THE EFFECT OF USING COLORFUL PICTURES TOWARD STUDENTS’ ENGLISH VOCABULARY MASTERY AT THE FIRST GRADE STUDENTS OF SMK

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Abstract
This research is aimed to find out the effect of using colorful pictures toward students’ English vocabulary mastery at the first grade students of SMK. The research was experimental. The population of the research was of the first grade students of SMK. The sample of the research was 64 students. The sample was taken by using cluster random sampling technique. The technique that was used to analysis the data is \( t_{test} \) formula. The finding shows that the score of \( t_{test} \) (3.27) is higher than \( t_{table} \) (1.669) from (df) 62. Based on the result of the study, it can be concluded that colorful pictures has positive effect toward students’ English vocabulary mastery at the first grade students of SMK. Dealing with the result, it is suggested that teacher to use colorful pictures toward students’ English vocabulary mastery because it can improve students vocabulary at the first grade students.

Keywords: Colorful Pictures; Teaching English; Vocabulary

INTRODUCTION

The teaching of English vocabulary in Indonesia especially vocational school needs some techniques that make the learners feel attracted in studying memorizing and mastering the vocabulary. It is really important to master four skills of language namely: (speaking, listening, writing and reading skills). A word is a microcosm of human consciousness. All languages have words. Language emerges first as words, both historically, and in terms of the way each of us learned our first and any subsequent languages. The coining of new words never stops. Nor does the acquisition of words. Even in our first languages we are continually learning new words, and learning new meanings for old words. Take, for example, this description of a wine, where familiar words are being used and adapted to express very specialized meanings (Thornburry, 2002: 1).

Learning vocabulary is very important and it is a part of learning English. In teaching vocabulary; teacher should have many ways strategies to help students
in learning vocabulary, like using picture, game, song, poem, film, etc. In this research the writer wants to try to use completion technique in developing student’s achievement especially in colorful picture on English vocabulary. In effort to make the English teaching successful, English teacher have to consider some factors such as the quality of teacher, student’s interest, motivations, school buildings, libraries and books which are involved together in teaching and learning process. Besides, there are still other factors like teaching techniques and teaching media which also play important roles. Vocabulary developments are not just learning more word knowledge. In expanding and deepening word knowledge, the students are helped to increase what they know about words. Teacher needs to include the reproduce of word (Camerson in Zaitun, 2001: 81).

Many media and style of visual presentation are useful to language learners are no general rule to indicate which media and visual style are appropriate at any time (Wright in Zaitun, 1976: 65). In choosing media, the teacher must be able to combine the relevant media to a subject that will we taught in teaching and learning activities. Colorful pictures are one of techniques applied in such situation. The English teacher prepares some colorful pictures and spends big sums of times to get the students understanding. The pictures can be real photographs, drawing objects or merely stick figures. When the researcher did the teaching training in this school, the researcher did not see that the teacher use the media in teaching English vocabulary and it makes the students feel and bored in studying. Therefore, the researcher is interested in proving and finding of the effect of using colorful pictures toward students’ English vocabulary mastery at the first grade students of SMK Negeri 1 Praya Tengah.

Broader issues is the nature of the construct that we set out to measure with a vocabulary test, Bachman and Palmer (at Jhon read, 2000: 17)(1996) propose that the general construct underlying language tests, which they call language ability, is made up not only of multiple areas of knowledge but also strategic competence. If we apply this concept to vocabulary, we realise that vocabulary ability involves more than just knowing a lot of lexical items, learners must have ready access to that knowledge and be able to draw on if effectively in
performing language-use tasks. In addition, they need to have strategies for dealing with situations where their vocabulary knowledge is insufficient to meet their communication needs (John Read, 2000: 17).

Our everyday concept of vocabulary is dominated by the dictionary. We tend to think of it as an inventory of individual words, with their associated meanings. This view is shared by many second language learners, who see the task of vocabulary learning as a matter of memorizing long lists of second language words, and their immediate reaction when they encounter an unknown word is to reach for a bilingual dictionary. From this perspective, vocabulary involves knowing the meaning of words and therefore the purpose of vocabulary test is to find out whether the learners can match each word with a synonym, a dictionary type definition or an equivalent word in their own language (John Read 2000: 16). Vocabulary is a microcosm of human consciousness and vocabulary knowledge involves knowing the meanings of words. The indicator of vocabulary is meaning: students know the meaning of the word.

