

## Pattern Of Vocabulary Size Development

Yulianus P. Mangewa

### Abstract

This mini project assessed students' vocabulary size development. This an exploratory study aims at describe the developing of the number of word family the students know. The multiple-choice format from the Vocabulary Levels Test was used to collect the data namely 2000 version of the Vocabulary Size Test (VST). This mini project was particularly interested to know the students' vocabulary size development. The findings revealed that the students' vocabulary size was less than 2,000 word-families. This means that the vocabulary size of the students is still far from the standard required. This means that the students' vocabulary size is still far from the required standard. The majority of students do not have the English vocabulary size sufficiently to be used as a media to learn the subjects at university, though formal exposure to language has been given for more than 12 years. This paper, also explains the development of vocabulary size from first year(Semester Two) to fourth year (Semester Eight) at university.

**Keywords:** *Vocabulary Size, word family, develop, vocabulary size test*

### INTRODUCTION

#### 1. Background

The majority of students in Indonesia are under the assumption that learning the English language can be done by focusing more on learning its grammar. Thus, students spend many years studying English grammar without reaching the desired level of fluency and proficiency. Grammar is only one pillar of any language. Certainly, the importance of grammar cannot be denied. It is essential to formulate comprehensible and clear sentences. Yet, without a good-sized vocabulary, one's means of expressing ideas will be limited. A good vocabulary is required for a good command over any language. The English language is no exception, with its large vocabulary size and diverse grammatical rules.

Vocabulary is the basis for communication, reading, and writing. Mukarto (2005) argues that there are various aspects or dimension of word knowledge that L2 learners have to acquire and various tasks that they have to perform in the acquisition process of L2 lexicon. Nagy and Anderson (1984) stated that people are exposed to roughly 88,700 different word families while in school between Kindergarten and grade 12 (in Indonesia graduated of senior high school or before university). Effective instruction while teaching vocabulary is a challenge for the instructor but is vital for the student. Vocabulary is crucial for all aspects of education. The student must understand the word and its meaning to gain comprehension of its use. As Wilkins (1972: 111) puts it, "without grammar very little can be

conveyed, without vocabulary nothing can be conveyed." Gaining a good knowledge of vocabulary is an essential tool for developing proficiency in a foreign language. In the foreword of the book *Modeling and assessing vocabulary knowledge*, Long and Richards (2007: xii) characterize vocabulary as "the core component of all the language skills".

Vocabulary is generally given little emphasis in the university curriculum in Asian countries (Fan, 2003). The situation is the same in Indonesia as an Asian country. Generally, the emphasis on English teaching in universities in Asian countries is on the four language skills ; speaking, writing, listening and reading ( Komol and Sripetpun, 2011: 1). For some universities in Indonesia emphasize on grammar/structure. Vocabulary teaching in many classrooms is largely incidental (Fan, 2003; Catalan, 2003). This means that when a particular word or phrase appears difficult for the students, they are told the definitions.

Developing vocabulary is an important part of successful language learning. It is essential for accessing background knowledge, expressing ideas, and learning about new concepts. Vocabulary development – Vocabulary refers to all of the words a learner understands. Development refers to change over time. ( Biemiller, 2009). In addition Ellis (2010 : 99) states that the study of a learner's vocabulary development involves a consideration of both quantitative changes in vocabulary size over time and qualitative changes in the learner's knowledge of individual words.

a. Vocabulary Size

Vocabulary learning is not only a quantitative issue. According to Nation, 1990:13) argues that researchers distinguish "breadth" or "size" of knowledge (the number of words of which the learner knows at least some significant aspects of the meaning) from "depth" of knowledge, with which they refer to the quality of vocabulary knowledge, namely how well a particular word is known. Although both measures are considered important - knowledge of words progresses from superficial to deep at various stages of learning - a lot of work on vocabulary testing has focused on vocabulary size.

