Abstract: This study was intended to find out whether or not there was any significant difference between the students who were taught by using chart game and those who were not. The population of this research was the fifth graders of One State Primary School Banyuasin academic year 2018/2019 with the total number of 58 students. For the sample, the writer took two classes by using purposive sampling based on the same amount of students: V A (29 students) and V B (29 students). The method used in this study was quantitative with quasi experimental method design. Then, the data were collected from vocabulary test. Researcher did 10 meetings along the research, 1 meeting for pre-test, 8 meetings for treatment, and the rest 1 meeting for post test. Post test result showed that mean of experimental group was 79.10 and mean of control group was 68.14. After being calculated by using independent sample t-test, it was found that value of t-obtained 5.564. It was higher than the critical value of t-table 2.003. Meanwhile, the values of significant (2-tailed) was .000. It indicated that the null hypothesis was rejected and the alternative hypothesis was accepted. In other words, there was significant difference between the fifth graders who were taught by using chart game and those who were not.

Keywords: vocabulary mastery and chart game

1. INTRODUCTION

English is a means of communication. Today, all people around the world use English as the united language in communication therefore those who cannot speak English will be hard to communicate when they go overseas or meet people from other countries. Seidlhofer (2005, p. 51) said the advantage of learning English is to know the development of knowledge, science, and technology since most of books, articles, journals of science are written in English. Realizing the importance of English, the Indonesian government treated English as the first foreign language and set it as local content subject for elementary school, and compulsory subject for junior high school and senior high school (Musthafa, 2010). As one of the language aspect which should be studied, vocabulary plays an important role in improving the students’ skills and the students’ ability to communicate. The vocabulary mastery will affect someone’s ability in using the language either in spoken or written form. Vocabulary is the foundation of all English skills.
Therefore, students ought to enrich their vocabulary. Hackman (2008, p. 23) told that teaching for students of primary school is not easy and same as teaching university students because they have different characteristics and motivation. In other words, children are different from adults, so teachers ought to give different teaching style. The children love to play, dance, move, and they cannot not focus in a long time. If teachers cannot teach the students properly, they may not enjoy their learning then the teaching and learning process may fail. Teachers of English have to use appropriate teaching strategy to attract students’ interest in learning English as it is known that the students love to learn through game. It was believed that game could help to minimize the students’ boredom in learning vocabulary. One of the familiar games is chart game. Chart game is a kind of game using visual representations as the media. In this technique, the teacher made cards or puzzles and drew pictures in the board. Then, students were divided into some groups and each group went front to the class and put the cards or puzzles in the board. The students will be divided into some groups and each group will go front to the class and put the cards or puzzles in the board. Rohani (2013) states that there are several benefits of chart games such as; students have fun to learn vocabulary, improve their vocabulary mastery, easy to remember the new vocabulary, active in the classroom, enjoy to learn, and build students’ self-confidence.

Furthermore, there were several problems occur in the classroom. First, the teacher only used textbook and worksheet (LKS) to deliver materials to the students and did not use any other teaching media. Second, the students did not seem too interested in the lesson, they did not pay attention in the teacher’s explanation, they prefer did other things. Third, the students were passive, not all of the students were active and doing their task seriously. When the teacher asked the students to answer questions, there was no one raised their hands. Thus, the teacher pointed one of them to answer the question. In line with this, students also had difficulties in remembering the meaning of words, they could not spell words correctly. The students especially the fifth graders got confused because written and pronunciation of the words were different, they thought that English is difficult. As the result, the students were lazy and bored, they did not pay much attention and had lack motivation to study since they think English is difficult.