Knowing a word is one thing, in learning their first language the first words that children learn are typically those used for labelling that is, mapping words on to concepts. In other words, acquiring a vocabulary requires not only labelling but categorising skills. Finally, the child needs to realise that common word like apple and dog can be replaced by super ordinate terms like fruit and animal. This involves a process of network building, network building serves to link all the labels and packages, and lays the groundwork for a process that continues for as we are exposed to new words and new meanings for old words that is, for the rest of our lives (Scott Thornburry, 2002: 18).

A father major difference between first and second language vocabulary learning is in the potential size of the lexicon in each case. An educated native speaker will probably have a vocabulary of around 20,000 words. This relatively slow progress has less to do with aptitude than with exposure. The average classroom second language learner will experience nothing like the quantity nor the quality of exposure that the first language infant receives. It has been calculated that a classroom learned would need more than eighteen years of
classroom exposure to supply the same amount of vocabulary input that occurs in just one year in natural settings. The answer must depend to a large extent on the learner’s need. A holiday trip to an English speaking country would obviously make different vocabulary demands than a year’s study in British university. This is around the number of words that most native speakers use in their daily conversation. About 2,000 words, too, is the size of the defining vocabulary used in dictionaries for language learners. These are the words and suffixes that are used in the dictionary’s definitions. In other words, fourteen out of 140 running words, or exactly ten per cent of the text, would be unfamiliar to the learner who had learned the top 2,000 (Scott Thornbury, 2002: 20).

According to (Scott Thornbury, 2002: 27) other factors that make some words more difficult than others are: Pronunciation: Research shows that words that are difficult to pronounce are more difficult to learn. Potentially difficult words will typically be those that contain sounds that are unfamiliar to some groups of learners. Spelling: sounds spelling mismatches are likely to be the cause of errors, either of pronunciation or of spelling, and can contribute to a word’s difficulty. While most English spelling is fairly law abiding, there are also some glaring irregularities. Grammar: also problematic is the grammar associated with the word, especially if this differs from that of its first language equivalent. Meaning: when two words overlap in meaning, learners are likely to confuse them. Having learned one meaning of the word, they may be reluctant to accept a second, totally different, meaning. Unfamiliar concepts may make a word difficult to learn.

Range, connotation and idiomaticity: words that can be used in a wide range of contexts will generally be perceived as easier than their synonyms with a narrower range. It is their idiomaticity, as well as their syntactic complexity, that makes phrasal verbs so difficult. The teacher has a number of options available. First, there is the question of how many words to present. According to (Scoot Thornbury, 2002: 18) this will depend on the following factors:

The level of the learners: whether beginners, intermediate, or advanced.
The learners’ likely familiarity with the words (learners may have met the words before even though they are not part of their active vocabulary. Whether items are being learned for production in speaking and writing or for recognition only as listening and reading. Since more time will be needed for the former, the number of items is likely to be fewer than if the aim is only recognition. Having decided on the number of items to teach, there is then the choice of the sequence of presentation, either: Meaning first, then form, or Form first, than meaning The next set choices relates to the means of presentation, whether to present the meaning through: Translation, Real things, Pictures, Actions/ gestures, Definitions Situations, And whether to present the word in its: Spoken form, or Written for, How to Test Vocabulary, Why Test Vocabulary.

The obvious answer is that, without testing, there is no reliable means of knowing how effective a teaching sequence has been. Testing provides a form of feedback, both for learners and teachers. Moreover, testing has a useful backwash effect: if learners know they are going to be tested on their vocabulary learning, they may take vocabulary learning more seriously. Testing motivates learners to review vocabulary in preparation for a test.

More formal testing may be required at certain strategic stages in a course. Tests of vocabulary knowledge sometimes form a part of placement tests, or as a component of a diagnostic test in advance of planning a course programme. Such tests usually involve some attempt to measure extent of vocabulary knowledge. Tests of achievement at the end of a course, and of overall proficiency, as measured by external examination such as the Cambridge First Certificate or TOEFL, typically include a vocabulary testing component. Vocabulary knowledge is sometimes targeted in tests of reading ability, since there is a strong correlation between the two. Finally learners’ developing vocabulary knowledge, and their use of vocabulary learning strategies, may be the subject of testing for research purposes especially the kind of research that teachers themselves can carry out in their own classroom (Scott Thornburry, 2002: 129).