The term word family for some experts called in different term, such as Boyle (1987) state that breadth of vocabulary knowledge refers to the total number of words families that a person knows. It means vocabulary size is similar with breadth or some others called as vocabulary knowledge Bauer and Nation (1993) investigated the importance of word families and word forms in order to find a systematic approach to vocabulary teaching and to determine the vocabulary load of texts. They define a word family as a base word and all its derived and inflected forms that can be understood by a learner without having to learn each form separately. They argue that important principle behind the idea of a word family is that once the base word or even a derived word is known, the recognition of other members of the family requires little or no extra effort. Clearly, the meaning of the base in the derived word must be closely related to the meaning of the base when it stands alone or occurs in other derived forms, for example, the word family for the word *develop* includes *develops*, *developing*, *developed*, *developable*, *undevlopable*, *developers*, and *undevloped*. *development(s)*, *developmental*, *developmentally*, *developmentwise*, *semideveloped*, *antidevelopment*, *redevelop*, *predevelopment*. Thus, if a learner knows the meaning of the base word in the word family, he can easily understand the meaning of the rest of the words in the family. In this way, the learner can increase his knowledge of any given word family by developing his morphological knowledge. Some researchers consider any word and its different forms as separate items while others count these as one word. For example, *house*, *housing*, and *houses* can be regarded as one word by some researchers because they are members of the same family, while other researchers may count them as three separate words. These differences in defining what counts as a member of the same family are due to

different purposes of research and the constraints governing them.

Nation (2012) points out the purposes of vocabulary size are : important for planning, diagnosis and research, for diagnostic purposes particularly where learners have reading problems, He added a vocabulary size test can be a very useful contributor to research on language proficiency and the effect of experimental interventions on language learning. It can provide an independent measure to help in equating groups in controlled studies.

### b. Word Family

According to Bauer and Nation (1993) the idea of a word family is important for a systematic approach to vocabulary teaching and for deciding the vocabulary load of texts. Nation (1996) explains one of the biggest obstacles facing many adult English language learners is acquiring an adequate vocabulary size. Even though students spend years studying English, their vocabulary size is much less than 5,000 word-families. However, a study carried out by Milton and Meara (1996) showed that the students" vocabulary size can increase enormously if learning takes place in the second language environment.

Bauer and Nation (1993) dealing with growth in morphological knowledge involves consideration of the idea of a "word family". From the point of view of reading, a word family consists of a base word and all its derived and inflected forms that can be understood by a learner without having to learn each form separately. Furthermore, they argue as a learner's knowledge of affixation develops the size of the word family increases. The important principle behind the idea of a word family is that once the base word or even a derived word is known, the recognition of other members of the family requires little or no extra effort.

In line with affixation grouping of affixes into levels Bauer and Nation(1993) point eight criteria which were used to determine the level at which a particular affix should be placed. The criteria are: (i). Frequency: The number of words in which an affix occurs. (ii). Productivity: The likelihood that the affix will be used to form new words. (iii) Predictability: The degree of predictability of the meaning of the affix. (iv). Regularity of the written form of the base: (v) Regularity of the spoken form of the base: (vi) Regularity of the spelling of the affix: (vii) Regularity of the spoken form of the affix: and

(viii) Regularity of function. These criteria act in two ways. They determine the level at which an affix is placed, and they also place restrictions on what particular words can be included as part of a word family at a given level. It is clear from the criteria that learners must draw on different types and levels of knowledge in order to use the relationships between words in a word family.

In context of the levels Bauer and Nation (1993) observe that the level only deal with affixation, the levels proposed are :

*Level 1: Each form is a different word*

A different form is a different word. Capitalization is ignored. At this level it is assumed that learners will not recognize that pencil and pencils are members of the same word family. Bauer and Nation (1993)

*Level 2: Inflectional suffixes*

At this level, words with the same base and inflections are considered as members of the same word family. Regularly inflected words are part of the same family. The inflectional categories are plural; third person singular present tense; past tense; past participle; -ing; comparative; superlative; possessive. Bauer and Nation (1993) state that There are at least three problems in defining the set of inflectional affixes. Firstly, there are disagreements in the literature as to what constitute the set of inflectional categories of English. Secondly, having made the decision regarding what inflectional categories to include, we have the problem that not all of the words constructed according to the principles of these categories are necessarily clearly inflectional. Bauer and Nation (1993)

Consider

*He is shooting clay-pigeons  
I watched him shooting clay-pigeons  
His shooting clay-pigeons disturbed me  
His shooting of  
clay-pigeons was very disturbing  
The shooting of clay-pigeons went on all  
day  
Clay-pigeon shooting is an expensive  
pastime*

It is clear that the -ing in the first and last items in the list is not the same. Similar (though less striking) problems arise with the use of past participles as adjectives.

