# A Comparative Study of Vocabulary Size among Different Vocabulary Learning Strategies Use 

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#### Abstract

Penelitian ini bertujuan untuk meneliti jumlah rata-rata vocabulary size siswa, menyelidiki startegi yang paling sering digunakan dan paling efektif, dan mengetahui apakah ada perbedaan yang signifikan dari vocabulary size diantara penggunaan strategi yang berbeda-beda. Populasi dari penelitian ini adalah siswa kelas pertama di salah satu SMAN Bandar Lampung. Instrumen yang digunakan dalam mengumpulkan data pada penelitian ini adalah kuesioner berdasarkan penelitian terdahulu yang dirancang oleh Schmitt's (1997) dan uji pengukuran kosakata yang dicapai yang dirancang oleh Sutarsyah (2006). Hasil analisis data menunjukan bahwa jumlah rata-rata vocabulary size siswa adalah 2166 kata. Perhitungan Anova menunjukkan bahwa strategi sosial adalah strategi yang paling sering dan paling efektif untuk digunakan. Sementara itu, semua $\mathrm{F}_{\text {hitung }}<\mathrm{F}_{\text {tabel }}$, dan semua signifikansi $>0,05$. Hal ini berarti $\mathrm{H}_{0}$ diterima sehingga tidak ada perbedaan yang signifikan dari vocabulary size diantara penggunaan strategi yang berbeda-beda.


This current study was aimed to find out the average of learners' vocabulary size, investigate the most frequently used and the most effective strategy, and to find out whether there is significant difference of vocabulary size among different learning strategy used. The population of this research was one of first year students in SMAN Bandar Lampung. The instruments in collecting the data were questionnaire based on Schmitt's (1997) study and vocabulary size test by Sutarsyah (2006). The result of data analysis shows that the learners' average vocabulary size is 2166 words. The result of Anova calculation showed that social strategy was the most frequently used and the most effective strategy, while, all the $\mathrm{F}_{\text {count }}<\mathrm{F}_{\text {table }}$, and all of $\mathrm{p}>0.05$. It means $\mathrm{H}_{0}$ was accepted, that there was no significant difference of vocabulary size among different learning strategy used.

Keywords : vocabulary learning, vocabulary size, vocabulary learning strategies

## INTRODUCTION

Nowadays, the demand of learning English language (FL) improved significantly because of the technology expansion and the use of English as international language. According to Nunan (1999/2000), English as a world language, is the pre-eminent language of wider communication. However, to master English Language is not easy; learner must pay attention to many aspects of language knowledge such as grammar/structure, vocabulary, and so on. Vocabulary acquisition is a standout amongst the most vital components for learning foreign language. It helps the learner to achieve communicative competence in learning language because the lack of vocabulary or vocabulary difficulties will bring about communicational barriers or failure.

As a matter of fact, in the classroom vocabulary learning is not really well managed because there are learners who still have limited vocabulary and learner who have broad vocabularies knowledge in the same level of proficiency. The fact was found when the researcher learned English language in the class along with his classmates. The researcher intended to know why vocabulary size of a particular student is different from others. Even though they learn at the same time, same level, and with same teacher but the results are still different.

In order to deal with the fact above, the researcher did the pre-observation to find out the answer. Then, it was found that every learner has different way to learn or memorize new vocabulary. In relation to the researcher's pre-observation, it was realized that there were many steps used by English Language learner such as taking a note, looking up in dictionary, using picture etc. For example, some
students learn and memorize a new word once that has been indirectly taught. While, others learner may look up the meaning of new words in a bilingual dictionary. Moreover, some students use both. In the context of learning English language, the way they learn new vocabulary is called vocabulary learning strategies (VLS).

Vocabulary learning strategies is a progression of moves a learner makes to encourage the completion of a learning task. Nevertheless, some learners are not aware of their learning strategy. Concerning the problems above, the researcher was encouraged to investigate the vocabukary size of the respondent, the most frequently used and effective VLS, and whether there is significant difference of VS among different VLS used. By conducting this research, it gave the information for the teacher and learner about the type of vocabulary learning strategy that is truly effective to facilitate vocabulary learning, and the most effective vocabulary learning.

## METHOD

This research used ex post de facto design in which there is no control group and no treatment to the sample but only collecting the data by analyzing the correlation between cause and effect among the variables in the research. This current study is quantitative descriptive since the data gathered were in form of number. Vocabulary learning strategies questionnaire was based on Schmitt's (1997) taxonomy of L2 vocabulary learning and it was adapted from related research conducted by Kallayanasute (2011). A vocabulary size test used a test designed by Sutarsyah (2006).

