

Productive Vocabulary Knowledge of ESL Learners

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Abstract: The paper seeks to investigate the level of productive knowledge of ESL learners, the writing quality and the relationship between the vocabulary knowledge and the writing quality. 150 final year students of English language in a university in Nigeria were randomly selected as respondents. The respondents were asked to write an essay of 300 words within one hour. The essays were typed into Vocab Profiler of Cobb (2002) and analyzed the Lexical Frequency Profile of the respondents. The essays were also assessed by independent examiners using a standard rubric. The findings reveal that the level of productive vocabulary knowledge of the respondents is limited. The writing quality of the majority of the respondent is fair and there is a significant correlation between vocabulary and the writing quality of the subjects. The researchers posit that productive vocabulary is the predictor of writing quality and recommend various techniques through which teaching and learning of vocabulary can be improved.

Key words:

Vocabulary, Writing, ESL Learners, Vocab Profile.

1. Introduction

Vocabulary knowledge entails the ability to understand vocabulary in both receptive and productive dimensions. It is a backbone of language proficiency, hence it is considered as crucial to the attainment of academic pursuit (Nation, 2001). Seventy thousand words are considered as benchmark of vocabulary knowledge of an educated native speaker while second language users are expected to understand a quarter of the vocabulary size of the first language users (Nation, 2001; Laufer & Vono, 2001). Studies also indicate that a good control of 20,000 word families is believed to be the level of lexical competence of a native speaker university graduate. Therefore ESL/EFL learners are required to acquire 1,000 word

families annually in order to attain certain level of native-speaker like (Kaur et al., 2008). In line with this, vocabulary plays a pivotal role in language class (Nation, 2001).

One of the contending issues in the area of second language vocabulary knowledge is the clear definition of the term 'word'. Researchers have provided different but interrelated frameworks within which the concept would be understood. Experts believe that word knowledge encompasses several dimensions. These include semantic degree, connotations, derivations and deep form. Nation (1990) identified eight categories involving receptive and productive knowledge, e.g. grammatical patterns, form, meaning, function, association. Additionally, Chapelle (1998) revealed that vocabulary

should involve four components. They are knowledge of word features, vocabulary size, processes of word access and word organization. Another three dimensions were also proposed by Henriksen (1999), these involve receptive and productive, depth knowledge and vocabulary breath. Based on the above ideas, another framework was also developed which consist of knowledge of vocabulary depth, vocabulary size, receptive and productive knowledge and word organization (Qian, 2002). Each is important based on the target need of language use. Despite the divergent views expressed by the researchers about vocabulary, these ideas denote some degree of common core. The study can deduce that vocabulary knowledge encompasses receptive and productive knowledge. However, limited vocabulary hinders effective communication and constitutes a great challenge for ESL learners to express themselves in writing, particularly in carrying out academic tasks that are usually in written. This has culminated in inability to paraphrase ideas gained from various sources, but rather plagiarizing (Neo, 2009). Therefore, the present study is to assess the productive vocabulary knowledge of university students in Nigeria. It also investigates the writing quality of the students and the relationship between vocabulary and writing quality.

2. Literature Review

Vocabulary is regarded as an essential instrument of language by which all other elements depend on it to function. This pivotal role of vocabulary informed the decision of scholars to label it as of paramount importance in second language proficiency as well as in academic pursuit because the acquisition of the four language skills hinges on it (Leki, Cumming & Silva, 2008; Laufer & Goldstein, 2004). However, vocabulary

knowledge can be assessed by means of learner's ability to gain, understand, remember and retrieve the items (Schmitt, Schmitt & Clapham, 2001). Moreover, adequate vocabulary knowledge facilitates learning of target language and at the same time determines the extent to which the learner is capable of using the language (Nation, 2001). The correlation between lexical knowledge and positive learning outcome denote the impact of word knowledge in learning (Laufer & Nation, 1995). Realizing the crucial role of word knowledge in producing positive learning outcome, a number of studies were reported to have been conducted on the impact of vocabulary in second language learning, however, the focus of this study is to examine the productive vocabulary knowledge in L2 writing.

Vocabulary breath plays a pivotal role in writing proficiency. Researchers have conducted a number of studies which examined the relationship between lexical richness and writing ability (Engber, 1995; Nation, 2001). Engber, further revealed that in term-essay writing the accurate retrieval of word is essential. Four lexical richness measures were used by the study in order to evaluate vocabulary proficiency and the result indicated that there was a correlation between the measures and six placement text produced by ESL students from different ethno-linguistic background. The study posited that different but appropriate choice of diction contributes to the quality of a text. Laufer and Nation (1995) developed Lexical Frequency Profile model in order to assess the use of vocabulary in learners' composition. The study examined the correlation between the profile and learners' scores on the profile of vocabulary level test and the result indicated that learners with large stock of vocabulary tended to use high frequency words to a lesser

extent compared to learners who have a small stock. Astika (1993) examined 210 writing samples and discovered that vocabulary could be a significant factor for writing quality. However, the correlation between the scores of vocabulary level test and that of the TOEFL written composition was also examined and the findings revealed that there was a correlation between the two scores including university word level (Belger & Hunt, 1999). Additionally, Linnarud (1986) assessed the samples of written text composed by native and non-native speakers of Swedish. The result indicated a significant correlation between each text and number of lexical items, the amount of lexical item in each sentence and concluded that vocabulary breadth was the influential predictor of effective writing. Usman (2015) also pointed out that vocabulary is a key to writing quality and according to him the higher the vocabulary size of learner, the better the quality of the writing composition.