Indeed, teachers of English have to use appropriate teaching strategy to attract students’ interest in learning English as it is known that the students love to learn through game. So that the problem discussed in this research was formulated as follow: “Was there any significant difference on vocabulary mastery between the fifth graders who were taught by using chart game and those who were not of One State Primary School in Banyuasin?.
II. LITERATURE REVIEW

Young learners are children from the first year formal schooling (five or six years) to eleven or twelve years age (Curtain, 2004, p. 12). Nation (2001, p. 46) states that young learners are active thinker, they are keen to know everything. So that, it is good to introduce them to many vocabulary in the very early start. One of ways can be done by teachers in order to make their teaching become fun is by providing a good strategy. One of strategy is in the form of game. They learnt best when they are enjoying themselves, enthusiastic, concern to study only in short time, and have long-term memorization. Most of students are lazy to learn English because of its difficulties. Besides, the teacher taught with the same strategy, it made them bored and not interested in learning English.

It was a must for the teacher to know a lot about the characteristics of young learners because it helped teacher very much in transferring the lesson. So it was important to use a strategy that can attract the students’ attention. Richard (2001, p. 69) mentions that chart game make the classroom activities become active and full of joy, it puts the students as the centred of learning. The teachers could make it as creative as well. They had to use the KISS principle. KISS stands for Keep It Simple for Students. Indeed, the teacher must teach vocabulary in easy and simple way to make students enjoy the class. In Short, chart game is one of good technique to be applied in teaching vocabulary because it help students to memorize words and they are fun during the process of teaching and learning and they become more active in the classroom. Thus, vocabulary charts could be very useful in helping students to master the words. Smaldino et al (2008) added that the children are not bored to learn vocabulary so it can make them easy to remember every word which have been taught by the teacher. Charts puts vocabulary in related categories so that it helps long term students’ memorization (Nixon, 2001, p. 29).

Teaching vocabulary should not interrupt the whole lesson. One of the difficulties in planning the vocabulary components of a course was making sure that it did not overwhelm other essential parts of the course. Brown (2001, p.377) mentions some guidelines for the communicative treatment of vocabulary instruction: 1) Allocate specific class time to vocabulary learning, 2) Help students to learn vocabulary in context. The best internalization of vocabulary comes from encounters (comprehension or production) with words within the context of surrounding discourse, 3) Play down the role of bilingual dictionaries. It was to help students to resist the temptation to overuse their bilingual dictionaries, 4) Encourage students to develop strategies for determining the meaning of words, 5) Engage in
“unplanned” vocabulary teaching. Most of the attention given to vocabulary learning will be unplanned: those moments when a student asks about a word or when a word has appeared that you feel deserves some attention. It was adapted from Diamond (2006), some procedures to teach vocabulary by using chart games were: First, teacher and students read the assignment. Second, teacher made a list of key terms and concept for the reading. Third, teacher divided the list into superordinate and subordinate information. Fourth, teacher organized the information into some classifications. Then, last, students worked individually, in groups which consist of 5-6 students for each group and then the students completed the chart on the board.

III. RESEARCH METHOD

In this study, researcher used a quasi-experimental design that was pre test and post test non-equivalent control group design. The researcher did not use random sampling system in selecting the groups. There were two groups, experimental group and control group. Both of groups were given a pre-test and post-test. Pre-test was administered before the treatment and the post-test was administered after the treatment. Both experimental and control group had treatment. The researcher applied Chart Game technique in teaching vocabulary to the experimental group and applied another strategy that was conventional method or lecturing method to the control group. There were 10 meetings for both experimental and control group. 1 meeting was for pretest, 8 meetings were for treatment and 1 meeting was for post test. The materials are about part of body, transportation and occupation. The difference was only at treatements. In experimental group, researcher applied chart game as the teaching strategy while in control group, researcher just used lecture method.

The population was all the fifth graders of One State Primary School Banyuasin in the academic year 2018/2019. There were 2 classes of the fifth grade. The total population in this study was 58 students. They were V A and V B consisted the same amount of students, 29. The researcher took V A as experimental group because the students’ vocabulary ability in that class were still very poor. The English teacher of the school said that most students in V A got bad mark in English based on their score in the previous level. In collecting the data, the researcher gave test which consisted of 30 items; 10 items for multiple choices, 10 items for matching test, and 10 items for word rearrangement. The test was administered twice before and after the treatment to the sample. The researcher gave the pre-test by giving
some questions to measure how well the vocabulary mastery of the students before being taught using chart game. To know the students’ ability in learning vocabulary after getting the treatments, post test was administered to the sample. Corrected item validity was the degree to which a sample of items represented an adequate operational definition of the construct of interest for which it is being used, no more and no less (Polit & Beck, 2006). The researcher conducted try out before doing the pretest in another primary school in Banyuasin. There were 35 items in try out. However, there were 30 valid items and 5 not valid items. The items in the test must represented the material that have been taught. So that, before the test would be given to the sample, the writer tried out (TO) the test items to know whether they were valid or not.