*Level 3: The most frequent and regular derivational affixes*

At this stage, the eight criteria outlined at the beginning of this article are applied to derivational morphology. All the criteria are applied quite strictly at this level, and the strictness

with which they are applied is reduced at subsequent levels. The affixes included at level 3 are-able, -er, -ish, -less, -ly, -ness, -th, -y, non-, un-, all with restricted uses. Bauer and Nation(1993)

*Level 4: Frequent, orthographically regular affixes*

At this level, the eight criteria are prioritized. In particular, the fact that an affix is frequent (widely generalized) is taken to be more important than whether it is productive or not, and orthographic criteria are taken to be more important than phonological criteria. This decision is based on the assumption that the processes recommended here are aimed at allowing comprehension of written rather than spoken forms. The affixes included at this level are: -al, -ation, -ess, -ful, -ism, -ist, -ity, -ize, -ment, -ous, in-, all with restricted uses. Bauer and Nation (1993)

*Level 5: Regular but infrequent affixes*

This level adds a number of affixes whose behavior is fairly regular, which may be productive, but which, because they are not widely generalized, do not individually add greatly to the number of words that can be understood. These affixes are : -age (leakage), -al (arrival), -ally (idiotically), -an (American), -ance (clearance), -ant (consultant), -ary (revolutionary), -atory (confirmatory), -dom (kingdom; officialdom), -eer (black marketeer), -en (wooden), -en (widen), -ence (emergence), -ent (absorbent), -ery (bakery; trickery), -ese (Japanese; officialese), -esque (picturesque), -ette (usherette; roomette), -hood (childhood), -i (Israeli), -ian (phonetician; Johnsonian), -ite (Paisleyite; also chemical meaning), -let (coverlet), -ling (duckling), -ly (leisurely), -most(topmost), -ory(contradictory), -ship (studentship), -ward (homeward), -ways (crossways), -wise (endwise; discussion-wise), ante- (anteroom), anti- (anti-inflation), arch- (archbishop), bi(biplane), circum- (circumnavigate), counter-(counter-attack), en- (encage; enslave), ex-(ex-president), fore- (forename), hyper-(hyperactive), inter- (interAfrican, interweave), mid-(mid-week), mis- (misfit), neo-(neo-colonialism), post-(post-date), pro-(pro-British), semi-(semi-automatic), sub- (subclassify; subterranean), un-(untie; unburden). Bauer and Nation(1993)

*Level 6: Frequent but irregular affixes*

This level includes those affixes which provide major problems of segmentation, either because they cause gross (orthographic) allomorphy in their bases (that is, parts of the base are deleted or additions besides the suffix are needed), or because there are major problems involved in segmenting them caused by

homography. Although the problems are dealt with in terms of particular affixes, note that many of the problems recur, and some of them recur with the less widely generalized affixes already mentioned. The affixes are -able, -ee, -ic, -ify, -ion, -ist, -ition, -ive, -th, -y, pre-, re-. Bauer and Nation (1993) *Level 7: Classical roots and affixes.*

At this level belong all the classical roots which abound in English words and which occur not only as bound roots in English (as in *embolism*) but also as elements in neo-classical compounds (such as *photography*). Bauer and Paul Nation (1993)

Frequency level refers to how often the word occurs in normal use of the language. Since the English language has a large number of words, it is impossible for EFL students to learn them all. By categorizing the words into lists according to their frequency levels, students can focus their efforts on learning the high frequency words first. Chiarello (1988) defined word frequency as "the *sine qua non* among variables that affect basic word recognition" (p.49). For example, the word occurs very often in written and spoken English. It occurs so frequently that about seven percent of the words on a page of written English are a repetition of the word *the*. Thus, the word is a high frequency word (Waring & Nation, 1997).

Vocabulary researchers normally differentiate between passive (receptive) and active (productive) vocabulary knowledge (Nation, 2001). Having passive vocabulary knowledge enables one to perceive the form of the word and retrieve its meaning(s). Active vocabulary knowledge, on the other hand, enables one to retrieve the appropriate spoken or written word form of the meaning one wants to express (Laufer & Goldstein, 2004).

The terminology used in the literature may be somewhat confusing. In the literature, 'size' is used interchangeably with, 'breadth' and 'depth' is sometimes substituted for 'organization' or 'quality'. In this paper, 'size' and 'depth' since that these two terms better reflect the aspects in question. Size, then, will be used to designate how many words a learner knows (Gyllstad, 2004)

## 2. Research Question

Taking into consideration all the issues highlighted in the field of developing vocabulary, the purpose of this study is to investigate the vocabulary size of learners at the English Department of a private university cited in a rural area. This study focus to investigate the vocabulary

size of learners at second semester (first year) to eighth semester (fourth year) English Education Department, Teachers Training and Education Faculty, Christian University of Indonesia Toraja (UKI Toraja). The results may be used to guide teachers in applying suitable strategies and activities to develop students' vocabulary size.

