BUILDING THE YOUNG LEARNERS ENGLISH VOCABULARY BY USING THE SMART CARD AT MBS SANG SURYA

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ABSTRAK

Abstract: Smart card as a medium of teaching language is regarded as central elements of the approach because it can be used as media to attract the young learners interest in learning language especially English language. The writer try to adopt this media in the classroom, especially by using a smart card to make the lesson more easier and interesting for the young learners to build their vocabulary in English. In relation, the purpose of this research is to investigate does the use of smart card has effect in building vocabulary in English to MBS DayCare learners. The researcher applied true experimental research design as the methodology with 20 young learners as the population and all of them taken as a sample by using rubric and t-test formula theory according Hughes. The researcher collect the data by using testing method. The result of this research showed that mean score of experimental group 8 and mean score of control group 7. Based on t-test, it showed that t-value 3.782 and after consulting to t-table, the t-value was higher than t-table. The smart card in vocabulary learning process is more effective to enrich the learners’ vocabulary, this can be seen from the results of test score that the experimental class which was given treatment using smart card media got higher score than control class without taught by used smart card media. The writer concluded that smart card has an effect in building vocabulary in English at Daycare learners in Muhammadiyah Boarding School (MBS) Sang Surya.


A. INTRODUCTION

River and Nunan in Maskor, et all (2016) stated that “Vocabulary is essential for successful second language use because without an extensive vocabulary we would be unable to use the structures and functions we may have learned for comprehensible communication” Based on this theory, it can inferred that mastering of vocabulary make easier to understand and use other concepts to communication especially in presenting vocabulary for the students and in this case, the researcher focus to the young learners (Maskor & Baharudin, 2016).

Tuma (2010) stated the steps to following in presenting vocabulary to the learner (Tuma, et al., 2010):
1. Sound and the meaning; the teacher says the word two and three times and pronounce them clearly. Indicate the meaning at the same time verbally.
2. Repetition; the students repeat the new word a few times. The teachers checks the pronunciation carefully. If a visual is used, keep it in front of them to ensure that they associate...
3. Written form; the teacher writes the new word on the board and has the class read it aloud without distorting the pronunciation. First, choose two or the three individuals to says it; and then get chorus repetition so that everyone in the class has the opportunity to associate the written form with the pronunciation.

4. Illustrative sentences; the teacher puts a short illustrative sentences on the board so that the meaning will be clear to everyone reading the notes afterwards. The students will enjoy trying to compose good illustrative sentences themselves.

Therefore, vocabulary can be taught with many media, the teacher should more attractive to choose, adapt, and use the vocabulary media. It was be expected the students can interest with English vocabulary learning (Bai, 2018).

In fact, most of the young learners just acquire a few vocabularies in English. They did not understand what the teacher said in English and they are difficult to remember new vocabularies that they will learn. Therefore, in teaching vocabulary, an English teacher can use several media because the aims of using of a variety of media in teaching can make they will be easier and interesting about anything they will learn and understand (Liu & Wu, 2016), (Ali, 2017). Asgari (2011) said that media can be used to explain language meaning and contraction, engage students in a topic or as a basis of whole activity (Asgari, 2011). Smart card is a media information technology useful to achieve the instructional goals of teaching and learning process, and they can also be easily found in our daily lives. Having understood that the young learners pay short attention and concentration in a learning process, it is better to provide something playful to them. Based on the explanation above, the researcher try to use smart card to increase the young learners vocabulary especially at MBS DayCare learners.

The researcher hopes that this study would have benefit in teaching and learning English, especially to build the young learners vocabulary by using Smart Card as a media. The purpose of this research is to investigate whether the use of smart card has effect or not in teaching vocabulary at the young learners in English at MBS DayCare.

**B. RESEARCH METHODS**

This study used Quasi Experimental Design. The kind of this study was quantitative study, where there is no randomization between control group and experimental group or called as nonequivalent control group design (Sugiyono, 2012). Quasi Experimental Design was used because it is difficult to randomize the sample (Sugiyono, 2016a).

The population means generalization region consists of object/subjects that have certain qualities and characteristics are determined by investigators to be study and then drawn conclusion (Sugiyono, 2016b). The population of this research would be a young learners at Muhammadiyah Boarding School especially at Daycare learners which is only 20 student. Based on Arikunto (2013), if the population more than 100 person, researchers take only 10%-15% or 20%-25% (or more) of it which can be taken as the sample (Suharsimi, 2013). But if the population less than 100 person, writer can take all of them as the sample. In this research, the researcher takes all of the population as the sample.

The data of this study would be collected used test.

