

# AN ANALYSIS OF THE FOURTH YEAR STUDENTS' ABILITY IN TRANSLATING A SCIENTIFIC TEXT FROM INDONESIAN INTO ENGLISH AT ENGLISH DEPARTMENT OF BUNG HATTA UNIVERSITY

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## Abstract

The purpose of this research was to describe the fourth year students' ability of English Department of Bung Hatta University in translating a scientific text from Indonesian into English. There are two aspects; lexical equivalence and grammatical adjustment that should be considered in translating chemistry text from Indonesian into English. The population of this study was the fourth year students of English Department, the Faculty of Teacher Training and Education, Bung Hatta University. To select the sample the researcher used simple random sampling technique, and the total number of sample was twenty one (21) students. The data were collected by asking them to translate chemistry text about definition of Solubility. The result of this study showed that in general the fourth year student's ability. It could be seen that 0% student had high ability 85.71% students had moderate ability 14.29 students had low ability. In detail, the percentages of each aspect in translation test were 85.71% students had moderate ability to adjust lexical equivalence and 90.58% students had moderate ability to adjust grammatical adjustment. Referring to the result of this study, the researcher gives suggestions to the lecturers to consider their method in teaching, teaching strategy, teaching technique, teaching materials, students' exercise of translation subject connected with the two aspects; lexical equivalence and grammatical adjustment. Furthermore, the researcher suggests to the next researcher to find the other relevant aspects related to translate scientific text from Indonesian into English.

**Key Words:** Chemistry Text, Translation, Ability

### A. Introduction

Translation is basically as a changing of a form to be other form (Larso in Simatupang, 1999:1). The other form here can be a source

language (SL) or target language (TL).

When we translate the word *saya* in Indonesian, the form that can be used is *aku*.

On the other hand, when we translate it into English, the translation is *I*. The example of

translation *saya* above shows that translating can be done in the same language (*intralingual*) or from a language to other language (*interlingual*). This example also shows that the translation is from Indonesian to English, it means that Indonesian as the *source language* and English as *target/receptor language*.

The factors influence a translation are lexical equivalence and grammatical adjustment. Texts in different languages can be equivalent in some different aspects such as in the different degrees (fully or partially equivalent), in respect of different levels of presentation (equivalent in respect of context, of semantics, of grammar, of lexis, etc.) and at different ranks (word-for-word, phrase-phrase, sentence-for-sentence) (Bell, 1991:6). Languages are different from each other; they are different from many aspects; in having distinct codes and rules regulating the construction of grammatical stretches of language and these forms have different meanings. The most important thing is that a translating may not change the real meaning of SL. If so, the translation is considered to be a wrong translation or could be fatal.

The problem of this study was formulated in the following question: "How is the ability of the fourth year students of

English Department in Bung Hatta University in translating a chemistry text from Indonesian into English?

The general purpose of this study is to describe the ability of the fourth year students of English Department in translating a chemistry text Indonesian into English. Specifically, the purposes of this study are as following:

1. To describe the ability of the fourth year students of English Department in adjusting lexical equivalence in translating a chemistry text from Indonesian into English
2. To describe the ability of the fourth year students of English Department in adjusting grammatical adjustment in translating a chemistry text Indonesian into English.

## **B. Research Method**

This research was a descriptive research because this kind of study describes the ability of the fourth year students in the English Department of Bung Hatta University in translating a scientific text from Indonesian into English.

According to Sugiyono (2009: 116), population is the generalize area which

consists of: object or subject that has quality and certain characteristics which the researcher has stated to study and then get the conclusion. The population was the fourth year students at English Department of Bung Hatta University. The sample was chosen by using the simple random sampling.

**Table 1**  
**Population of the Research**

<b>NO</b>	<b>CLASS</b>	<b>MEMBER OF STUDENTS</b>
<b>1</b>	<b>A</b>	<b>47</b>
<b>2</b>	<b>B</b>	<b>50</b>
<b>3</b>	<b>C</b>	<b>29</b>
<b>Total</b>		<b>126</b>

The instrument used to collect the data in this research was a translation test. The criteria of a good test are it is valid and reliable. A valid test measures exactly what it proposes to measure, does not measure irrelevant or “contaminating” variable, relies as much as possible on empirical evidence (performance), involves performance that samples the test’s criterion (objective), offers useful, meaningful, information about a test-taker’s ability and it is supported by a theoretical rationale or argument (Brown, 2010: 30). In order to see the test is valid or

not, the researcher used content validity because the test fixes with the curriculum, syllabus and teaching materials. A good test also reliable that is the test is consistent and dependable. A reliable test is consistent in its conditions across two or more administrations, gives clear directions for scoring/evaluation, has uniform rubrics for scoring/evaluation, lends itself to consistent application of those rubrics by the scorer and contains items/tasks are unambiguous to the test-taker ( Brown, 2010: 30).