The main question guides this research is what do the students' vocabulary size develop significantly? Thus, this research tries to describe the developing of the number of word family the students of English Education Department at UKI Toraja know.

The purpose of using Vocabulary Size Test Nation (2012) notes that is designed to measure both first language and second language learners' written receptive vocabulary size in English, he added the test measures knowledge of written word form, the form-meaning connection, and to a smaller degree concept knowledge. The test measures largely decontextualised knowledge of the word although the tested word appears in a single non-defining context in the test.

## METHOD

### 1. Sample

There are 1154 students at English Education Department, Teachers Training and Education Faculty, Christian University of Indonesia Toraja (UKI Toraja) and according to Wunsch (1986), for a group of 1154 students, at least a sample of 58 are needed to make an estimation with a sampling error of  $\pm 5$  percent at 95 percent confidence level. Nevertheless, 60 students are chosen randomly. Out of the 60 students were from different level, 15 students were from Semester 2, 15 from Semester 4, 15 from Semester 6, and 15 students from Semester 8. Generally, they were S1 students from the Teachers Training and Education Faculty. All the subjects were native speakers of Bahasa Indonesia, none had English-speaking parents and none had lived outside Indonesia. Since English is a foreign language in Indonesia, most of the input is received from formal instruction. All schools follow a syllabus of the Ministry of Education and use materials that are authorized by it. At the end of high school instruction, i.e. at the end of grade 12, all students take a government exam for English subject.

Occasionally, students may communicate with English-speaking tourists because Toraja is one of the tourist destinations. The four groups of

subjects were from the same department and same university and were taught by the same teachers. Thus, the four groups of subjects were as closely matched as possible with regard to input conditions, in campus and outside it, with regard to teachers, socioeconomic status, and mother tongue. In sum, even though the study was not longitudinal, the groups were carefully matched on all variables except the additional year of school in group two, three, and four. Therefore, it postulated that the difference between the groups in their respective English vocabularies can be attributed to this additional year of study. The quantitative method using the 2000 version of the Vocabulary Size Test (VST) : Version B developed by Paul Nation (1983, 1990) was used in this exploratory study.

The test was administered among the English Education Department, Teachers Training and Education Faculty, Christian University of Indonesia Toraja (UKI Toraja) in June 2013. Data collected was analyzed using the Statistical Package for Social Sciences (SPSS).

## 2. *Instrument*

The instrument used for this study was the Vocabulary Size Test(VST): Version B developed by Paul Nation and Beglar (2007) based on the British National Corpus (BNC). This diagnostic testing of vocabulary size measures the students' passive vocabulary size, which is based on word-frequency level 2000 words.

The Vocabulary Size Test is originally based on words from five word-frequency levels namely the first 2,000 words, 3,000 words, 5,000 words, the University word level (beyond 5,000 words) and 10,000 words. However, in this study only the first 2,000 levels was used. Each level is intended to relate to specific vocabulary learning objectives. According to Nation (1990), the 2,000-word levels contain the high-frequency words that all learners need to know in order to function effectively in English. Finally, words at the University level should help students in reading their textbooks and other academic reading material.

The answers are scored as correct or incorrect. Each correct answer is given 20 point. Since the test has 100 items, the maximum score is therefore 2000. "A weak score at any level is defined as knowing fewer or less than 83%" as to Nation's experience using the test (Nation, 1990 : 140).

This test was chosen because it is commonly used in other research focusing on vocabulary size. Moreover, students taking the test would find it is easy to understand the definitions, because the definitions used in the test are based on the 2,000 most frequent words, which makes the definitions clear and unambiguous. In addition, collecting the data and analyzing it is relatively easy, because the test is easy to score and interpret.

The test comprises 100 items. According to Read (2000 : 320), to determine the estimated vocabulary size using this kind of test is just multiply the correct reply by 100. For the reason, if a student obtained 100 correct replies, his estimated vocabulary size is 10,000.

## 3. *Measures*

The Vocabulary Size Test used in this research contains 100 multiple-choice items. A shorter version was used because of time concerns. The shorter version was created by Nation and Beglar (2007), and it contains 100 multiple-choice items (See Appendix B for a copy of the adapted test). Students choose the correct definition from four choices. Students have to have a fairly developed idea of the meaning of the word because the correct answer and the distractors usually share elements of meaning (Nation & Beglar, 2007)

## 4. *Procedure*

Prior to using an adapted form of the Vocabulary Size Test, a request for permission was sent to Mr. Paul Nation via email, who approved using the test in this study (see Appendix A for a copy of the approval). Data were collected in the last ten days of June 2013. All subjects had to complete tests in the same time period without using dictionaries. The test took about 50 minutes and was conducted as follows: Before administering the tests, the researcher explained about the test and the purpose of this study. The test lasted for almost 45 minutes.