Reliability of the Test

Reliability is a necessary characteristic of any good test. A test must first be reliable as a measuring instrument. Reliability refers to the stability of test scores. A reliability test is consistent and dependable (Brown, 2004, p. 20). To measure the reliability of the test, the writer used split half method.

Technique for Analyzing the Data

The data will be analyzed with the following formula:

\[
X = \frac{R}{N} \times X \times 100
\]

(Depdiknas, 2008, p. 12)

Where:
- \(X\) : Students’ Individual Score
- \(R\) : Number of Correct Answer
- \(N\) : Number of Test Items

Then researcher interpreted the score to find the vocabulary level. The scale of the score distribution in the student’s vocabulary score was from 0 – 100. The score was graded into eight levels, which are excellent, very good, good, enough, low, poor and very poor. Researcher used the table of students’ measurement achievement criteria to measure and to know the students’ achievement. To analyze the data, the researcher used paired sample t-test and independent sample t-test technique. Paired sample t-test was used to compare two sets of scores obtained from the same group or when the same participants were measured more than once in a research design. This analysis was also a useful means to carry out tests on two paired samples to find out whether there was any significant difference between pretest and post test. To get the t-test result the researcher used the SPSS 16 program. The
independent sample t-test was applied to find out whether or not the use of Chart Game was effective to improve students’ vocabulary mastery. The result was analyzed by the researcher through Statistical Package for Social Science (SPSS). The researcher compared the posttest result of both experimental and control group.

<table>
<thead>
<tr>
<th>Criteria of mastery</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>91-100</td>
<td>Excellent</td>
</tr>
<tr>
<td>81-90</td>
<td>Very good</td>
</tr>
<tr>
<td>71-80</td>
<td>Good</td>
</tr>
<tr>
<td>61-70</td>
<td>Moderate</td>
</tr>
<tr>
<td>51-60</td>
<td>Enough</td>
</tr>
<tr>
<td>41-50</td>
<td>Low</td>
</tr>
<tr>
<td>31-40</td>
<td>Poor</td>
</tr>
<tr>
<td>0-30</td>
<td>Very poor</td>
</tr>
</tbody>
</table>

*Source: Students Report Book*

**The Normality and Homogeneity of the Test**

Field (2009) says that a normality test is a statistical process used to determine if a sample or any group of data fits a standard normal distribution, while homogeneity test is used to determine whether the obtained data are homogenous or not. In this study, the researcher used Statistical Package for Social Science (SPSS) to analyze the normality and homogeneity of the data. Field (2009) adds that the kolmogorov-smirnov is used to measure the normality of the sample because the data of this study was more than 50. Next, the levene’s test was used to examine the homogeneity of variance of the scores. The levene’s test checked the null hypothesis that the variances in the groups were equal so that it meant the difference between the variances is zero.

**Paired Sample T – Test**

Paired sample t-test was used to compare two sets of scores obtained from the same group or when the same participants are measured more than once in a research design. This analysis was also a useful means to carry out tests on two paired samples to find out whether there is any significant difference between pretest and post test. To get the t-test result the researcher used the SPSS program.

**Independent Sample T – Test**

The independent sample t-test technique would be used by the researcher for analyzing the data. The independent sample t-test was applied to find out whether the use of
Chart Game would be significant or not to improve students’ vocabulary mastery. The result was analyzed by the researcher through Statistical Package for Social Science (SPSS). The researcher compared the post-test result of both experimental and control group.

