The Correlation between Students’ Grammar Mastery and Vocabulary Mastery toward Students’ Translation Accuracy on Recount Text

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Abstract

Educational development improves from time to time. Students are not only dealing with one language to study but also at least two languages; national and international languages. Translation plays an important role in learning a language. This study aims to find the relation between students’ grammar and vocabulary mastery toward students’ translation accuracy on recount text in which grammar and vocabulary are two supporting skills of language. This study used a questionnaire to measure students’ grammar and vocabulary mastery and translation accuracy. Three raters helped measure the translation accuracy. There is positive and significant correlation between students’ grammar mastery, vocabulary mastery and students’ translation accuracy on recount text at Active Conversation Class of Swift English School, with a coefficient correlation of 0.9392 and the degree of significant of 26.1862.

Keywords: Grammar Mastery, Vocabulary Mastery, Translation Accuracy.

Introduction

The use of multiple languages makes language studies ever more important in this era of globalization and technological development. Zedan, et al (A.M. Zedan, et al, 2013) states that language play an important role in various aspects of our daily lives. Its role is not only limited to
communication, rather it extends into the vast branches of knowledge and human sciences. This encourages language teachers to perform better in teaching students language. Language teaching has become a need in the modern era in order to facilitate interaction among people around the world.

Vocabulary is needed to allow people's expression in every language skill, for example in writing. Richard and Renandya (J.C. Richard & W.A. Renandya, 2002) state that vocabulary is a core component of language proficiency and provides much of the basis for how well learners speak, listen, read and write. Someone's writing is to be considered great when they have a large vocabulary, allowing the reader to feel amazed with the author. Usually, in English instructional processes, the teacher gives an assignment for the students to write their own experience. Instructional material which is related to an experience story is recount text. Students who are masters in grammar may also have problems in writing text or even translating text if they do not master the vocabulary.

Language teaching has become a serious issue nowadays because of globalization which requires communication among countries. It also requires the role of translation since the use of multiple languages has increased. Shiyab (S.M. Shiyab, 2010) stated that globalization does not only evolve around translation or linguistic changes, but is first and foremost about information technology, and political and economic changes. This research will study the correlation between student's grammar mastery and student's vocabulary mastery toward student's translation accuracy of recount text. Accuracy of translation is assessed as we know it to be the most important part in translation.

Some students have problems with grammar mastery and some of them have problems with vocabulary mastery, both of which may give impact on their translation quality. Thus, it is necessary to do the research to find out the correlation between: 1) A student's grammar mastery
and students’ translation accuracy of recount text. 2) To find out the correlation between students’ vocabulary mastery and student’s translation accuracy of recount text. 3) To find out the correlation between student’s grammar mastery and student’s vocabulary mastery. 4) To find out the correlation between student’s grammar mastery and student’s vocabulary mastery toward student’s translation accuracy of recount text.

**Grammar**

Grammar usually called as English structure is one of the regulations in using English for written or spoken activities. It is a must, in learning English especially, for new learners to study grammar. Azar (B.S Azar, 2002) states that grammar promotes the development of all language skills in a variety of ways. Grammar is a set of rules by which people speak and write. These rules are not always understood consciously because the rules we refer to are those hardly ever thought about, but which allow people to use their language easily and naturally. Based on the experts’ definition of grammar above, it can be concluded that grammar is rules of how words and their component parts combine to make sentences.

As the limitation, researcher will use simple past tense when correlating with student’s translation accuracy of recount text. According to Uchiyama (K. Uchiyama, 2006), simple past tense is the tense normally used for the relation of past event. It is clear that recount text uses simple past tense. Verbal sentences in simple past tense use verbs in the sentence. While in nominal sentences, simple past tense does not use verbs as the predicate but it uses to be in past form was and were. In short, simple past tense is a tense used for signing past event. It indicates that something was done in the past.
**Vocabulary**

Vocabulary is the core component of language proficiency and provides much of the basis for how well learners speak, listen, read, and write. Nunan (Nunan, 1991) stated that vocabulary is a list of targeted language words. In addition, Richards and Schmidt (J.C Richard & R. Schmidt, 2010) state that vocabulary is a set of lexeme, including single words, compound words, and idioms. In short, it can be concluded that vocabulary is the amount of words in a language and it is also the main component of language proficiency to master four language skills.