## RESULTS

### 1. *Description of Students' Vocabulary Size*

The Vocabulary Size Test was administered to the four groups of 60 students. The test consists of 100 items and the total possible score 2000 points. Table 1 provides the

descriptive statistics of the students' total scores for the Vocabulary Size Test. A weak score at any level is defined as knowing less than 83% (83% out of 2000 = 1660) according to Nation's (1990, p. 140) experience using the test.

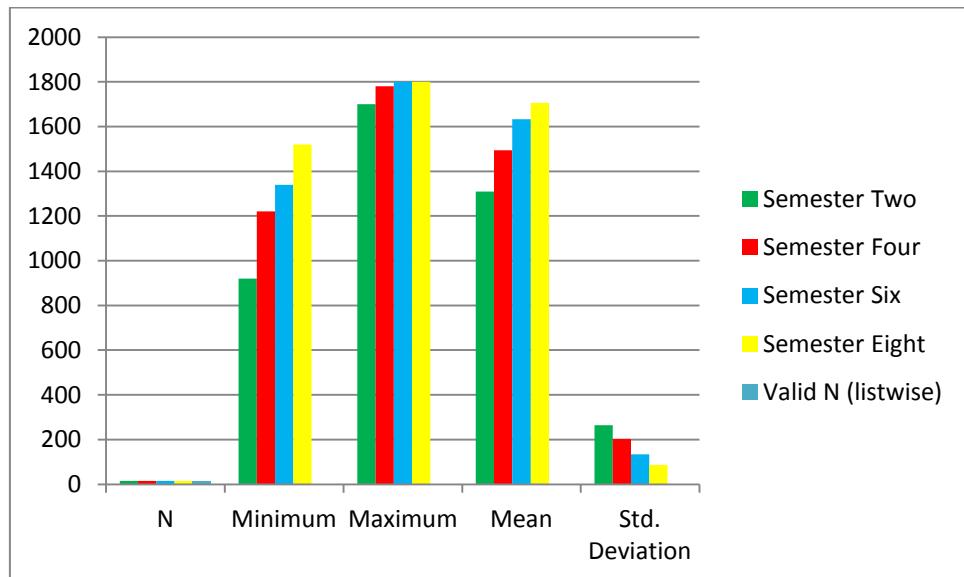
The minimum score obtained by the students are 920 for Semester 2, 1220 Semester Four, 1340 Semester Six, and 1520 Semester Eight. While, the maximum score obtained are 1700 Semester Two, 1780 Semester Four, 1800 Semester Six and Semester Eight.

The mean scores obtained by Semester Two, Semester Four, Semester Six, and Semester Eight students in Vocabulary Size Test are 1309.33 ( $SD = 263.80$ ), 1493.00 ( $SD = 202.23$ ), 1633.33 ( $SD = 133.45$ ) and 1705.33 ( $SD = 87.33$ ) respectively. In terms of vocabulary size, the mean scores represent 1309.33, 1493.33, 1633.33 and 1705.33 word families. It could be seen that the vocabulary size increased from 1309.33 to 1493.33 to 1633.33 to 1705.33 word families. In other words, within four years the increase was 396 word families.

**Tabel 1. The Descriptive Vocabulary Size of Students**

**Descriptive Statistics**

|                    | N  | Minimum | Maximum | Mean      | Std. Deviation |
|--------------------|----|---------|---------|-----------|----------------|
| Semester Two       | 15 | 920.00  | 1700.00 | 1309.3333 | 263.80368      |
| Semester Four      | 15 | 1220.00 | 1780.00 | 1493.3333 | 202.22571      |
| Semester Six       | 15 | 1340.00 | 1800.00 | 1633.3333 | 133.45233      |
| Semester Eight     | 15 | 1520.00 | 1800.00 | 1705.3333 | 87.33079       |
| Valid N (listwise) | 15 |         |         |           |                |