According to (Scot Thornbury 2002: 130) we conclude that knowing a word means knowing: The word’s form- both spoken and written, The word’s
meaning (or meanings). Any connotations the word might have, Whether the word is specific to a certain register or style, The word’s grammatical characteristic – e.g. part of speech, The word’s derivations, The word’s relative frequency. We have already seen an example of a multiple choice test. Multiple choice tests are a popular way of testing in that they are easy to score (a computer can do it), and they are easy to design (or seem to be). Moreover, the multiple choice format can be used with isolated words, words in a sentence context, or words in whole texts (Scott Thornburry, 2002: 132).

Sometimes it is useful to assess the size of a learner’s vocabulary. For example, as a factor in determining a learner’s readiness to sit a public examination, the number of words they know may be crucial. It is estimated that a recognition vocabulary of at least 4,500 words is necessary for the Cambridge First Certificate examination. There is little point in a learner entering for the exam if his or her vocabulary size is barely 2,000. One fairly crude measure is to use a dictionary and choose a random selection of words- say every tenth word on every tenth page-and incorporate these into a test. Or learners could simply be asked to translate the words into their first language. The proportion of words correctly known represents the proportion of words in the whole dictionary. Another approach is to ask learners themselves to assess the number of words they know by giving them a representative sample of words in the form of list and asking them to tick the words they are familiar with. A more sophisticated self-assessment test takes into account the fact that word knowledge involves varying degrees of depth (Scott Thornburry, 2002: 137).

METHOD

The study was aimed at finding out the effect of using colorful pictures toward students’ English vocabulary mastery for the first grade students of vocational school. The research design used in this study was an experimental design in which there were two variables that was going to see in this research. Independent variable of this study is colorful pictures and the dependent variable of this study is vocabulary mastery. There are some indicators in teaching vocabulary, such as pronunciation, spelling, grammar, meaning, range,
connotation and idiomaticity, the researcher used those indicators when the researcher did the research especially in the treatment. While in making the instrument the researcher only used one indicator of teaching vocabulary, it is meaning.

Experimental approach is characterized by much greater control over the research environment and in this case some variables are manipulated to observe their effect on other variables (Kothari, 2004: 5). This research used Randomized Two-Groups Posttest only Design, the two-group experimental design may involve little more than random assignment and posttest (Campbell, 1963: 25).

RESULT AND DISCUSSION

Before coming to the statistical computation of the data, it is important to present of mean, mode, median and standard deviation of experimental and control group.

1) Experimental Group

a. Mean: \[ \bar{x} = \frac{\sum fix_i}{n} \]

<table>
<thead>
<tr>
<th>Class limits</th>
<th>Frequency (f_i)</th>
<th>Midpoint (x_i)</th>
<th>F_iX_i</th>
</tr>
</thead>
<tbody>
<tr>
<td>52-60</td>
<td>2</td>
<td>56</td>
<td>112</td>
</tr>
<tr>
<td>61-69</td>
<td>4</td>
<td>65</td>
<td>260</td>
</tr>
<tr>
<td>70-78</td>
<td>9</td>
<td>74</td>
<td>666</td>
</tr>
<tr>
<td>79-87</td>
<td>11</td>
<td>83</td>
<td>913</td>
</tr>
<tr>
<td>88-96</td>
<td>5</td>
<td>92</td>
<td>552</td>
</tr>
<tr>
<td>∑</td>
<td>32</td>
<td></td>
<td>2503</td>
</tr>
</tbody>
</table>

Mean: \[ \bar{x} = \frac{\sum fix_i}{n} = \frac{2503}{32} = 78.21 \]

b. Mode:
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Mo = L + i \left( \frac{f_1}{f_1 + f_2} \right)

= 78.5 + 9 \left( \frac{2}{2 + 5} \right)
= 78.5 + 9 \left( \frac{2}{7} \right)
= 78.5 + 2.57
= 81.07

c. Median

Me = L + i \left( \frac{n - cbf}{f_w} \right)