1. **Pre-Test.** The first step in gathering the data is by giving the students pre-test. The purpose of pre-test is to know about the student’s background of English learning. Students are divided into two different groups, experimental group consist of 10 students and control group consist of 10 students. The total number of the students were 20. The test is oral test about the Transportations and Instruments by using smart card media.

2. **Treatment.** The writer gave the treatments for experimental group used number by using smart card media and for the control group the writer teaching them without using smart card media.

3. **Post-test.** In the last, the writer gave the post-test to experimental and control group. The purpose is to know about the effect of smart card in learning vocabulary. The test is as same as the one is given in pos-test for both group. The researcher use Number and Family picture by using smart card media. The researcher used experimental research that describes as quantitative degree. The data be collected from the result of pre-test and post-test. In calculating the learners mean score of experimental group and control group, the researcher used the following formula:

To find the students’ mean score of experimental and control group, used the following formula:

\[
M_x = \frac{\sum x}{N} \quad (1)
\]

\[
M_y = \frac{\sum y}{N} \quad (2)
\]

Where \(M_x\) = the mean score of experiment group, \(M_y\) = the mean score of control group, \(x\) = the total score for experimental group, \(y\) = the total score for Control group, and \(N\) = the number of sample
To find out the standard deviation of experimental group and control group. The formula of standard deviation as follow:

1. Find out the standard deviation of experimental group, the formula as follows:
   \[ \sigma_x = \sqrt{\frac{\sum x^2}{N_x} - \left(\frac{\sum x}{N_x}\right)^2} \]  
   Where: \(X\) = the students standard deviation for experimental group
   \(N\) = the number of sample

2. Find out the standard deviation of control group, the formula as follows:
   \[ \sigma_y = \sqrt{\frac{\sum y^2}{N_y} - \left(\frac{\sum y}{N_y}\right)^2} \]  
   Where: \(Y\) = the students standard deviation for control group
   \(N\) = the number of sample

3. The last, in the testing the significance of two variables standard deviation by using the following formula:
   \[ t = \sqrt{\frac{\sum x^2 N_x + \sum y^2 N_y}{(N_x + N_y) - 2(N_x N_y)}} \]  
   Where: \(M_x\): Mean score of experimental group
   \(M_y\): Mean score of control group
   \(N\): Total numbers of the subject
   \(x\): The deviation of experimental group
   \(y\): The deviation of control group.

   a. If t-test c-table in the significance of 0.05 (p=0.01), Ho is rejected. It means that the experimental groups have higher skill in vocabulary than control groups.
   b. If t-test > t-table in the significance level of 0.05 (p=0.01), Ho is accepted. It means that the control groups have lower skill in vocabulary than experimental groups (Arikunto, 2013: 354).

C. RESULT AND DISCUSSION

In this section, the researcher presented the statistical calculation of obtained data, namely group A and group B. Then, the discussion covers the calculation of mean score of both control and experimental group. The data was analyzed and calculated statistically to find out the mean score and the coefficients of both of the test. For this purpose, it is important to find out the deviation of pre-test and post-test of the individual score at first. The deviation of the two scores were presented in the following Table 1 and Table 2.

Table 1. The Learner’s Pre-test and Post-test Score of Experimental Group (A)

<table>
<thead>
<tr>
<th>No</th>
<th>Learner’s Name</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jundan</td>
<td>60</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>Ziyan</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>Aziz</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>4</td>
<td>Naufal</td>
<td>80</td>
<td>90</td>
</tr>
<tr>
<td>5</td>
<td>Asyifa</td>
<td>80</td>
<td>90</td>
</tr>
</tbody>
</table>

Table 2. The Learner’s Pre-test and Post-test Score of Control Group (B)

<table>
<thead>
<tr>
<th>No</th>
<th>Learner’s Name</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gwen</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Queen</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Misyari</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Andra</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Adam A</td>
<td>80</td>
<td>90</td>
</tr>
<tr>
<td>6</td>
<td>Adam B</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>7</td>
<td>Kianu</td>
<td>70</td>
<td>90</td>
</tr>
<tr>
<td>8</td>
<td>Alena</td>
<td>70</td>
<td>90</td>
</tr>
<tr>
<td>9</td>
<td>Sultan</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>Na'il</td>
<td>90</td>
<td>80</td>
</tr>
</tbody>
</table>

Total 810 930

After getting the score deviation of pre-test and post-test, then the next step was the calculation of mean score of the two groups. It can be formulated as follows:

1. The calculation of mean score
   The mean score of experimental group (Mx)
   \[ Mx = \frac{\sum x}{N} \]
   \[ Mx = 160 \]
   20
   \[ Mx = 8 \]
   The mean score of control group (My)
   \[ My = \frac{\sum y}{N} \]
   \[ My = 140 \]
   20
   \[ My = 7 \]