Vocabulary includes various types which must be known (Harmer, 2007). They are as follows:

**Language Corpora**

One of the reasons we are able to make statements about vocabulary with considerably more confidence than before is because of the work of lexicographers and other researchers who are able to analyze large banks of language data stored on computers. From a corpus of millions of words the computer can now give quick accurate information about how often words are used and in what linguistic contexts.

**Word Meaning**

A problematic issue associated with vocabulary is that it deals with meaning. The meaning of a word is often related to other words. For example, we explain the meaning of “full” by saying that it is the opposite of “empty”; we understand that “cheap” is the opposite of expensive.
Extending Word Use

Words do not just have different meanings; they can also be stretched and twisted to fit different contexts and different uses. We say that someone is in a black mood or someone is yellow, yet we are not actually describing a colour. In such contexts black and yellow mean something else.

Word Combinations

Although words can appear as single items which are combined in a sentence, they can also occur in two-or-more item groups. They often combine with each other in ways which competent speakers of the language recognize instantly, but which others often find strange. The kinds of words that go together in one language are often completely different from the kinds of word which live together in another. Word combinations have become the subject of intense interest in the recent past, in part spurred on by discoveries from language corpora.

The Grammar of Words

A key middle ground where words and phrases on the one hand and grammar on the other meet up is through the operation of word classes or parts of speech such as nouns or adjectives. When we say a word is a noun, we then know how it can operate in a sentence. The same is true for such word classes as verbs or determiners or prepositions. When we know a word’s part of speech, we know what other words it can be put with, within a phrase or sentence, and where it can be put synthetically. Within word classes there are a number of restrictions. Knowledge of these restrictions allows competent speakers to produce well-formed sentences. Students’ grammar needs are determined on the basis of task performance rather than through a predetermined grammar syllabus. However, whether students develop acceptable
levels of grammatical proficiency through such an approach is problematic, Richards & Renandya (J.C Richards & W. A. Renandya, 2002).

**Translation Accuracy**

Translation is a process of transferring meaning from one language (the source language) into another language (the target language). Larson (Larson, 1984) states that translation is transferring the meaning of the source language into the receptor language. Hatim and Munday (Hatim & Munday, 2004) define translation as the process of transferring a written text from source language to target language. This is done by going from the form of source language to the form of the target language.

The translator take the question of interpretation into account in relation to the problem of selecting the phrases of the target language which will have roughly the same meaning, Bassnett (S. Bassnett, 2005). Translation does not only focus on transferring meaning, from the source language into the target language, but also the style. Each language may have its own style. That is why competent translation is transferring meaning and style from a source language to another language as naturally as possible. Nida and Taber (Nida & Taber, 2003) define translation as a process of reproducing, in the receptor language, the closest natural equivalent of the source languages message; first in terms of meaning and secondly in terms of style.

Translation quality assessment, well known as TQA, is a technique to measure the quality of a translation. Nababan, et al (M. Nababan, et al, 2012) mentions that there are three criteria of translation quality assessment that should be considered by translators. They are acceptability, readability and accuracy.

Accuracy of translation means that the message of the source text is transferred into the target text correctly. Shuttleworth and Cowie (M. Shuttleworth, and M. Cowie. 2014) state as follows:
“Accuracy is a term used in translation evaluation to refer to the extent to which a translation matches its original, while it is usually refers to preservation of the information content of ST in TT, with an accurate translation being generally literal then free, its actual meaning in the content of a given translation must depend on the type of equivalence.”

