

# Student's Vocabulary Mastery on TOEFL Test: Does It Correlate with Reading Comprehension?

Maunah Setyowati

English Language Education Department  
State Islamic University of Sunan Ampel Surabaya

Eryna Pratiwi

English Language Education Department  
State Islamic University of Sunan Ampel Surabaya  
[erynapratiwi2@gmail.com](mailto:erynapratiwi2@gmail.com)

Annisa Khusnul Latifa

English Language Education Department  
State Islamic University of Sunan Ampel Surabaya  
[ichalatief21@gmail.com](mailto:ichalatief21@gmail.com)

Syahrul Mabagits

English Language Education Department  
State Islamic University of Sunan Ampel Surabaya  
[mabagits11@gmail.com](mailto:mabagits11@gmail.com)

**Abstract**— The purpose of this study was to determine the correlation between vocabulary mastery and reading comprehension on TOEFL test. This study used quantitative research with correlational design. The population of this study were 6<sup>th</sup> semester students of English Language Education Department at State Islamic University of Sunan Ampel Surabaya which involved 30 students. This research employed cluster random sampling to determine the sample. The data were analyzed by using Pearson Product Moment Correlation. Multiple choice tests were used to collect the data. Next, the data were calculated statistically to determine the correlation between the two variables. The results showed that the mean score of TOEFL test on Students' Vocabulary Mastery was 63,8 and the mean of TOEFL test on Reading comprehension was 61,6. This research showed that there was a correlation between students' vocabulary mastery and reading comprehension using TOEFL test. The higher the students' vocabulary, the better achievement can students get in reading comprehension.

**Keywords:** TOEFL test, reading comprehension, vocabulary mastery, correlation design

## I. INTRODUCTION

TOEFL is a high-stakes test which scores are important because of many decisions in the context of academics, work, and international affairs. This statement is supported by Jannah M and Siti Sarah F (2017) who state that TOEFL is used by various test takers with various purposes, for instance, for those who are applying for scholarships to continue their study in the English spoken countries. Furthermore, this test is also needed by those who want to apply for a job both in their home country and overseas. In addition, Samad (2016) states that TOEFL test is obliged by universities in Indonesia as a requirement to complete their study and obtain their bachelor certificate.

Through the statement above, it can be concluded that TOEFL test is not only used to measure a person's English language skills but also needed in the world of education and employment.

There are 4 skills that are examined on TOEFL test such as listening, structure, reading, and written expression. In the listening comprehension section, the test-taker of TOEFL exam will have the opportunity to demonstrate their ability to understand conversations and talks in English. There are three parts on this section such as short dialogues, long conversations, and talks. All of the questions are to be answered based on what is stated or implied by the speaker which has been heard. Structure is tested in the second section on the TOEFL paper-based test. This section consists of a number of multiple-choice questions that test your knowledge on the structure of English sentences and error recognition questions that test your knowledge on correct written expression. There are two types of questions in this section such as Structure and Written Expression.

The third part of the TOEFL is reading comprehension. There is only one type of question in this section which is in the form of multiple-choice questions asking the test-taker to choose the best answer for the question about the information provided in the reading section. The last section in TOEFL is writing. The type of questions in this section consists of an essay question which must be answered by the test-taker in thirty minutes.

On the TOEFL test, reading is one of the most time-consuming parts and it leads to boredom. It is because the texts deal with academic context with various fields and tend to be scientific. There are several things that must be taken into count in the reading section of TOEFL test. Firstly, reading is closely related to reading habit. Reading habit has correlation with speed reading, eye-scrolling, and familiarities of the context. Secondly, it is also related to the familiarity of the text, strategy regarding to context in term of familiarity, and un-familiarity using topic of the text

especially in completing reading comprehension. Third, Carrell (1983) notes that ESL readers paid a good deal of attention to grammatical features, such as vocabularies and sentence structures, which left no room for schemata in their thinking processes. Vocabulary has always been an essential part of learning English as a foreign language. Inadequacy vocabulary will offend the students' chances to communicate in English. Coady and Huckin (1997:9) state that the primary thing in learning a language is the acquisition of vocabulary, and practice to use the language which is the same thing as acquiring. Vocabulary knowledge has long been recognized as a strong correlation of reading comprehension. It is nice to be able to report that reading improves vocabulary mastery.