2. The Computation of Deviation
   Square deviation of experimental group
   \[ \sigma_x^2 = \frac{\sum x^2 - (\frac{\sum x}{N})^2}{N_x} \]
   \[ X^2 = 3000 - \frac{(160)^2}{20} \]
   \[ X^2 = 3000 - \frac{25600}{20} \]
   \[ X^2 = 3000 - 1280 \]
   \[ X^2 = 1720 \]
   \[ X^2 = 2,998 \]
   Square deviation of control group
   \[ \sigma_y^2 = \frac{\sum y^2 - (\frac{\sum y}{N})^2}{N_y} \]
   \[ Y^2 = 2400 - \frac{(140)^2}{10} \]
   \[ Y^2 = 2400 - \frac{19600}{10} \]
   \[ Y^2 = 2400 - 1960 \]
   \[ Y^2 = 440 \]
3. The Calculation of T-test

After finding square deviation, the result of data analysis score is calculated to the score of t-test formula.

\[ t = \frac{8 - 6.5}{\sqrt{\frac{1.72 + 6.44}{20} \cdot \frac{1}{20} + \frac{1}{20}}} \]

\[ t = \frac{1.5}{\sqrt{\frac{2.16}{30} \cdot \frac{2}{40}}} \]

\[ t = \frac{1.5}{\sqrt{0.056 [0.05]}} \]

\[ t = \frac{1.5}{\sqrt{39.662}} \]

\[ t = 39.662 \]

The analysis of data in this research eventually aimed to find out the deviation means scores analysis it is referred to the score of t-test namely 0.0028. Now, it is to be interpreted to find out if it is significant or not.

Before the writer check the table of distribution. Firstly, the writer determines the degree of freedom (df) that is x+y\(-2= 20 + 20 - 2 = 38\). Based on the table of level significance have been pointed out, the coefficient. t-test is directly checked on the table of t-distribution. Based on the table, the critical value of t-table on the level of significance t 0,05% is 2,02 and t 0,01% is 38. Based on the data analysis above, it is found that the result of t-test is higher than t-table. It means that alternative hypothesis which stated the use of smart card is effect in teaching vocabulary is accepted. Meanwhile the null hypothesis which stated smart card is not effective in teaching vocabulary is rejected.

Based on the result of analysis of the deviation score of pre-test and post-test above, the researcher then continued to calculate the computation of the mean scores. Since the two groups are evaluated using the same test, then we can see from the mean score is that greater obtained by certain group, the better of achievement, or vice versa. It can be interpreted that the mean score of the groups is 6.5 for control group and 8 for experimental group. Experimental group is better that control group although it is only a temporary assumption. So it can be concluded that using smart card has effect to involve actively in learning vocabulary in class. The teachers as material presenter should choose an appropriate smart card based on some guidelines above. Besides that the advantages of by using smart card in developing vocabulary are:

1. The students might have a high interest in following the teaching learning process. Most children in the elementary school are interested in some teaching aids, such as games, and smart card.

2. The students might be motivated to be active in the class, and it can be easier to ask students to give responses and opinion.

3. It is easy to understand, memorize, remember vocabulary and could avoid misunderstanding, because the students see the object directly. The students were also active, and enthusiastic in their activities in classroom because it can play their imagination, motivate them in learning vocabulary as the interesting method to apply in classroom.

D. CONCLUSION

Based on result of the study, it could be concluded that the use of smart card has an effect in learning vocabulary. Besides that, teaching vocabulary which is using smart card can make students more enthusiastic, excited and happy in learning vocabulary process. The students' progress during teaching learning process is better. It is supported by the result analyzing data from the result between the deviations of mean scores of experimental group was 8, control group was 6.5 and t-test table 39.662. From this fact, it was clear that mean score of both groups has a difference. And result t-test is higher than t-table. It means the alternative hypothesis (Ha) was definitely accepted.

The writer would like to propose some suggestion, which helpfully would be useful for all subjects: (1) to the teacher, the smart card would be influence the learners' in enrich their vocabulary. They should pay attention to the fact that learners' motivation during teaching learning process is the important thing which should be increased. The use of various media is suggested to make the students more encourage to improve the teaching learning process. And the student's should pay attention to the teacher explanation, so if the teacher gives question, they can do perfectly and they can do the exercise; (2) to other researchers, It has been known from the result of the study that the use of smart has effect students' vocabulary skill. Hereby, it is expected that the result of the study make the English teacher use an appropriate media in improving students' vocabulary skill.

REFERENCES


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