The accuracy of the message is an important thing in translation, as stated by Baker (M. Baker, 2011), but it is also important to bear in mind that the use of common target language patterns, which are familiar to the reader, play an important role in keeping the communication channel open.

**Recount Text**

Ningsih (P.A Ningsih, 2014) explains that recount is a piece of text that retells past events, usually in an order in which they have happened. Another definition, according to Azhar( S. Azhar, 2015), says that recount is based on life experience; recount tells somebody about something that you have experienced. Furthermore, Hyland (Hyland, 2003), in his book *Second Language Writing*, also mentioned that the purpose of recount is to reconstruct past experiences by retelling events in an original sequences. In conclusion, it can summarized that recount is a kind of text which retells about something which happened in the past, in a time orderly fashion.

From Astuti (P. Astuti, 2011), the generic structure of recount texts are: orientation, sequence of events, reorientation.

**Orientation**

Recount begins by telling the reader who was involved, what happened, where the event took place, and when it happened. Orientation gives the reader background information needed to understand the text, and what the reader will need in to recognize the scene, setting and context of the text.
Sequence of Events

An event is a main activity which occurs in the story of the text. In writing recount text, events are ordered in a chronological sequence. Sometimes additional detail is added, to the text, to give some information for reader.

Reorientation

Reorientation is a closing statement that may include elaboration. Some recount texts also have a concluding paragraph. In this concluding paragraph, the writer can give his/her personal comment or statement, but it is an optional one.

Materials and Method

This is a correlation design using a quantitative method. The data in this research is presented in the form of test results and a questionnaire results. The researcher took the data of students’ grammar and vocabulary mastery from the tests, and the data of students’ translation accuracy were taken from a questionnaire, and distributed to experts. The population of this research was Active Conversation students of Swift English School. The sample was ten students. The test instrument is used to measure students’ grammar mastery, vocabulary mastery and students translation accuracy of recount text. It used quantitative analysis to prove the hypothesis that there is a correlation among variables. It applied a product moment and a significant correlation formula to prove the hypotheses using:

\[ r_{xy} = \frac{\sum xy}{\sqrt{\sum x^2}(\sum y^2)} \]

(S.Arikunto, 2010).
Result and Discussion

**Hypothesis test 1**

The test of the first hypothesis is done by using an analysis of product moment correlation. The first hypothesis states that there is positive and significant correlation between a student’s grammar mastery and a student’s translation accuracy of recount text.

The researcher uses:

\[ r_{xy} = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}} \quad \text{and} \quad t = r\sqrt{n-2} \sqrt{1-r^2} \]

The Calculation of First Hypothesis

Correlation Test

\[ r_{xy} = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}} \]

\[ = \frac{3946.74}{\sqrt{5310}(3329.15)} \]

\[ r_{xy} = 0.9387 \]

Significant Test

\[ t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \]

28
From the data calculation above, $r_{xy} = 0.9387$. This value is consulted by $r_{table(0.05)} = 0.6320$ and the result is $0.9387 > 0.6320$, therefore there is positive correlation between $X_1$ variable and $Y$ variable. For the significant test, $t = 7.7127$. This value is compared to $t_{table}$ for the degree of error 5% by two tail test and $df = n-2 = 8$. It is obtained 2.306. Because of $\mu \neq 0$, it can be said that the $X_1$ variable and the $Y$ variable have a significant correlation. In conclusion, there is a positive and significant correlation between students’ grammar mastery and students’ translation accuracy of recount text. Therefore, $H_a$ is accepted.

**Hypothesis test 2**

The test of the second hypothesis is done by using an analysis of a product moment correlation. The first hypothesis states that there is positive and significant correlation between a student’s vocabulary mastery and a student’s translation accuracy of recount text.