**Figure 1. The Descriptive Vocabulary Size of Students**

**Tabel 2. The Distribution of Students Got Score Less and More than 83% (standard)**

|                | Frequency Less Than 83% | %     | Frequency Higher Than 83% | %     |
|----------------|-------------------------|-------|---------------------------|-------|
| Semester Two   | 12                      | 80    | 3                         | 20    |
| Semester Four  | 11                      | 73.33 | 4                         | 26.67 |
| Semester Six   | 6                       | 40    | 9                         | 60    |
| Semester Eight | 4                       | 26.67 | 11                        | 73.33 |

Based on the data Tabel 2, it shows that the frequency of students Semester Two who got score less than 83% as the standard is 12 (80%) students, 11 (73.33%) students Semester Four, 6 (40%) students Semester Six, and 4 (26.67%) students Semester Eight. While the frequency and percent of students got score higher than 83% is 3(20%) students Semester Two, 4 (26.67%) students

Semester Four, 9 (60%) students Semester Six, and 11 (73.33%) students Semester Eight.

Data Tabel 2 above implies that the frequency and percentage of the students who got score less than 83% has decreased from Semester Two to Semester Eight, on the other side the frequency and percentage of the students who got score less than 83% has increased from Semester Two to Semester Eight.

## 2. Output for T-Test for Difference in Means with Independent Sampel T-Test

**Tabel 3. The Output of Group Statistics Students Semester Two and Semester Four**

**Group Statistics**

|          | Students | N  | Mean      | Std. Deviation | Std. Error Mean |
|----------|----------|----|-----------|----------------|-----------------|
| VAR00002 | Sem.2    | 15 | 1309.3333 | 263.80368      | 68.11382        |
|          | Sem.4    | 15 | 1493.3333 | 202.22571      | 52.21445        |

Data Tabel 3, above shows the mean for Semester Two is 1309.33 with SD 263.80 and mean Semester Four is 1493.33 with SD 202.23. It means that the mean of students Semester Two less than the mean of Semester Four ( $1309.33 < 1493.33$ ) but standard deviation Semester Two greater than standard deviation Semester Four ( $263.80 > 202.23$ )

To determines if the score Semester Two have the same or different with Semester Four, let see the value in the Sig. column is .318, the value is greater than .05 (.318 > .05) it means the variability for two groups is about the same. The scores in Semester Two do not vary too much more than the scores in Semester Four. It means that the variability in the two groups is not significantly different.

**Tabel 4. Compare Mean Independent Sample Test for Semester Two and Semester Four**

**Independent Samples Test**

|         | Levene's Test for Equality of Variances | t-test for Equality of Means |      |        |        |                 |                 |                       |   |         |
|---------|---|------------------------------|------|--------|--------|-----------------|-----------------|-----------------------|---|---------|
|         |   | F                            | Sig. | t      | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |         |
|         |   |                              |      |        |        |                 |                 |                       | Lower                                     | Upper   |
| VAR0002 | Equal variances assumed                 | 1.032                        | .318 | -2.144 | 28     | .041            | -184.0000       | 85.82448              | -359.80348                                | 8.19652 |
|         | Equal variances not assumed             |                              |      | -2.144 | 26.230 | .041            | -184.0000       | 85.82448              | -360.33933                                | 7.66067 |

Table 4 above shows the Sig (2-Tailed) value is .041. If the Sig (2-Tailed) value is less than or equal to .05 It can conclude that there is a statistically significant difference between two

groups. The result is  $.041 < .05$  we can conclude that there is a statistically significant difference between the mean score for the Semester Two and Semester Four.

**Table 5. The Output of Group Statistics Students Semester Four and Semester Six****Group Statistics**

|          | Students | N  | Mean      | Std. Deviation | Std. Error Mean |
|----------|----------|----|-----------|----------------|-----------------|
| VAR00002 | Sem.4    | 15 | 1493.3333 | 202.22571      | 52.21445        |
|          | Sem.6    | 15 | 1633.3333 | 133.45233      | 34.45724        |

Data Tabel 3, above shows the mean for Semester Four is 1493.33 with SD 202.23 and mean Semester Six is 1633.33 with SD 133.45. It means that the mean of students Semester Four less than the mean of Semester Six ( $1493.33 < 1633.33$ ) but standard deviation Semester Four greater than standard deviation Semester Six ( $202.23 > 133.45$ )

To determines if the score Semester Four have the same or different with Semester Six, let see the value in the Sig. column is .007, the value is less than .05 (.007 < .05) it means the variability for two groups is not the same. That the scores in Semester Four vary much more than the scores in Semester Six. It means that the variability in the two groups is significantly different.