**IV. FINDINGS**

The Kolmogorov-Smirnov was used to measure the normality of the sample because the data of this study was more than 50. Based on the data, the significant $0 > 0.05$, it is clear that the data obtained was considered normal. According to the table, Kolmogorov-Smirnov statistic for normality of post-test group 1 was 0.092 and group 2 was 0.082. The significant value was greater than 0.05, the data is normal. The researcher measured the homogeneity of pretest and posttest for both experimental group and control group. If the significant $0 > 0.05$, it was clear that the data were homogeneous. Based on data, the significance of homogeneity of pretest was 0.072>0.05. Indeed, the data had the same variances. Then, the significance of homogeneity of post-test was 0.476>0.05. Therefore, the data were considered homogeneous.

The pre-test and post-test for experimental group were done in class VA and VB at One State Primary School Banyuasin. The result of the pre-test for experimental group showed that the lowest score was 34 reached by 1 student and the highest score was 86 reached by 1 student. Then, the result of the pre-test for control group showed that the lowest score was 46 reached by 1 student and the highest score was 83 reached by 1 student. Then, the result of the post-test for experimental group showed that the lowest score was 66 reached by 2 students and the highest score was 97 reached by 1 student. Meanwhile, the result of the post-test for control group showed that the lowest score was 60 reached by 6 students and the highest score was 86 reached by 1 student.

**Table 2. The Score Distribution In Experimental Group**

<table>
<thead>
<tr>
<th>Score</th>
<th>Category</th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>90-100</td>
<td>Excellent</td>
<td>1</td>
<td>3</td>
<td>12</td>
<td>41</td>
</tr>
<tr>
<td>80-89</td>
<td>Good</td>
<td>2</td>
<td>7</td>
<td>14</td>
<td>48</td>
</tr>
<tr>
<td>70-79</td>
<td>Average</td>
<td>3</td>
<td>10</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>60-69</td>
<td>Poor</td>
<td>17</td>
<td>59</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>&lt;59</td>
<td>Very poor</td>
<td>6</td>
<td>21</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>29</td>
<td>100</td>
<td>29</td>
<td>100</td>
</tr>
</tbody>
</table>
The results of pre test for experimental were as follows: 3% (reached by 1 student) got excellent, 7% (reached by 2 students) got good, 10% (reached by 3 students) got average, 59% (reached by 17 students), and 21% (reached by 6 students) got very poor. After the post-test we can see that 41% (reached by 1 student) got excellent, 48% (reached by 14 students) got good, 10% (reached by 3 students) got average.

Table 3. The Score Distribution In Control Group

<table>
<thead>
<tr>
<th>Score</th>
<th>Category</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>90-100</td>
<td>Excellent</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>80-89</td>
<td>Good</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>70-79</td>
<td>Average</td>
<td>12</td>
<td>41</td>
</tr>
<tr>
<td>60-69</td>
<td>Poor</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>&lt;59</td>
<td>Very Poor</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>29</td>
<td>100</td>
</tr>
</tbody>
</table>

From the table above, the results of post test for control group were as follows: 3% (reached by 1 student) got excellent, 21% (reached by 6 students) got good, 41% (reached by 12 students) got average, 28% (reached by 8 students) got average, and 7% (reached by 2 students) got poor. After the post-test we can see that 3% (reached by 1 student) got excellent, 38% (reached by 11 students) got good, 38% (reached by 11 students) got average, 21% (reached by 6 students) got poor.
Table 4. Paired Samples Test Of Experimental Group

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>-2.16207E1</td>
<td>9.03333</td>
<td>1.67745</td>
<td>-25.05678 - 18.18460</td>
<td>28</td>
<td>.000</td>
</tr>
</tbody>
</table>

Output paired samples test shows the result of compare analysis with using t. The results were $t=12.889$ with degree of freedom 28 and significance 0.000. Since, $t$-obtained 12.889 was higher than $t$-table 2.003, it can be concluded after receiving a treatment of chart game in experimental group the students could improve their vocabulary mastery achievement. It could be seen in the table 14, the significant 2 tailed was lower than alpha value 0.05. It can be concluded that chart game taught in the experimental group was effective to improve students’ vocabulary achievement.