## II. LITERATURE REVIEW

### 1. TOEFL Test

TOEFL test is one of the tests used to determine a person's ability in English language skills. As stated by Ririn O. (2018) TOEFL is used widely as a trademark test for a standardized examination to measure English proficiency of foreign language learner. Moreover, according to (Collins English dictionary, 2014) TOEFL is also a test to evaluate the ability of an individual in order to check English skills proficiency of people who do not use English as the first language or people who learn English as a foreign language. This kind of test is commonly used by United States for school admission and professional used (Hudson & Evehigby, 2014). The TOEFL test itself examines the test takers' proficiency in understanding the academic English surrounding (Pierce et al, 2015).

#### 1.1 Types of TOEFL test

As the time goes by, TEFL test has evaluated the test to the best one for meaning non-native English proficiency. There are three kinds of TOEFL test; PBT (paper-based test), CBT (computer-based test), and iBT (internet-based test).

##### 1.1.1 PBT (paper-based test)

Paper-based test is a TOEFL test which uses panned, printed or drawn questions and so does the answer. The objectives of TOEFL PBT test are for students' placement, evaluating students' progress and as alternative option when CBT cannot be held in certain area. There are three sections in TOEFL PBT such as listening comprehension, structure and written expression, and reading. The score ranges from 310 to 677 (Sharpe, 1999)

##### 1.1.2 CBT (computer-based test) CBT

The content of computer-based test TOEFL is similar to TOEFL PBT. However, the difference is only on how to answer the questions (Pyle, 2001). The Computer is used as the tool of the test such as listening, structure, reading, and writing. (Sharpe, 1999)

##### 1.1.3 iBT (internet-based test) iBT

Internet based test is a TOEFL test that highlight the four skills in English and helps test takers by providing academic English circumstance questions, which is important for the participants of the test (ETS, 2015). In addition, TOEFL iBT provides speaking test. The TOEFL iBT used multi-section, resulting in a more academic English circumstance (ETS, 2009).

## 2. Reading Comprehension

Reading is one of the important skills in learning languages. By reading, people will get a lot of knowledge and information. Stauffer (Petty & Jensen, 1980) considers reading as a thought related to transmission lines or ideas. In addition, reading can be used to build concepts, develop vocabulary, provide knowledge, add a process of personal enrichment, develop intelligence, help understand the problems of others, develop self-concepts and be fun. Reading does not only absorb the meaning contained in it but also carried the ability to respond or react to what is read, which results in understanding. Through reading, someone will be able to develop an idea or concept that has been obtained and understand various things from various sources.

Reading comprehension is essential for young learners (Sweet & Snow, 2003) and provides the basis of substantial amount of learning in higher level (Kirsch et al., 2002). Without the skill of reading comprehension and the motivation of reading to learn, students' academic progress is limited (Alvermann & Earle, 2003). The National Reading Panel defines that reading comprehension is an ability to read text quickly, accurately, and using expression properly (p. 3-5). All the three dimensions critically appear to a full definition of reading comprehension (Dowhower, 1991).

Reading comprehension affects the learning process, especially for students, if they have good reading comprehension, the knowledge gained is broader and will facilitate the learning process. According to Grabe & Stoller (2002), they define understanding as a word processor, forming general ideas and integrating them into new understandings. This shows that the reader has successfully extracted from the text and constructed it into their own new understanding.

## 3. Vocabulary Mastery

Vocabulary is one of the important parts of learning English as a foreign language. A Satuna IW (2015) states that vocabulary is one of English components that defined as the total number of words in a language. Mastering lots of vocabulary is very important for foreign language learners. By having vocabulary mastery someone can understand various types of information in the form of English in oral or written form.

As stated by Hirsch (2003), he has found that knowing at least 90 percent of words from a text allows the

reader to get the main ideas from the reading text and correctly guessing what the meaning of many unknown words will help them to learn new words. In addition, Roehrig and Guo (2011) explain that vocabulary knowledge is one of the main factors that influence reading comprehension. This is also supported by Sedita (2005) who states that vocabulary knowledge is very important in reading comprehension and determines how well students understand the text.

Therefore, it can be concluded that reading comprehension and vocabulary have a correlation. If a student does not have vocabulary knowledge, it can inhibit the learning process. Conversely, if the student has good vocabulary mastery, this can help him or her to understand a text or material easily.

#### **4. Previous Studies**

There are several studies related to this present study. The first one is a study by Maryam Golkar and Mortaza Yamini (2007) entitled *Vocabulary, Proficiency and Reading Comprehension*. The study sets out to determine the reliability and validity of vocabulary level tests, both the passive and productive versions. The finding of the study proved the Vocabulary Levels Tests to be reliable and valid tests of vocabulary size. The learners' passive and active vocabularies were also found to be highly correlated as a whole and at each separate word-frequency level. In addition, there was a high correlation between the learners' vocabulary knowledge on the one hand and proficiency and reading comprehension ability on the other hand.