The population of this research was the first year students of SMAN 15 Bandar Lampung. The total samples of students involved in the study were 60 students. In determining the sample the researcher used purposive sampling. To conduct the research, the research used these following procedures: 1) determining the research question. 2) Determining the instruments. 3) Finding the sample. 4) Trying out the instruments. 5) Analyzing the result of the try-out test. 6) Distributing the instruments. 7) Scoring the data. 8) Analyzing the data. 9) Drawing conclusion. In order to find out is there any significant difference of vocabulary size among different learning strategy used. The hypotheses were analyzed by One Way Anova. The criteria for accepting the hypothesis is explained as follows $\mathrm{H}_{0}$ is accepted if the $\mathrm{F}_{\text {-count }}<\mathrm{F}_{\text {-table, }}$, meanwhile $\mathrm{H}_{1}$ is accepted if the $\mathrm{F}_{\text {-count }}>\mathrm{F}_{\text {-table. }}$. In addition, $\mathrm{H}_{\mathrm{o}}$ is accepted if alpha level is higher than 0.05 ( $\alpha>0.05$ ).

## RESULT

Having collected the data, the researcher analysed the result of students's vocabulary size, questionnaire, and Students' VLS preferences based on vocabulary size level. The result of the data are discussed in the following parts.

## Result of Students' Vocabulary Size Test

The highest vocabulary size achieved is 93 (2775 words), the lowest vocabulary size is 51 ( 1525 words), and the average is 72 ( 2166 words). Afterwards, the researcher categorized the student intro three group based on their scores of vocabulary size test, they are: high (76-100), moderate (60-75), and low (40-59). The chart below displays the result of the students' vocabulary size test.

Figure 1. Result of Students' Vocabulary Size Test


Table 1. Result of Vocabulary Size Test

| High | $75-100$ | 19 respondents | $31,6 \%$ |
| :--- | :--- | :--- | :--- |
| Moderate | $60-74$ | 30 respondents | $50 \%$ |
| Low | $40-59$ | 9 respondents | $18,3 \%$ |

In accordance to the analysis above, it was revealed that most of students had good vocabulary size. It was proved by $31.6 \%$ of the students achieved score in high category (75-100), and $50 \%$ students achieved average score (60-74). Meanwhile, only $18.3 \%$ had low vocabulary size.

## Result of the Students' Vocabulary Learning Strategies Questionnaire

Table 2. Means Analysis of Each Strategy

| One-Sample Statistics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{N}$ | Mean | Std. Deviation | Std. Error <br> Mean |
| AVDET | 60 | 3.0694 | .56076 | .08866 |
| AVSOC | 60 | 3.1778 | .39770 | .06288 |
| AVMEM | 60 | 3.1472 | .66094 | .10450 |
| AVCOG | 60 | 3.0667 | .64156 | .10144 |
| AVMET | 60 | 3.022 | .65729 | .10393 |

Derived from Table 2, it was revealed that social strategy ( $\mathrm{M}=3.1778$ ) was the most frequently used strategy by the students. The second strategy was Memory
strategy ( $\mathrm{M}=3.1472$ ). While, metacognitive strategy $(\mathrm{M}=2.968)$ was the last frequently used strategy by the respondents.

## Result of Students' VLS preferences based on vocabulary size level

To answer the first research question, the calculation by using SPSS 16 was conducted based on the questionnaire data. Besides reporting One Way Anova, the calculation also reporting the descriptive data of the vocabulary learning strategy used between those with high, moderate, and low vocabulary size level.

The table of descriptive data and Anova are provided as follows:

Table 3. Descriptives data of VLS used according to students' level of vocabulary size

| STRATEG IES | VS LEVEL | N | Mean | Std. <br> Deviation | Min. | Max. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DETERMINATION | High | 19 | 34.142 | . 47185 | 2.67 | 4.67 |
|  | Moderate | 30 | 33.298 | . 59116 | 2.00 | 3.83 |
|  | Low | 9 | 29.220 | . 52473 | 2.33 | 4.17 |
|  | Total | 60 | 31.955 | . 56076 | 2.00 | 4.67 |
| SOCIAL | High | 19 | 34.988 | . 35298 | 2.67 | 3.67 |
|  | Moderate | 30 | 33.189 | . 40239 | 1.83 | 3.50 |
|  | Low | 9 | 32.300 | . 44191 | 2.50 | 4.17 |
|  | Total | 60 | 33.521 | . 39770 | 1.83 | 4.17 |
| MEMORY | High | 19 | 34.414 | . 58607 | 2.50 | 4.50 |
|  | Moderate | 30 | 32.130 | . 75780 | 1.33 | 4.33 |
|  | Low | 9 | 32.543 | . 65332 | 2.33 | 4.50 |
|  | Total | 60 | 32.882 | . 66094 | 1.33 | 4.50 |
| COGNITIVE | High | 19 | 32.457 | . 58807 | 1.67 | 4.17 |
|  | Moderate | 30 | 31.140 | . 72875 | 1.67 | 4.33 |
|  | Low | 9 | 28.682 | . 63421 | 2.17 | 4.50 |
|  | Total | 60 | 31.430 | . 64156 | 1.67 | 4.50 |
| METACOGNITIVE | High | 19 | 33.867 | . 69289 | 1.67 | 4.67 |
|  | Moderate | 30 | 29.694 | . 62544 | 1.67 | 4.17 |
|  | Low | 9 | 28.887 | . 57665 | 2.50 | 4.67 |
|  | Total | 60 | 29.686 | . 65729 | 1.67 | 4.67 |

Considering the result of the Anova analysis in table 4, the results indicates that high proficiency students reported higher mean scores in all of the five strategy categories than low and moderate level. The most preferred strategy for high and moderate level students were social strategies $(\mathrm{M}=3.49)$ and $(\mathrm{M}=3.31)$.

Table 5. Anova analysis based on vocabulary size level

| Strategies |  | Sum of Squares | Df | Mean Square | $\begin{gathered} \text { F } \\ \text { Count } \end{gathered}$ | Sig. | $\begin{gathered} \text { F } \\ \text { Table } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DET | Between Groups | 1941.387 | 38 | 51.089 | 1.420 | . 094 | 3.16 |
|  | Within Groups | 2913.736 | 81 | 35.972 |  |  |  |
|  | Total | 4855.124 | 119 |  |  |  |  |
| SOC | Between Groups | 2575.007 | 38 | 67.763 | 2.478 | . 010 | 3.16 |
|  | Within Groups | 1578.352 | 81 | 19.486 |  |  |  |
|  | Total | 4153.360 | 119 |  |  |  |  |
| MEM | Between Groups | 1481.572 | 38 | 38.989 | 2.282 | . 006 | 3.16 |
|  | Within Groups | 1383.688 | 81 | 17.083 |  |  |  |
|  | Total | 2865.260 | 119 |  |  |  |  |
| COG | Between Groups | 1291.872 | 38 | 33.997 | 1.113 | . 338 | 3.16 |
|  | Within Groups | 2475.080 | 81 | 30.557 |  |  |  |
|  | Total | 3766.952 | 119 |  |  |  |  |
| MET | Between Groups | 1473.316 | 38 | 38.771 | 1.048 | . 420 | 3.16 |
|  | Within Groups | 2996.174 | 81 | 36.990 |  |  |  |
|  | Total | 4469.952 | 119 |  |  |  |  |

Results of the Anova bellow showed that $\mathrm{F}_{\text {count }}$ for all strategies were lower than $\mathrm{F}_{\text {table }}$ (3.16) and p for all strategies were lower than 0.05 . It revealed that there was no significant difference of vocabulary size among differnet VLS used.

## DISCUSSION

Based on the research finding, the researcher discusses the students's vocabulary size, the most frequently used and effective of VLS, and vocabulary learning strategies use based on vocabulary size level. The findings are discussed below.

## Students' Vocabulary Size

According to Curriculum 1994, the purpose of English language learning is to make the students able to communicate and have vocabulary size estimated 1000 words for junior high school and 2000 words for senior high school. Relating to the finding, the average of respondents' vocabulary size is 2166 words. It indicates that the first year students of SMAN 15 Bandar Lampung have good vocabulary size, both in A class and B Class.

On the other hand, Graves (1986) states that the ideal number of vocabulary size for beginner to support them in learning English language is estimated between 2500 to 5000 words. The results revealed that the vocabulary size of Indonesian students is far from ideal. The fact can be seen from the result of vocabulary size test in current study reported only 19 out of 60 respondent gained the high vocabulary size. It is also supported by the previous research conducted by Nurweni and Read (1999, as cited in Nur, 2004), who found that average first year Indonesian university student only mastered about 1226 English words.