**Tabel 6. Compare Mean Independent Sample Test for Semester Four and Semester Six**  
**Independent Samples Test**

|                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |    |                 |                 |                       |   |          |
|-----------------------------|---|------|------------------------------|----|-----------------|-----------------|-----------------------|---|----------|
|                             | F                                       | Sig. | t                            | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |          |
|                             |   |      |                              |    |                 |                 |                       | Lower                                     | Upper    |
| VAR0002                     | 8.388                                   | .007 | -2.238                       | 28 | .033            | -140.00000      | 62.55918              | -268.1467                                 | 11.85333 |
|                             |   |      |                              |    |                 |                 |                       |   |          |
| Equal variances assumed     | 24.2                                    | .035 | -2.238                       | 50 | .035            | -140.00000      | 62.55918              | -269.04544                                | 10.95456 |
|                             |   |      |                              |    |                 |                 |                       |   |          |
| Equal variances not assumed | -2.238                                  | .035 | -2.238                       | 50 | .035            | -140.00000      | 62.55918              | -269.04544                                | 10.95456 |
|                             |   |      |                              |    |                 |                 |                       |   |          |

Table 6 above shows the Sig (2-Tailed) value is .033. If the Sig (2-Tailed) value is less than or equal to .05 It can conclude that there is a statistically significant difference between two

groups. The result is  $.033 < 0.05$  we can conclude that there is a statistically significant difference between the mean score for the Semester Four and Semester Six.

**Table 7. The Output of Group Statistics Students Semester Six and Semester Four****Group Statistics**

|          | Students | N  | Mean      | Std. Deviation | Std. Error Mean |
|----------|----------|----|-----------|----------------|-----------------|
| VAR00002 | Sem.6    | 15 | 1633.3333 | 133.45233      | 34.45724        |
|          | Sem.8    | 15 | 1705.3333 | 87.33079       | 22.54871        |

Data Tabel 7, above shows the mean for Semester Six is 1633.33 with SD 133.45 and mean Semester Eight is 1705.33 with SD 87.33. It means that the mean of students Semester Six less than the mean of Semester Eight ( $1633.33 < 1705.33$ ) but standard deviation Semester Six greater than standard deviation Semester Eight ( $133.45 > 87.33$ )

To determines if the score Semester Six have the same or different with Semester Eight, let see the value in the Sig. column is .164, the value is greater than .05 (.164 > .05) it means the variability for two groups is about the same. The scores in Semester Six do not vary too much more than the scores in Semester Eight. It means that the variability in the two groups is not significantly different.

**Tabel 8. Compare Mean Independent Sample Test for Semester Six and Semester Eight Independent Samples Test**

|                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                       |   |          |
|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|----------|
|                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |          |
|                             |   |      |                              |        |                 |                 |                       | Lower                                     | Upper    |
| Equal variances assumed     | 2.043                                   | .164 | -1.748                       | 28     | .091            | -72.00000       | 41.17944              | -156.35225                                | 12.35250 |
| Equal variances not assumed |   |      | -1.748                       | 24.132 | .093            | -72.00000       | 41.17944              | -156.96550                                | 12.96550 |

Table 8 above shows the Sig (2-Tailed) value is .091. If the Sig (2-Tailed) value is greater than .05 (.091 > .05) It can conclude that there is no statistically significant difference between two groups. The result is .091 > .05 we can conclude that there is no statistically significant difference between the mean score for the Semester Six and Semester Eight.

## DISCUSSION

The research question of this research concerned the developing of English vocabulary size at English Education Department at UKI Toraja. The Vocabulary Size Test was used to measure the student's vocabulary size after studying the English language for one to four years at the university level. The test score revealed that the students' vocabulary size was less than 2,000 word-families. This means that the vocabulary size of the students is still far from the standard required as Hu & Nation (2000) argued that readers should be familiar with 98% of the words in the text at any level.

The result shows that the students' vocabulary size developed 396 words family , but it is still far from the standard for university students which required to know more word family. When the result compare with Nation's recommendation 83% word family of Vocabulary Size Test (83% out of 2000 = 1660 ) (Nation.1990:140), it is obvious that the students Semester Two and Semester Four are still unfulfilled the standard, but students Semester Six and Semester Eight has fulfilled, since 60% up has obtained 1660 word family.

The result shows development no significant in vocabulary size of students Semester Two to students Semester Eight, where the minimum score of students Semester Two is 920 word families develops to 1800 word families of

students Semester Eight. Thus, the word family develops only 96% for four years. The data also shows development of mean score from Semester Two to Semester Eight (1309.33 to 1705.33), where it shows development 30.25% for four years.