The second study was conducted by Munadia (2016), which deals with difficulties faced by students in the TOEFL test including structure and written expression section: reduction of verb, the use of verb, parallelism, subject verb agreement, and relative clause. Moreover, the difficulties are also caused by four factors such as the students lack of grammar skill and vocabulary mastery, as well as they are easily distracted and have less practice.

The third study was conducted by David D. Qian and Mary Schedi (2004), which aimed to empirically evaluate an in-depth vocabulary knowledge measurement in the context of developing the new TOEFL test. The result indicated that the new measurement has similar level of difficulty and provides a similar amount of prediction of test-takers' reading performance.

The fourth study was done by Iskandar Abdul Samad, Miftahul Jannah, and Siti Fitriani (2017), that aimed to investigate the undergraduate students' difficulties and their strategies in completing TOEFL reading comprehension test. The result indicated five difficult reading aspects encountered by the students. In addition, their strategies to complete the reading comprehension section of the TOEFL test are also found.

Furthermore, a research by Ririn Oktarina (2018) investigated students' difficulties in accomplishing reading section of TOEFL test. The results of this research were finding Main Idea, Implied Detail Question, Unstated Detail and Stated Detail Question as well as Vocabulary Question

as the difficult questions that they should pay more attention. More practice could potentially help. Having a lot of vocabulary in that category, in students' reading comprehension, as well as in their TOEFL scores; will also potentially grow.

Each previous study has different focus. The result of this study only focuses on the correlation between students' reading comprehension and their vocabulary mastery on TOEFL test. This study also attempts to find out the students' ability in reading comprehension and vocabulary mastery. Although the scores of reading and vocabulary test are different but the correlation is strong. It may be caused by the difficult vocabulary on the test items. Students who have high scores in reading also have high score in vocabulary. There are many factors that help students to comprehend the reading materials. Those factors may help students comprehend reading materials. When they found unknown words, they could guess the meaning of the unknown words by referring them to the text.

### **III. METHOD**

The purpose of this research is to investigate the correlation between students' vocabulary mastery and reading comprehension on TOEFL test, and also to get the empirical data about the formulated problem. This study examined the relationship between vocabulary mastery and students' reading comprehension as English learners. The study used correlational design to compare the students' reading comprehension and their vocabulary mastery.

To collect data in this study, the researchers conducted an observation and a test to the sixth semester students at English Language Education Department State Islamic of Sunan Ampel Surabaya. The data focuses on the students whose vocabulary understanding on TOEFL test and reading comprehension were low. The researcher gave students' test on vocabulary and reading comprehension, each of which consists of 50 questions. In the test, students had 1 hour to work with the questions. Totally, there were 30 students in the class.

After conducting a research by using test, the researcher analyzed the data by using Correlation system in SPSS (Statistical Program for Social Science) 16.0 and Microsoft Excel. The researcher collected the data by looking at the result of the test of vocabulary mastery and reading comprehension to find out the result of student's vocabulary and reading comprehension achievement. The result of the test was in the form of score or interval data. After getting the result, the researcher analyzed two data; (1) mean of score between vocabulary and reading comprehension, (2) the correlations between vocabulary and reading comprehensions.

### **IV. FINDINGS AND DISCUSSION**

The findings are taken from the result of checking the data using Microsoft Excel and SPSS 16.0. The researcher conducted field of research. The research dealing with the

correlation between students' reading comprehension and students' vocabulary mastery by student's 6<sup>th</sup> semester of State Islamic University of Sunan Ampel Surabaya had been done as scheduled. The data of this research were obtained through a test. The researcher took scores of the 30 students randomly and analyzed those scores to find out whether there was any correlation between the score of the students reading comprehension and vocabulary mastery.

In this chapter, the researcher gives the report concerning the data description the achievement of those two scores. The data of the students score of reading comprehension and vocabulary can be seen as the following:

#### **A. The Result of Mean of Students Vocabulary Mastery and Reading Comprehension Test**

**Statistics**

	Vocabulary Mastery	Reading Comprehension
N		
Valid	30	30
Missing	0	0
Mean	63.8667	61.6667
Median	68.0000	64.0000
Mode	70.00	64.00
Std. Deviation	13.81587	1.15798E1

15.	56	54
16.	72	62
17.	76	70
18.	60	58
19.	24	24
20.	70	64
21.	68	64
22.	72	70
23.	64	62
24.	72	70
25.	70	68
26.	68	64
27.	78	64
28.	70	68
29.	64	64
30.	72	62

So, the mean score on TOEFL test score of the students' vocabulary mastery is 63,8 and the mean on TOEFL test score of their reading comprehension is 61,6.