In the case of making a reliable test, the researcher used inter-rater technique because the researcher wants to minimize the subjectivity in scoring. It means that, there are two scorers (the researcher and Yolanda Marini).

To calculate the coefficient of correlation and to find out the reliability, the researcher used the Pearson Product Moment Formula in Arikunto (2012: 87) as follow:

$$r_{xy} = \frac{N \sum xy - (\sum x) (\sum y)}{\sqrt{\{N \sum x^2 - (\sum x)^2\} \{N \sum y^2 - (\sum y)^2\}}}$$

Where:

$r_{xy}$  = the coefficient correlation between x and y variables

n = the number of the students who follow the test

x = the score from the first scorer

y = the score from the second scorer

$\sum xy$  = the total score of cross product x y

$\sum x$  = the sum of score from the first scorer

$\sum y$  = the sum of score from the second scorer

$x^2$  = the sum of the first scorer's squared

$\sum y^2$  = the sum of the second scorer's squared

$(\sum x)^2$  = the square of sum of the first scorer

$(\sum y)^2$  = the square of sum of the second scorer

To know the degree of reliability, the researcher uses degree of coefficient correlation based on Arikunto's idea (2012:75) states that general coefficient correlation as follow:

.81 – 1.0 = very high correlation

.61 -- .80 = high correlation

.41 -- .60 = moderate correlation

.21 -- .40 = low correlation

.0 -- .20 = very low correlation

The result was very high correlation (0.97).

The technique in collecting data that is used by the researcher is a translation test. In order to collect the data, the researcher used the procedures as follows:

1. The researcher gave the translation test to the students.
2. The researcher explained the directions to the students.
3. The researcher gave more than 60 minutes to the students in doing their test.
4. The researcher collected the students' answer sheet.
5. The researcher copied the students' work and gave them to the second scorer.
6. The researcher and the second scorer checked the students' answer based on the criteria of translation.

In analyzing data, the researcher used descriptive analysis technique. She analyzed the data by counting the percentage of the students' ability in translation test. To analyze the data, the procedures are as follows:

1. The researcher presented the raw scores and counted the total score of each student.
2. The researcher classified the students' ability to translate chemistry text from Indonesian into English based on lexical equivalence and grammatical adjustment by finding the Mean and Standard Deviation by using these formulas, (Gay, *et. al.* 2009 :307):

$$M = \frac{\sum x}{N}$$

Where:

M = Mean

$\sum x$  = Sum of scores

N = Number of sample

To calculate standard deviation, the researcher used the following formula, (Arikunto, 2012:299):

$$SD = \sqrt{\frac{\sum x}{n} - \left[\frac{\sum x}{n}\right]^2}$$

Where:

SD = standard deviation

$\sum x$  = the score of the students

$\sum x^2$  = the total of  $x^2$

n = number of sample

3. She classified the students' ability into high, moderate, and low ability used the following categories (Arikunto, 2012:229):

$>M + SD$  = high

$M - SD \Rightarrow M + SD$  = moderate

$<M - SD$  = low

4. Calculating the percentage of the students who get high, moderate, and low ability, she used this formula:

$$P = \frac{R}{T} \times 100\%$$

Where:

P = percentage of the students' score

R= the sum of the students who get high, moderate, or low ability

T= the sum of the students

### C. Findings

In these findings, the researcher presented students' ability in translating chemistry text from Indonesian into English. In general, students' ability was moderate. It is indicated by the evidence that the majority of students had moderate ability; there are 85.71% students had moderate ability in adjusting lexical equivalence and 90.48% students had moderate ability in adjusting grammatical adjustment.