Based on result of data Tabel 3 to Tabel 8 they show that statistically the development of the students' score is develop in irregular. Since the variability score students Semester Two- Semester Four( Tabel 3) as well as score students Semester Six – Semester Eight(Tabel 7) are not significantly different. While the variability score students Semester Four- Semester Six( Tabel 5) is significantly different.

The result also shows that Independent Samples Test (Tabel 4,6, and 8) are develop irregular. Tabel 4 shows that there is a statistically significant difference between the mean score for the Semester Two and Semester Four. Tabel 6 shows that there is a statistically significant difference between the mean score for the Semester Four and Semester Six. Tabel 8 shows that there is no statistically significant difference between the mean score for the Semester Six and Semester Eight.

Based on the result above, it concluded that development of students' vocabulary size at English Department UKI Toraja is irregular.

Considering that all the students did not manage to achieve mastery of the recommended 2,000 word frequency band, it is urgent to pay attention on Schmitt argues that it is essential that the first 2,000 word families be explicitly taught in the early stages of language learning as it forms the foundation for their vocabulary acquisition (Schmitt,2000). On this account, teachers and curriculum developers may benefit from frequency word lists and concordances when

creating materials for classroom instruction. Learners would then be able to benefit and acquire vocabulary useful for their academic study in a structured and principled manner. Therefore, teachers should do everything they can to enlarge the vocabulary size of their students. Since they encounter more academic and specialized texts, a large vocabulary size is essential for their academic success. Good vocabulary size is critical for understanding and interpreting written texts. Thus, developing their vocabulary size should be a priority.

The importance of vocabulary size is a preliminary step in identifying the amount of vocabulary needed to perform basic tasks at the university level, such as reading text books, reading a novel, reading newspapers, watching movies, and listening to friendly conversations. Some studies have suggested that the vocabulary size needed for EFL learners to carry on such receptive tasks is a vocabulary size of 8,000 word-families (Beglar & Nation). It means that the students who have not achieved a minimum standard of vocabulary size, indeed difficult to understand the content or meaning in the text or conversation. On the other hand, Cahyono and Widiati (2008) argue that good vocabulary mastery supports mastery of each of the language skills, both receptive (listening and reading) and productive (speaking and writing).

There are several factors that might have affected the students' responses in the Vocabulary Size Test. Those factors might be come from the university or internal factor such as ; curriculum, teachers, learning facility, etc.) and the external factor. The external factor is that some words in the test are culture-specific. Culture-specific words are words that occur in the target language but are totally unknown in the source language. For example, the word *poppadom* means *thin, slightly hard pieces of fried bread*, it refers to very thin flat circular South Asian bread that breaks easily into pieces. Even though it is one of the 2,000 most frequent words, more than 80% of the students may have chosen the wrong answer because it is a culture-specific word. In the rural, people are not pay attention of the kinds of bread. Another example is *vitreous* means *made of or like glass*. This kind product rarely find or use in daily activity. Eighty-six percent of the students did not know the correct definition of the word *vitreous*.

The definition of some words cannot be found by large number of students correctly, those words are : *fen, perturb, palette, devious, hallmark, gimmick, heyday, tracksuit, spleen, jovial, lintel*,

*pallor, beagle, cordillera, scrunch, torpor, mozzarella, lemur, vitreous, cerise, feint, serviette, scrumptious, poppadom, nymphomaniac, maladroit*. The definitions of those words were answered wrongly by students. The numbers of students who answer wrongly those words are more than 50%.

## CONCLUSION

Developing vocabulary size of English Education Department at UKI Toraja is very weak, since their vocabulary size develops only 396 word family from Semester Two to Semester Eight. The limited vocabulary size was impact to acquire new vocabulary. The development of students' vocabulary size from semester to semester is not always significant different, where there is a statistically significant difference between the mean score for the Semester Two to Semester Four and Semester Four to Semester Six, while Semester Six to Semester Eight there is no statistically significant difference

Moreover, curriculum of the English Department did not provide subjects to make possible students enrich their vocabulary size, since there is no subject on vocabulary building. Consequence of evidence mentioned is development of students' vocabulary is not significant.

This mini project can be of great help to university in developing material for vocabulary size for students. However, this study has only focused on the development vocabulary size relates with word family achieved by students of English Department at UKI Toraja. This mini project will be benefit when it is designed more specific, such as vocabulary knowledge (receptive and productive). Finally, it is necessary to carry out longitudinal studies with the same group of learners in order to investigate vocabulary size development throughout the different stages of university students.

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