= 78.5 + 9 \left( \frac{2}{32 - 15} \right)
= 78.5 + 9 \left( \frac{11}{15} \right)
= 78.5 + 9 \times 0.73
= 78.5 + 6.6
= 85.1

d. Standard Deviation

Table 2. Standard Deviation of Experimental Group

<table>
<thead>
<tr>
<th>Class Limits</th>
<th>F_i</th>
<th>X_i</th>
<th>X_i^2</th>
<th>F_i X_i</th>
<th>F_i X_i^2</th>
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<tbody>
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<td>56</td>
<td>3136</td>
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<td>61-69</td>
<td>4</td>
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<td>260</td>
<td>16900</td>
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<tr>
<td>70-78</td>
<td>9</td>
<td>74</td>
<td>5476</td>
<td>666</td>
<td>49284</td>
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<tr>
<td>79-87</td>
<td>11</td>
<td>83</td>
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<td>913</td>
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<td>88-96</td>
<td>6</td>
<td>92</td>
<td>8464</td>
<td>552</td>
<td>50784</td>
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<td>∑</td>
<td>32</td>
<td></td>
<td>2503</td>
<td>199019</td>
<td></td>
</tr>
</tbody>
</table>

S = \sqrt{\frac{\Sigma f_i x_i^2 - \left( \Sigma f_i x_i \right)^2}{n}}

= \sqrt{\frac{199019 - \left( \frac{2503}{32} \right)^2}{32 - 1}}

= \sqrt{\frac{199019 - \left( \frac{6265009}{32} \right)}{31}}
The data description of experimental group shows that the highest score is 96 and lowest score is 52. The mean is 78.21, the mode is 81.07, the median is 79.31 and the standard deviation is 10.21. Then, the histogram and polygon of vocabulary score of experimental group shown in the bellow figure:

![Histogram and Polygon of Vocabulary Score of Experimental Group]

Figure 1. Histogram and Polygon of Vocabulary Score of Experimental Group

2) Control Group
a. Mean: \( \bar{x} = \frac{\sum fx_i}{n} \)

<table>
<thead>
<tr>
<th>Class limits</th>
<th>Frequency (f)</th>
<th>Midpoint (xi)</th>
<th>Fxi</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1</td>
<td>51</td>
<td>52</td>
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<tr>
<td>57-65</td>
<td>12</td>
<td>61</td>
<td>732</td>
</tr>
<tr>
<td>66-74</td>
<td>9</td>
<td>70</td>
<td>630</td>
</tr>
<tr>
<td>75-83</td>
<td>6</td>
<td>79</td>
<td>474</td>
</tr>
<tr>
<td>84-92</td>
<td>4</td>
<td>88</td>
<td>352</td>
</tr>
<tr>
<td>( \sum )</td>
<td>32</td>
<td></td>
<td>2260</td>
</tr>
</tbody>
</table>
Mean: \( \bar{x} = \frac{\sum fixi}{n} \)
\( = \frac{2260}{32} \)
\( = 70.62 \)

b. Mode:
\( Mo = L + \left( \frac{f_1}{f_1 + f_2} \right) \)
\( = 56.5 + 9 \left( \frac{11}{11 + 3} \right) \)
\( = 56.5 + 9 \left( \frac{14}{14} \right) \)
\( = 56.5 + 7.07 \)
\( = 63.67 \)

c. Median
\( Me = L + \left( \frac{n}{2} - cbf \right) \)
\( = 56.5 + 9 \left( \frac{32}{12} - 1 \right) \)
\( = 56.5 + 9 \left( \frac{16 - 1}{12} \right) \)
\( = 56.5 + 9 (1.25) \)
\( = 56.5 + 11.25 \)
\( = 67.75 \)

d. Standard Deviation

<table>
<thead>
<tr>
<th>Class Limits</th>
<th>( F_i )</th>
<th>( X_i )</th>
<th>( X_i^2 )</th>
<th>( F_iX_i )</th>
<th>( fX_i^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>48-56</td>
<td>1</td>
<td>52</td>
<td>2704</td>
<td>52</td>
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<td>57-65</td>
<td>12</td>
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<td>3721</td>
<td>732</td>
<td>44652</td>
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<tr>
<td>66-74</td>
<td>9</td>
<td>70</td>
<td>4900</td>
<td>630</td>
<td>44100</td>
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<tr>
<td>75-83</td>
<td>6</td>
<td>79</td>
<td>6241</td>
<td>474</td>
<td>37446</td>
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<tr>
<td>84-92</td>
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<td>88</td>
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<td>352</td>
<td>3097</td>
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<td>32</td>
<td>2260</td>
<td>159878</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( S = \sqrt{\frac{\sum fixi^2 - (\sum fixi)^2}{n}} \)
The data description of control group shows that the highest score is 92 and lowest score is 48. The mean is 70.62, the mode is 63.67, the median is 67.75 and the standard deviation is 2.92. Then, the histogram and polygon of vocabulary score of experimental group shown in the bellow figure:

To analysis the data, the researcher find out the mean score of the post test of experimental group and control group.
a. Experimental group

\[
\overline{X}_1 = \frac{\sum x_{1i}}{n_1} = \frac{2488}{32} = 77.75
\]

b. Control group

\[
\overline{X}_2 = \frac{\sum x_{2i}}{n_2} = \frac{2232}{32} = 69.75
\]

To analysis the data, the researcher find out the variant of the post test of experimental group and control group.

a. Experimental group

\[
\sigma^2_{S_1} = \frac{\sum (x_{1i} - \overline{x}_1)^2}{n_1 - 1} = \frac{3037.92}{32 - 1} = \frac{3037.92}{31} = 97.99
\]

b. Control group

\[
\sigma^2_{S_2} = \frac{\sum (x_{2i} - \overline{x}_2)^2}{n_2 - 1} = \frac{2872.86}{32 - 1} = \frac{2872.86}{31} = 92.67
\]
Based on the data above, the value of $t$-test could be found in the following:

$$
t = \frac{X_1 - X_2}{\sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2} \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}
$$

$$
t = \frac{77.75 - 69.75}{\sqrt{\frac{(32 - 1)97.99 + (32 - 1)92.67}{32 + 32 - 2} \left( \frac{1}{32} + \frac{1}{32} \right)}}
$$

$$
t = \frac{8}{\sqrt{\frac{3037 + 2872.77}{62} \times 0.0625}}
$$

$$
t = \frac{8}{\sqrt{\frac{5909.77}{62} \times 0.0625}}
$$

$$
t = \frac{8}{\sqrt{95.31 \times 0.0625}}
$$

$$
t = \frac{8}{\sqrt{5.956}}
$$

$$
t = \frac{8}{2.44}
$$

$$
t = 3.27
$$

The statistical analysis of the data obtained that were done, hence the discussion of the result of the analysis came. In this case, the mean scores and the value of $t$-test both groups had been interpreted. Interpreting the result of analysis, first it was found out that the mean score of Experimental Group has greater than the mean score of Control Group. There is 77.75 for Experimental Group and 69.75 for Control Group. It indicated the using colorful pictures had significant effect in students’ vocabulary mastery.

This research is used to know the differences significance between teaching vocabulary by using colorful pictures and teaching vocabulary by using puzzle. To know the researcher used:
Alternative Hypothesis (Ha): colorful pictures has positive effect toward students’ English vocabulary mastery. Null Hypothesis (Ho): colorful pictures has not positive effect toward students’ English vocabulary mastery. The criteria of hypothesis was if t-test > t-table, Ha is accepted and Ho is rejected; and if t-test < t-table Ha is rejected and Ho is accepted.

Based on the computation of t-test, the value of t-test is 3.27 and the value of t-table is 1.669 from (df) 62, because t-test 3.27 > t-table 1.669 it can be concluded that Alternative Hypothesis (Ha) is accepted, it means that the using colorful pictures had positive effect toward students’ English vocabulary mastery at the first grade students of SMK Negeri 1 Praya Tengah in Academic Year 2012/2013 in English subject. It can be provided by the result of Experimental Groups post-test which was greater than the control Groups. In which, there was it is accurate the using colorful pictures improved students’ ability in mastering vocabulary and make students interest in teaching process.

CONCLUSION

Based on the result of the analysis, the value of t-test is 3.27 and the value of t-table from the (df) 62 is 1.669, it can be concluded that the value of t-test is greater than the value of t-table. It can be confirmed that the null hypothesis (Ho) is clearly rejected and therefore, the alternative hypothesis (Ha) is accepted. Finally, the researcher may conclude that the colorful pictures has positive effect or in other words it is effective toward students’ English vocabulary mastery.

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REFERENCE


