

THE CORRELATION BETWEEN STUDENTS' VOCABULARY AND THEIR DESCRIPTIVE READING COMPREHENSION

Lyllys Anita Sarena, Wan Anayati, Andang Suhendi

English Department, Faculty of Literature
Universitas Islam Sumatera Utara Medan, Indonesia
E-mail: lyllysanita@gmail.com

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Abstract

The study investigates the correlation between students' vocabulary mastery and their reading comprehension. Reading Comprehension is the ability to read, process it and understand its meaning. It relies on two, interconnected abilities: word reading, being able to decode the symbols on the page and language comprehension, being able to understand the meaning of the words and sentences); meanwhile comprehension is achieved when the reader successfully extracts the useful knowledge from a text and constructs it into a new understandings of their own. The data were collected from 30 tenth grade students. The test items of vocabulary mastery and reading comprehension were given to the students to measure their level of vocabulary mastery and reading comprehension. The results were compared to find out the correlation between those variables. The results show that there was strong correlation between students' vocabulary mastery and their reading comprehension. The current study concludes that students' experiences and reading strategies help the students understand text, but vocabulary was more contributive in helping the students to comprehend the texts.

Keywords: *Correlation; reading comprehension ability; vocabulary mastery*

1. Introduction

Reading is one of the most important language skills. By reading, people may get a lot of information. The more he or she reads, the more information he or she will get. Reading makes someone smarter and more creative. According to Laddoo (2007), reading forces the reader's brain cells to work on a regular basis, which will keep the reader sharper and smarter. Even though some information can be obtained without reading, for example, by listening to a teacher, seminar, radio, television, etc., through reading, someone may get more information than by listening. For example, someone who reads a newspaper will get more information than someone who watches news on television. A reader can read the text again when he or she forgets or tries to get detailed information, while a listener cannot. This is supported by Willis (2008), who states that by reading, someone can find the information he or she needs with specific information.

From the description above, the writers attempt to find out the correlation between students' vocabulary mastery and their reading comprehension and to find out how high the correlation between vocabulary mastery and reading comprehension is.

The subjects of this research are the students in the tenth grade at SMK Grafika Bina Media Medan. The results of this study are expected to enrich research regarding the relationship between students' vocabulary mastery and their reading comprehension.

According to Morin & Goebel (2001) vocabulary is knowledge of words and word meanings. Actually, vocabulary is more complex; vocabulary mastery is not only knowing the words and their meaning but also knowing about how the words sound and how the words are used in context. According to Miller and Gildea (1987), knowing a word by sight and sound and knowing a word by sight and knowing its dictionary definition are not the same as knowing how to use the word correctly and understanding it in various contexts. Building up a useful vocabulary is central to the learning of a foreign language at the primary level (Cameron, 2001).

2. Literature Review

Reading comprehension is the ability to read, process, and understand its meaning. It relies on two interconnected abilities: word reading (being able to decode the symbols on the page) and language comprehension (being able to understand the meaning of the words and sentences). Someone who has a lot of vocabulary in a foreign language could learn the language easily. Since vocabulary is all about words, good mastery of them helps someone understand language. When a learner intends to learn a foreign language, he or she has to learn the vocabulary of the foreign language first. Wallace (1982) mentions two points about the importance of vocabulary:

1. Language exists in two forms: spoken and written; both of them need vocabulary to develop their own existence.
2. Vocabulary is one of the most important language skills. Therefore, vocabulary is much needed for production in learning English as a foreign language rather than only for recognition.

Furthermore, Lehr and Osborn (2001) explain two kinds of vocabulary description as follows:

First, words come in two forms, oral and print.

1. Oral vocabulary includes the words that are recognized and used in listening and speaking.
2. Print vocabulary includes the words that are recognized and used in reading and writing. Second, word knowledge is composed of two forms: receptive and productive.
3. Receptive vocabulary includes words that are recognized when we hear or see them. It is the ability to comprehend passive vocabulary, which is used in reading and listening contexts.
4. Productive vocabulary includes words that recognize who we speak or write. It is an active ability that is used in speaking and writing.

Furthermore, knowing and understanding words mean knowing their "form" (how they sound, how they spell, and any grammatical changes that could be made to them), their "meaning" (their conceptual context), and how they relate to other words and particular types of language use (Cameron, 2001).

However, according to Klingner, Vaughn and Boardman (2007), reading is a process of constructing meaning that can be achieved through dynamic instruction

among the following aspects: the reader's prior knowledge, the information suggested by the text, and the context of the reading situation.

