups namely the smartest, medium, and weak students. Then, random sampling will be used to choose the students who will be sample in this research. The interpretation of this sample will be done with the consideration that characteristic of every students have different, although they sat at the same semester and got the same information. Class will be chosen by researcher in a purposive random sampling; from three classes the researcher only chosen two classes. There are 32 students of class VIIC and 32 students of class VIID. Because these classes have same level, there is a favorite to win level. The researcher not chosen class VIIB because this class has good score compared class VIIC and VIID.

This research has done in SMP N 5 Sekampung Udik Satap with the population entire grade seven, and for the samples are VIIC as experiment class and VIID as control class. The classes were taken by simple random sampling at seventh grade. The class was taken by stratified random sampling to apply this media the researcher use the data from the researcher as based data to divide the students in three part as high, average, and low. By doing this research, hopefully the researcher would know the effect of Puzzle Games by Smart Phone in teaching vocabulary.

The implementation covered try out and test. The try out was done at the seventh grade or class VIIB. The try out was help to get the validity and reliability test. If the test has been valid and reliable, so the test can use to experiment, the researcher used test as instrument. Before doing the test, the instrument should have been known about its validity level. The measurement of the vocabulary test items, the researcher used content validity through tryout test. The researcher gave tryout once for 32 students, which consist of 30 items of multiple choice, because after calculated, the test has been reliable, it means that the instrument has valid. So, the researcher used the tryout test to be tested after the researcher eliminates 10 items from tryout test. The researcher used 20 items to pretest and posttest. Reliability of the test was needed in order that the test could be used . The writer used Product moment formula to know the reliability. The result of the try-out test was split into odd and even numbers. The both of them were correleated by used Spearman-brown formula.

After calculated by using product moment formula, it was gotten 0.63 in the try out. There was the correlation between odd and even items score and from the calculation that by using by Spearmrn Brown, the first gotten $r_{11} = 0,77$. If the result consulting to the r score, it means that the result has very high interpretation. So, the test was reliable and could be used for the the research.

The researcher used Product moment formula to know the difficulty level of test item. The researcher used the difficult level of test item to know difficult and easy level of the test item. The researcher has 30 items test, and all of items have different level. The first level is difficult level; there are number 14, 21, and 30. The second level is average; there are numbers 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, and 29. And the tried level is easy level; there are 1, 2, 16, and 26.

Researcher gave pretest before giving the treatments. The pretest was give to 32 students which consist of 30 items test. The students were come from 16 students of VIIC and 16 students of VIID. In experiment class the highest score was 70 and the lowest was 35 which had a mean 53,86. Meanwhile, in control class the highest score was 70 and the lowest was 45 which had a mean 59,33 From the data, it was known that most of them had not mastered vocabulary well.

In experimental class, for the first treatment, the highest score was 90, and the lowest score was 60. In the second treatment, the highest score was 95, and the lowest

score was 65, and in the third treatment, the highest score was 95, and the lowest score was 70. The total score of the first treatment until the third treatment in experimental class was 3645 with the mean 81.

In other hand, in control class the total score of the first treatment until third treatment was 3310 with the mean 73,5. For the first treatment, the highest score was 85, and the lowest score was 60. For the second treatment, the highest score was 90, and the lowest score was 65, and for the third treatment, the highest score was 95, and the lowest score was 70.

The post test was given after the researcher gave the treatment in the three meeting. The post-test was given to both of classes in order to know the students' vocabulary mastery after they received the treatments. The post test held simultaneously in 30 minutes. The pre test and post test had similar type. There were 20 multiple choice each treatment.

CONCLUSION

Based on the result of the research, Puzzle Games by Smart Phone has increased students vocabulary mastery at the seventh grade of SMP N 5 Sekampung Udik Satap. It is showed from their result of pre-test and post-test. The students' vocabulary had increased based on the changed that happening on themselves when they study with Puzzle Games by Smart Phone in vocabulary. From the data, researcher concluded that there was significant effect of using Puzzle Games by Smart Phone in student's vocabulary mastery instruction for the seventh grade at SMP N 5 Sekampung Udik Satap. It was proved from the data that in experiment class who was taught by Puzzle Games by Smart Phone, the total treatment mean score was 81 and in control class who was taught by using Puzzle Games by Smart Phone had the total treatment mean score 73,5. Then, it was found that Puzzle Games by Smart Phone is effective or equal to use as media in instruction vocabulary for the students in Junior High School, especially in SMP N 5 Sekampung Udik Satap. It was proved from the post test data that in experiment class, it had post test mean score 85,33 and in control class, it had mean score 80,66. Puzzle Games by Smart Phone as media in vocabulary instruction had contribution and significant effect for both students and the teacher. The students enjoyed and they were fun in accepting information especially the new experience in learn vocabulary, while the teacher was easier in transferring material to learn vocabulary. Besides, the students more understood about vocabulary belonging to its indicators. So, they could write and speak better than before. Based on the result and discussion, the researcher concluded that Puzzle Games by Smart Phone has effective to teach vocabulary material for the students grade seventh in Junior High School, although they have different in students achievement.

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