Table 5. Paired Samples Test Of Control Group

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>-4.68966</td>
<td>8.48151</td>
<td>1.57498</td>
<td>-7.91585 - 1.46346</td>
<td>-2.978</td>
<td>28</td>
<td>.006</td>
</tr>
</tbody>
</table>

Based on table 15, output paired samples test shows the result of compare analysis with using t. The results were $t=2.978$ with degree of freedom 28 and significance 0.006. Since, $t$-obtained 2.978 was higher than $t$-table 2.003, it can be concluded after receiving a treatment of chart game in experimental group the students could improve their vocabulary mastery achievement. It could be seen in the table 15, the significant 2 tailed was lower than alpha value 0.05. It can be concluded that chart game taught in the experimental group was effective to improve students’ vocabulary achievement.
Output independent samples t-test shows the result of compare analysis with using t. The results were $t=5.564$ with degree of freedom 56 and significance 2 tailed $0.00<0.05$. Since, $t$-obtained 5.564 was higher than $t$-table 2.003, it meant that $H_0$ rejected, $H_a$ accepted. So that there was significant difference between the experimental and control group and the use of chart game was effective to improve students’ vocabulary achievement.

Based on the result of analysis, the calculation indicated that the result of post test was higher than pretest in experimental group. Then, the result of post test was also higher than pretest in control group but not as significant as experimental group. It meant that there was significant improvements in vocabulary mastery achievement in experimental group. Furthermore, during the study, the researcher found some differences before and after the treatments. The students were difficult to memorize the words, have lack motivation, and lazy to learn vocabulary. They prefer did another things rather than learning because of the media. After receiving the treatments by using chart game, they finally could memorize a lot of words, and interested to learn. Therefore, chart game took the students’ interest and made them easier to memorize the vocabulary (Smaldino et al, 2008). In short, it was proven that the students’ vocabulary mastery score by using chart game was better. It meant that the use of chart game was significantly effective in teaching vocabulary mastery to the fifth graders of One State Primary School Banyuasin.

V. CONCLUSION AND SUGGESTION

Based on the findings and interpretation of the study, the researcher concluded that it was effective to teach vocabulary by using chart game to the fifth Graders of One State Primary School Banyuasin. It can be proved from the students’ vocabulary mastery
achievement after post-test was given. It meant that the alternative hypotheses (Ha) was accepted and the null hypotheses (Ho) was rejected. In short, there was significant difference in vocabulary achievement between the fifth graders who were taught by chart game and those who were not of One State Primary School Banyuasin.

Researcher would like to give some suggestions to the teachers of English, students, and institution. They were as follows: (1) To the teachers of English, as the facilitators in the classroom, teachers had to find out appropriate teaching strategy to make students interested in learning. They ought to consider that they are having important role in the process of teaching and learning. The teachers should focus on learning centred. It meant that students had to make sure that the students could get the knowledge for every meeting. In teaching young learners, teachers should include game to make students enjoy the lesson. Teacher should know what the students’ needs and interests. Teachers should encourage and motivate the students to learn vocabulary. Therefore, in this study, researcher recommended chart game as one of techniques that could be applied in the teaching vocabulary. Chart Game offered interesting and fun way in learning vocabulary. (2) To the students, they had to enrich their vocabulary especially primary students because they had long-term memory in the early age to make them easier to master other skills like speaking, reading, listening, and writing. Besides, the students should be more active and creative in learning vocabulary, they had to give question about the materials they do not really understand. (3) To the institution, it was a must to develop the quality of institution. A good institution could be known through their quality especially in term of education. Institution should update their education program suited to curriculum. Both teachers and institution should be cooperative and collaborative to reach the goals of education. Teachers should be facilitated like teaching aids, teaching seminar, and so on. Besides, the students should be given more practice in teaching English to young learners.

REFERENCE