#### **B. Correlation between Vocabulary Mastery and Reading Comprehension**

The main goal of the study is to find out the correlation between vocabulary mastery and reading comprehension of the students' in sixth semester of English Language Education at State Islamic University of Sunan Ampel Surabaya. To find out the correlation between the two variables above, the researchers used Microsoft Excel and SPSS 16,0. The result of the correlation is presented in the table below.

NO	Vocabulary Mastery	Reading Comprehension
1.	70	68
2.	68	64
3.	68	62
4.	62	60
5.	60	58
6.	44	42
7.	52	50
8.	92	90
9.	72	70
10.	70	68
11.	66	64
12.	40	38
13.	32	66
14.	64	62

**Correlation**

	Vocabulary mastery	Reading comprehension
Pearson Correlation	1	.839**
Sig. (2-tailed)		.000
N	30	30
Pearson Correlation	.839**	1
Sig. (2-tailed)	.000	
N	30	30

The correlation significance of the two variables is 0,000. The significant level used in this study is 0,05. It means that the significance of the variable (0,000) is lower than the significant value. According to the significance value, it can be concluded that there is a significance correlation between vocabulary mastery and reading comprehension.

Pearson's correlation value:

- Pearson's correlation value 0.00 – 0.20 = no correlation
- Pearson's correlation value 0.21 – 0.40 = low correlation
- Pearson's correlation value 0.41 – 0.60 = medium correlation
- Pearson's correlation value 0.61 – 0.80 = high correlation
- Pearson's correlation value 0.81 – 1.00 = perfect correlation

Since the Pearson correlation value of students' vocabulary mastery and reading comprehension is 0.839, it can be concluded that there is a significant correlation between students' vocabulary mastery and reading comprehension.

The data above showed that almost all the students in sixth semester of English Language Education at State Islamic University of Sunan Ampel Surabaya who gained high score in vocabulary mastery test, they also get high score in their reading comprehension. It means that vocabulary has essential correlation with the students' success in understanding reading text. Moreover, it shows also that vocabulary is important for students dealing with their reading comprehension.

## V. CONCLUSION

After conducting the research, the researchers come with conclusion that:

The correlation of score on TOEFL test of students Vocabulary Mastery and Reading Test is fair. The mean score on TOEFL test of Students' Vocabulary Mastery is 63,8 and the mean on TOEFL test of Reading comprehension is 61,6.

The data that had been gained from the 6<sup>th</sup> semester students of English Language department at UINSA showed that Reading comprehension and students Vocabulary has a correlation and it influences students' ability in understanding a reading test.

## REFERENCES

- [1] ETS (Educational Testing Service). (2009). test and score data summary TOEFL® Internet-based and Paper based Tests. Retrieved from <http://www.ETS.org/TOEFL>
- [2] Goltar M. and Yamini M. (2007). Vocabulary, Proficiency and Reading Comprehension. *The Reading Matrix*, (7) 3, 88-112
- [3] Hudson, E., & Evehighy. (2014). TOEFL iBT Premier 4th edition. New York: Kaplan..
- [4] Munadia, (2016). *AN ANALYSIS OF EFL STUDENTS' DIFFICULTY IN THE TOEFL STRUCTURE AND WRITTEN EXPRESSION SECTION*, (Thesis). UIN Ar-Raniry Aceh.
- [5] Samad I.A, Jannah M, and Fitriani S.S (2017). EFL STUDENTS' STRATEGIES DEALING WITH COMMON DIFFICULTIES IN TOEFL READING COMPREHENSION SECTION. *International Journal of Language Education*, 1 (1), 29-36.
- [6] Sharpe, L.P. (1999). Practice exercise for the TOEFL 5th Edition. Barron's.
- [7] Pierce, D., & Kinsell, S. (2015). Cracking the TOEFL iBT. New York : Random House.
- [8] [Qian D. D. and Schedi M. (2004). *Evaluation of an in-depth vocabulary knowledge measure for assessing reading performance*. *Language Testing*, 21 (1), 28–52].
- [9] Ririn Oktarina (2018). *DIFFICULT SKILLS IN READING SECTION OF TOEFL FACED BY SIXTH SEMESTER ENGLISH STUDENTS*. <http://repository.unja.ac.id/4713/1/%5BArticle%5D%20edit.pdf>
- [10] Longman. *Complete Course for the TOEFL Test. Preparation for the Computer and Paper Test*. (Pearson Education, 2001).
- [11] Duwi Priyatno. *Mandiri Belajar Analisis Data dengan SPSS untuk Pemula*. (Mediakom, 2013)