The researcher uses:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \quad \text{and} \quad r_{xy} = \frac{\sum xy}{\sqrt{\sum x^2}(\sum y^2)}$$

**The Calculation of second Hypothesis**

**Correlation Test**

$$r_{xy} = \frac{\sum xy}{\sqrt{\sum x^2}(\sum y^2)}$$
\[
\frac{3216.65}{\sqrt{(4712.5)(3329.15)}} = 0.8121
\]

From the data calculation above, \( r_{xy} = 0.8121 \). This value is consulted by \( r_{table(10,0.05)} = 0.632 \) and the result is \( 0.9387 > 0.632 \), therefore there is positive correlation between the \( X_2 \) variable and the \( Y \) variable. For the significant test, \( t = 3.9364 \). This value is compared to \( t_{table} \) for the degree of error 5\% by two tail test and \( dk = n-2 = 8 \). It is obtained 2.306. Because of \( \mu \neq 0 \), it can be said that the \( X_1 \) variable and the \( Y \) variable have a significant correlation. In conclusion, there is positive and significant correlation between students’ vocabulary mastery and students’ translation accuracy of recount text. Therefore, \( H_a \) is accepted.
Hypothesis test 3

The test of the third hypothesis is done by using an analysis of a product moment correlation. The first hypothesis states that there is positive and significant correlation between a student’s grammar mastery and a student’s vocabulary mastery.

The researcher uses:

\[ t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \]  
\[ r_{xy} = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}} \]

The Calculation of second Hypothesis

Correlation Test

\[ r_{xy} = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}} \]

\[ = \frac{4237,5}{\sqrt{(5310)(4712,5)}} \]

\[ r_{xy} = 0,8471 \]

Significant Test

\[ t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \]
From the data calculation above, \( r_{xy} = 0.8471 \) This value is consulted by \( r_{table}(10,0.05) = 0.632 \) and the result is 0.8471 > 0.6320, therefore there is positive correlation between the \( X_2 \) variable and the \( Y \) variable. For the significant test, \( t = 3.9364 \). This value is compared to \( t_{table} \) for the degree of error 5% by two tail test and \( dk = n-2 = 8 \). It is obtained 2.306. Because of \( \mu \neq 0 \), it can be said that between the \( X_1 \) variable and the \( Y \) variable there is a significant correlation. In conclusion, there is positive and significant correlation between students’ grammar mastery and students’ vocabulary mastery. Therefore, \( H_i \) is accepted.

**Hypothesis test 4**

The test of fourth hypothesis is done by using an analysis of a product moment correlation. The fourth hypothesis states that there is any positive and significant correlation between a student’s grammar mastery, vocabulary mastery and a student’s translation accuracy on recount text. The researcher used formula:

\[
R_{y\,x_1\,x_2} = \sqrt{\frac{r_{y\,x_1}^2 + r_{y\,x_2}^2 - 2 r_{y\,x_1} r_{y\,x_2} r_{x_1\,x_2}}{1 - r_{x_1\,x_2}^2}}
\]

**The Calculation of Fourth Hypothesis**

Correlation Test

\[
R_{y\,x_1\,x_2} = \sqrt{\frac{r_{y\,x_1}^2 + r_{y\,x_2}^2 - 2 r_{y\,x_1} r_{y\,x_2} r_{x_1\,x_2}}{1 - r_{x_1\,x_2}^2}}
\]
\[
\begin{align*}
R^2 &= \frac{(0.9387)^2 + (0.8121)^2 - 2(0.9387)(0.8121)(0.8471)}{1 - (0.8471)^2} \\
&= \sqrt{0.8812 + 0.6595 - 2(0.6458)} \\
&= \sqrt{1.5407 - 1.2916} \\
&= \sqrt{0.2491} \\
R_{xy1x2} &= 0.9392
\end{align*}
\]

**Significant Test**

\[
F_h = \frac{R^2 / k}{(1 - R^2) / (n - k - 1)}
\]

\[
= \frac{0.9392^2 / 2}{(1 - 0.9392^2) / (10 - 2 - 1)}
\]

\[
= \frac{0.8821 / 2}{(1 - 0.8821) / (7)}
\]

\[
F_h = 26.1862
\]