2.1 Reading Comprehension

According to Ruddell (1994), comprehension is a process in which a reader constructs meaning while, or after, interacting with text through the combination of prior knowledge and previous experience. Information in text is taken in relation to the text and immediately remembered or anticipated in social interactions and communication.

Those definitions above suggest that comprehension is achieved when the reader successfully extracts useful knowledge from a text and constructs it into a new understanding of their own. According to Day and Park (2005), there are several types of comprehension:

1. Literal comprehension;
2. Inferential comprehension;
3. Reorganization;
4. Predictive comprehension;
5. Evaluative comprehension;
6. Appreciative or personal comprehension, and
7. Reading Strategies.

When the reader finds unknown words in the text, he or she should have some strategies to comprehend those words. According to Caverly et al. (2008), to understand the text, the reader needs to find the key words. This will allow the reader to understand the meaning of the unknown words. According to Mcentire (2003), when the reader finds unknown words, they do not need to look up every word in a dictionary; they can guess the meaning of new words through context.

2.2 Reading Strategies

Grabe and Stoller (2002) explain that there are three models of reading: 1. Top-down model, 2. Bottom-up model, and 3. Integrated model. Furthermore, Adler (1972) explains that there are some techniques which can be used to make reading faster and efficient. The techniques are: skimming and scanning

Those strategies are very helpful in reading. However, the effectiveness of reading depends on the reader's ability to use those strategies. Skimming is used when readers need a general idea of the subject matter. On the other side, scanning is used when readers need to gather specific information.

3. Research Method

3.1 Research Design

In the present research, a quantitative approach with the correlation method is employed. Quantitative research is used since this research focuses on analyzing the data through a systematic process using certain computations. Creswell (2012: 12) describes in his book experimental design, correlation design, and survey design. To conduct this research, the writers take correlational designs, where the design is divided into two categories: explanatory design and prediction design. The writers selected an explanatory design for this research. Quantitative research design can be classified into four methods: 1) experimental method; 2) correlation method; 3) causal-comparative

method; and 4) survey method (Creswell, 2012). According to the research design used and the title of this research, the writers use the correlational method because the objective is to study and find the relationship between two variables that are the correlation between students' vocabulary mastery and reading comprehension.

3.1.1 Population and Sample

The writers used cluster sampling to determine the sample for this research. The writer took one class, that was the tenth grade students of SMK Grafika Bina Media Medan. They were 30 students as the sample of this research.

3.1.2 Instruments

In this study, the writers need to use an instrument to help in collecting the data. Kaswan and Suprijadi (2013) state that an instrument is any device that is used to collect data. Instruments can be presented in written, audio, or visual formats. The instrument that was used in this study was divided into two kinds. The first was a vocabulary mastery test, and the second was a reading comprehension test that used a multiple-choice type. The test consisted of 20 items with four alternatives. The alternatives included one correct answer and three wrong answers.

3.2 The Method of Collecting Data

The procedure of data collecting used in this research was testing. The writers used two kinds of tests to investigate the correlation between vocabulary mastery and reading comprehension, so they used the test method. The test consisted of 40 items and was divided into two parts: the first was the vocabulary mastery test, which consisted of 20 items, and the second was the reading comprehension test, which also consisted of 20 items. The purpose of this research was to measure the correlation between students' vocabulary mastery and their reading comprehension. The data from the study were analyzed using statistical analysis. Statistics is the science of collecting, organizing, summarizing, and analyzing information to draw conclusions or answer questions (Moreillon, 2007). To measure the correlation between the two variables and to analyze the scores, the writers use the Pearson Product Moment Correlation Formula.

A normality test was conducted to determine whether the research data obtained were normality disturbed or not. The test normality was measured by using one sample Kolmogorov-Smirnov test in SPSS.

4. Discussion

As it has been mentioned in the previous sections, the writers conducted field research. Having finished doing research on the correlation study between students' vocabulary mastery and reading comprehension done by tenth grade students of SMK Grafika Bina Media Medan, the writers collected the data from this research from the scores available. It was the result obtained by the group of students who had completed the subject of vocabulary and reading. The writers took the scores of 30 students randomly and analyzed those scores in order to find out whether there was any correlation between their vocabulary mastery and their reading comprehension by using the Pearson Product Moment Correlation Formula.

Then the writers gave the report concerning the data description and compared the achievement of those two scores.

Based on the test given, the total score of the tenth grade students of SMK Grafika Bina Media Medan in terms of vocabulary mastery was 2040.