The vocabulary size which is not ideal for beginner in the current study proves that vocabulary learning in Indonesia is not going well. It is because the respondent did not use vocabulary learning strategy efficiently or did not receive explicit instruction on vocabulary learning strategies in learning, so that they did not aware of vocabulary learning strategy. In fact, vocabulary learning strategy can facilitate their learning so that they can learn efficiently and acquire broader vocabulary size.

## The Most Frequently Used of Vocabulary Learning Strategy

Tabel 2 above reveals that social strategy is the most frequently used strategy by the first year students of SMAN 15 Bandar Lampung in 2014/2015 academic year. It is followed by memory strategy as the second, determination strategy as the third, cognitive strategy as the forth and metacognitive strategy as the least frequently used strategy by the respondent. The finding of the study was similar to Mongkol's research (2008) who found that Social strategy is the most commonly used strategy by his respondents. $94.4 \%$ of her participants learn vocabulary by asking meaning to their teacher or friend.

Social strategy ranked the highest means in frequency of strategy use is strategy that needs others people to facilitate in learning vocabulary. There are some examples of these strategies, such as: asking teacher for an L1 translation, asking teacher for paraphrase or synonym of new word, studying and practicing meaning in a group and etc. This finding shows that the respondents are interested in traditional method of learning where the teacher provides all the knowledge and materials and the students are only need to listen, follow the instruction, and take a note. The advantage of this method is learner can quickly understand what they learn.

## The Most Effective Learning Strategy

In accordance with the table 3, means score of social strategies was the highest in high, moderate, and low vocabulary size group. It revealed that most of successful learners used social strategies in vocabulary learning. It is not surprising that social strategy gain the highest score of vocabulary size. This strategy such as: ask teacher for meaning, translation, and discover new meaning through group work
activity can help learner in vocabulary learning. This finding is supported by Sahbazian (2004) who states that social strategy is among the strategies that successful learner perceived to use with high frequency.

Social strategy promotes active processing of information and cross modeling/imitation, the social context enhances motivation of the participants, cooperative learning can prepare the participants for 'team activities' outside the classroom, and because there is less instructor intervention, students have more time to actually use and manipulate language in class.

If getting involved in interaction with people is the key element in vocabulary learning, then interacting with native-speakers would be an excellent way to gain vocabulary. A similar finding was reported in Milton and Meara's study (1995), in which one group of nonnative-speakers enrolled in a British university (presuming a reasonably large amount of native-speaker interaction) averaged vocabulary gains of 1325 words per six months, compared to an average 275 word gain previously in their home countries.

## Vocabulary Learning Strategies Use Based on Vocabulary Size Level

Considering the result of the Anova analysis to see the difference between groups on the same variable, it revealed that there was no significant difference in the use of VLS based on vocabulary size level. However, the finding revealed that a greater mean of students with high vocabulary size level reported significantly higher use of the VLSs than those with moderate and low vocabulary size levels. Similar result was found by some previous researchers conducted by Intaraprasert
and Boonkongsaen (2014). They revealed that the students with high and low vocabulary knowledge tend to use VLSs differently.

## CONCLUSION AND SUGGESTIONS

Based on result findings and discussion, it can be concluded that the first year students of SMAN 15 Bandar Lampung has good vocabulary size, although it is not ideal yet. Social strategy is the most frequently used and effective strategy. It is not surprising because learners are interested to learn vocabulary by getting involved in social interaction, such as: working in group, asking teacher for meaning and translation, and so on. This strategy also can facilitate them to learn easily by getting involved in social interaction. The results also shows that there is no significant difference of vocabulary size among different learning strategy used. However, it also revealed that learner who tend to use more vocabulary learning strategy will be successful in acquiring vocabulary.

The results of this research can be used as information both for teacher and students. It is suggested that teacher should teach vocabulary learning strategy explicitly, so that their student can be aware to learning strategy that can help them learn vocabulary easily. The learners can use social strategy to learn vocabulary, however it is beter for the to use strategy more than one because the more they use VLS, the broader vocabulary size they have. Since the sample of this research is limited, the researcher suggest to investigate the VLS and vocabulary size with random subjects, bigger sample size in order to get more reliable on the result of the research. for further research.

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