From the data calculation above, \( R_{xy1x2} = 0.9392 \). This value is consulted by \( r_{table(38,0.05)} = 0.6320 \) and the result is \( 0.9392 > 0.6320 \), therefore there is a positive correlation between \( X_1, X_2 \)
and the Y variable. For the significant test, \( f_{count} = 26,1862 \). This value is consulted by \( f_{table} \) for the degree of error 5% by dk numerator=\( k \) and dk denominator=(\( n-k-1 \)) so it is obtained \( f_{table} = 4,74 \) and the result is 26,1862 > 4,74 it can be said that between \( X_1 \),\( X_2 \), and the Y variable there is a significant correlation. In conclusion, there is a positive and significant correlation between students' grammar mastery, vocabulary mastery and students' translation accuracy on recount text. Therefore, \( H_a \) is accepted.

**Conclusion**

From the investigation, it can be concluded that there is a positive and significant correlation between a student’s grammar mastery and student’s translation accuracy on recount text; at Active Conversation Class of Swift English School; with a coefficient correlation of 0.9387 and the degree of significant is 7,7127. There is a positive and significant correlation between a student’s vocabulary mastery and a student’s translation accuracy on recount text at Active Conversation Class of Swift English School; with a coefficient correlation of 0.8182 and the degree of significant is 3,9364. There is a positive and significant correlation between a student’s grammar mastery and a student’s vocabulary mastery on recount text, at Active Conversation Class of Swift English School; with a coefficient correlation of 0.8471 and the degree of significant is 4.3224. There is a positive and significant correlation between a student’s grammar mastery, vocabulary mastery and a student’s translation accuracy on recount text, at Active Conversation Class of Swift English School; with a coefficient correlation of 0.9392 and the degree of significant is 26,1862.

**Table 1. The Data Result of \( X_i \) and Y Variable**
X

1

n

1

= 10

\( \Sigma x^2 = 5310 \)

\( \Sigma xy \)

Y

n

2

= 10

\( \Sigma y^2 = 3329,15 \)

3946,74

Source : Table data result of hypothesis test

\[ y = 0.7433x + 22.692 \]

\( R^2 = 0.8811 \)

\textbf{Table 2. The Data Result of }X_1\textbf{ and } Y \textbf{ Variable}

<table>
<thead>
<tr>
<th>X_1</th>
<th>n_1 = 10</th>
<th>( \Sigma x^2 )</th>
<th>( \Sigma xy )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>n_2 = 10</td>
<td>( \Sigma y^2 )</td>
<td>3329,15 3216,65</td>
</tr>
</tbody>
</table>

Source : Table data result of hypothesis test
Table 3. The Data Result of $X_1$ and $X_2$ Variable

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_1$</td>
<td>$n_1 = 10$</td>
<td>$\Sigma x^2 = 5310$</td>
<td>$\Sigma xy$</td>
<td></td>
</tr>
<tr>
<td>$X_2$</td>
<td>$n_2 = 10$</td>
<td>$\Sigma y^2 = 4712.5$</td>
<td>4237.5</td>
<td></td>
</tr>
</tbody>
</table>

Source: Table data result of hypothesis test

$y = 0.6826x + 29.474$

$R^2 = 0.6595$

$y = 0.798x + 12.754$

$R^2 = 0.7176$
Table 4. The Result of Correlation between X₁, X₂ and Y Variable

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>r_{xy}</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁ and Y</td>
<td>10</td>
<td>0.9387</td>
</tr>
<tr>
<td>X₂ and Y</td>
<td>10</td>
<td>0.8121</td>
</tr>
<tr>
<td>X₁ and X₂</td>
<td>10</td>
<td>0.8471</td>
</tr>
</tbody>
</table>

Source: Table data result of hypothesis test

References