Table 1
The Scores of Vocabulary Mastery (X)

No	Initial	The Score
1.	JT	75
2.	HR	65
3.	LA	70
4.	JB	80
5.	AT	80
6.	HM	60
7.	MG	85
8.	BTS	70
9.	HM	70
10.	NF	65
11.	PD	75
12.	SK	85
13.	ST	40
14.	TW	45
15.	PP	65
16.	HR	45
17.	HR	75
18.	LS	75
19.	TH	75
20.	HS	65
21.	EY	70
22.	JG	70
23.	DCS	75
24.	TN	40
25.	NGN	60
26.	DNS	60
27.	SOB	75
28.	AL	65
29.	FGS	85
30.	HTG	75

Table 2
The Scores of Reading Comprehension (Y)

No.	Initial	The Score of
1.	JT	70
2.	HR	85
3.	LA	80
4.	JB	80
5.	AT	80
6.	HM	82,5
7.	MG	85
8.	BTS	50
9.	HM	60
10.	NF	72,5
11.	PD	85
12.	SK	77,5
13.	ST	80
14.	TW	72,5
15.	PP	62,5
16.	HR	50
17.	HR	80
18.	LS	82,5
19.	TH	70
20.	HS	62,5
21.	EY	82,5
22.	JG	85
23.	DCS	75
24.	TN	45
25.	NGN	60
26.	DNS	55
27.	SOB	80
28.	AL	60
29.	FGS	80
30.	HTG	70

Based on the test given, the total score of the tenth grade students of SMK Grafika Bina Media Medan in terms of reading comprehension mastery was 2160.

Data Analysis

a. Normality Test

Before calculating the data, the writers checked the normality of the data. The writers used SPSS program to find out whether the data normal or not.

Table 3
Normality testing by One-Sample Kormogolov-Smirnov Test One-Sample Kolmogorov-Smirnov Test

		X	Y
N		30	30
Normal Parameters ^{a,b}	Mean	68,00	72,00
	Std. Deviation	12,360	11,898
Most Extreme Differences	Absolute	,427	,833
	Positive	,427	,833
	Negative	-,975	-,807
Kolmogorov-Smirnov Z		,171	,216
Asymp.sig. (2-tailed)		,026	,001

b. The Correlation Between Students' Vocabulary Mastery and Their Reading Comprehension

From the data above, the writers got the result of each variable. That is the result of the correlation between students' vocabulary mastery and reading comprehension.

Table 4
Analysis Result of Pearson Product Moment Correlation

		X	Y
Pearson	Correlation Coefficient	1,000	,491 **
	X Sig. (2-tailed)	.	,006
	N	30	30
	Y Correlation Coefficient	,491 **	1,000
	Y Sig. (2-tailed)	,006	.
	N	30	30

** . Correlation is significant at the 0.01 level (2-tailed)

The table above showed that the correlation coefficient equaled $r_{xy} = .491$, which indicated there was positive correlation between two variables.

5. Conclusion

As described in the previous chapter, the aims of this research are to analyze the students' achievement of vocabulary mastery and reading comprehension and the correlation between students' vocabulary mastery and their reading comprehension.

Regarding the result above, the correlation coefficient equaled $r_{xy} = .491$, which indicated there was a positive correlation between two variables. From the r_{xy} number (.491), the writer concluded that there was a strong correlation between two variables (see the interpretation correlation on table 4). The number of .491 resided between $r = .50$ and 1.0 . It means that there was a large correlation. Based on the data, vocabulary and reading were significant because Sig. 2-tailed (0.006) was smaller than 0.05. It means that if the students mastered vocabulary, they would also master reading comprehension.

The result of this research has been answered that there is a correlation between students' vocabulary mastery and their reading comprehension. It could be considered as a strong correlation since the result was included into strong category. In addition to the ability of students' vocabulary mastery, the strategy and background knowledge of the text help students comprehend the text.

In improving students reading comprehension, teachers should teach vocabulary to their students since vocabulary has a strong relationship with reading comprehension. Having a lot of vocabulary makes the students understand the text easily. Although strategy of reading and experience of students help them comprehend a text, vocabulary mastery is more important in helping the students comprehend the text. Vocabulary is the knowledge of words and their meanings. Actually, vocabulary is more complex; vocabulary mastery is not only knowing the words and their meaning but also knowing about how the words sound and how the words are used in context.

Referring to the result and discussion, it was found out that there is a strong correlation between students' vocabulary mastery and their reading comprehension. Although the scores of the vocabulary and reading tests are different, the correlation between them is strong. There are many factors that help students comprehend the reading materials, including background knowledge and experience. Those factors may help students comprehend reading materials. When they find an unknown word, they can guess its meaning by referring to the text.

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