#### 1. The Students' Ability in Translating Chemistry Text from Indonesian into English

Based on the result of the data analysis, it was found that the highest score was 87 and the lowest score was 56. The researcher has calculated mean and standard deviation and the results were 79.74 for mean and 7.15 for standard deviation. The result of the data analysis also showed 0 student (0%) had high ability, 18 students (85.71%) had moderate ability and 3 students (14.29%) had low ability.

**Table 1**  
**Students' Ability in Translating Chemistry Text from Indonesian into English**

Quality	Number of Students	The Percentage of Student's Ability
High	0	0 %
Moderate	18	85.71 %
Low	3	14.29 %
<b>Total</b>	21	100
		101

#### 2. The Students' Ability to Adjust Lexical Equivalence in Translating Chemistry Text from Indonesian into English

Based on the result of the data analysis, it was found that the highest score was 40 and the lowest score was 24. Then researcher has counted mean and standard deviation and the results were 35.89 for mean and 3.39 for standard deviation. The result of the data analysis also showed 0 student (0%) had high ability, 18 students (85.71%) had moderate ability and 3 students (14.29%) had low ability.

### 3. The Students' Ability to Adjust Grammatical Adjustment in Translating Chemistry Text from Indonesian into English

Based on the result of the data analysis, it was found that the highest score was 49 and the lowest score was 32. Then researcher has counted mean and standard deviation and the results were 43.83 for mean and 3.94 for standard deviation. The result of the data analysis also showed 2 students (9.52%) had high ability, 19 students (90.48%) had moderate ability and 0 students (0%) had low ability.

#### D. Discussions

##### 1. The Students' Ability to Adjust Lexical Equivalence in Translating Chemistry Text from Indonesian into English

After doing this study, the researcher found some students face such difficulties to in adjusting lexical equivalence in translating chemistry text from Indonesian into English. It was proven by the data that almost all students (18 students or 85.71%) had moderate ability.

For example:

1. **Kelarutan** adalah nilai perbandingan antara jumlah zat terlarut dalam suatu pelarut.

Students' translation:

1. **Solubelation** is compare of value between amount of essence that **dissolve** in a **soluble**.

Correct translation:

1. **Solubility** is the amount of **solute** to that of **Solvent**.

These examples proved that some of them still do not understand how to adjust the appropriate lexical equivalence in English as the words "kelarutan, terlarut dan pelarut". They translated them into "Solubelation, dissolve and soluble", while the correct translations are "solubility, solute and solvent". The word "sebagai contoh", they translated it into "for example" while the correct translation is "as an example" etc.

##### 2. The Students' Ability to Adjust Grammatical Adjustment in Translating Chemistry Text from Indonesian into English

The next finding of this study was the students' ability to adjust grammatical adjustment. It was indicated by the data that 19 students (90.48%) had moderate ability. In adjusting grammatical adjustment, students still do not understand how to adjust grammatical adjustment dealing with morphological form of passive voice and

comparative degree. They could not make a good grammatical of using an appropriate passive voice and comparative degree. Like an example above that they still do not understand the form of passive voice. In passive voice the verb will be in the third form and before verb there is a be.

For example:

1. Suatularutan**tidaklagidapatdibedak**  
**anantarapelarutdanzatterlarutnya.**

Students' translation:

1. A solution, solvent and solute  
**cannot be distinguish.**

Correct translation:

1. In a solution, solvent and solute  
**cannot be distinguished.**

## **E. Conclusions**

1. In general, the ability of the fourth year students at English Department of Bung Hatta University was moderate. It was indicated by the data that 18 students (85.71%) had moderate ability in translating chemistry text from Indonesian into English.
2. The students' Ability to Adjust Lexical Equivalence in Translating Chemistry Text from Indonesian into

English was moderate. It was also indicated by the data that 18 students (85.71%) had moderate ability.

3. The students' Ability to Adjust grammatical in Translating Chemistry Text from Indonesian into English was moderate. It was proven by the data that 19 students (90.48%) had moderate.

## **F. Suggestions**

1. Since the results of this study showed that students' ability in translating chemistry text from Indonesian into English was moderate, it is suggested to the lecturer to enrich students' exercise of translation subject in order to improve their ability in translation connected with the aspects; lexical equivalence and grammatical adjustment.
2. To the students, it is suggested for them to practice more by doing more exercises in order to enrich their vocabulary and improve their grammar and surely by looking at the two aspects; lexical equivalence and grammatical adjustment.



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