3. Theoretical Framework and Research Methodology

The research has a strong theoretical base in online vocab profile which was designed based on Lexical Frequency Profile of Laufer and Nation (1995) to assess the level of productive vocabulary knowledge (Cobb, 2002) and the component of writing quality used by examiners in assessing writing quality. The researchers randomly selected 150 level 4 students of English language in a university in Nigeria. The number represents 40% of the population of 375 students (Creswell, 2012). In this regard, writing task was used to obtain the data in which the respondents were given one hour within which to write an essay of 300 – 400 words. The written essays produced by the respondents were typed into the web-based

programme available at <http://www.lextutor.ca> with some amendments. Misspellings that do not alter the word are corrected in order to be recognized by the computer, proper nouns are erased because they are not labelled amongst the lexicons of a given language and words with wrong meaning and association were also erased because they cannot be labelled as productive use of vocabulary by the learners (Laufer, 1998). The vocab profiler processed and analyzed the essays based on the following frequencies or levels: first 1,000 words of high frequency of General Service List (K1) (West, 1953 cited in Bauman & Culligan, 1995), second 1,000 words list of low frequency, the Academic word List (AWL) (Coxhead, 2000) and Off list –words that do not belong to any of the three levels such as acronyms and specialized register. These categories of four levels denote that when a large proportion of a written composition is dominated by low frequency words, it indicates the high level of productive use of vocabulary, particularly the AWL as a predictor of productive vocabulary knowledge (Morris & Cobb, 2004).

Moreover, the essays were also assessed by two independent examiners who are Senior Lecturers of English Language in a university on the basis of four grading scales: Excellent, Good, Fair and Weak. Descriptive Statistics via SPSS was employed to determine the performance of the respondents in each of the components of writing on one hand, and the overall quality of writing on the other. Additionally, Correlational Analysis was also performed to determine the correlation between the level of vocabulary knowledge and each of the components of writing quality –Organization, Content and Mechanics.

4. Findings

The analysis provides the levels of productive vocabulary knowledge of the respondents as analyzed by the vocab profiler. The section also presents the levels of writing quality of the respondents. The relationships between vocabulary and writing quality of the respondents are discussed.

Table 1 indicates that the level of productive vocabulary knowledge of the respondents is weak because out of the one hundred and fifty (150) respondents who responded through writing task and analyzed through online soft-wire instrument (vocab profiler), none of the respondents have been able to produce an essay with higher range of Academic Word List against the High Frequency Word. All of them fall within the category of weak status. It should be noted that AWL is the predictor of productive vocabulary knowledge. When the AWL is low, the productive vocabulary knowledge is also low.

Table 2 illustrates the descriptive statistics of components of writing quality on the basis of three components:

Organization, Content and Mechanics. The performance of respondents in organization reveals that 9 respondents attain excellent level while 10 respondents prove to be good. 117 respondents are fair and 14 respondents fall weak. In terms of content, only 2 of the respondents are found to be excellent and 33 respondents attain the scale of good. 91 respondents are marked fair and 24 respondents label weak. In mechanics, 1 proves to be excellent while 10 respondents are good. 96 respondents constitute fair scale and 43 respondents are identified as weak.

As a whole, the writing quality of the respondents is generally fair based on the large proportion of percentages. Table 3 above presents the percentages of categories of the scale used. It is quite clear that majority of the respondents are fair writers of which 69% fall within the category. 10% are good while 15% are weak. Only 6% get excellent. With this analysis, one can say that the level of writing quality of the respondents is generally fair.

Table 1 Lexical Frequency Profile

	High Frequency Words	Low Frequency Words	Academic Word List	Off List
Highest Score	96.20	11.31	9.14	17.28
Lowest Score	72.61	2.67	0.7	2.16

Table 2 Components of Writing Quality

	Excellent	Good	Fair	Weak
Organization	9	10	117	14
Content	2	33	91	24
Mechanics	1	10	96	43

Table 3 Frequency of Overall Writing Quality

	Frequency	Percent
weak	23	15.0
fair	103	69.0
good	15	10.0
excellent	9	6.0
Total	150	100.0

Table 4 Correlation between Vocab Profile and Components of Writing Quality

	Vocab profile	Organization	Content	Mechanics
Vocab Profile	–	.278	.175	.387*
Organization	.278	–	.892**	.828**
Content	.175	.892**	–	.753**
Mechanics	.387*	.828**	.753**	–

*. Correlation is significant at the 0.05 level (1-tailed).

**. Correlation is significant at the 0.01 level (1-tailed).

The table indicates that vocab profile correlates with mechanics at 0.05 (1-tailed) $r = .387$, $n = 20$, $p > .046$, whereas there are no correlations between vocabulary and organization as well as with the content. The result also provided the basis to advance an argument that knowledge of organization and content is not enough for ESL learners to produce good essay, there is also the need for adequate vocabulary knowledge.

5. Discussions

The levels of productive vocabulary knowledge of the respondents as analyzed by the vocab profiler appear in four different categories of word frequency. The High Frequency Words (K1) which are used frequently in daily activities, the Low Frequency Word (K2) which are not used more often, the Academic Word List (AWL) – most frequent words appear in academic text

and the Off List – words that do not belong to any of the three categories. These groups of words include acronyms and technical words. The findings reveal that the high frequency words are the dominant set of words used by the respondents in their essays with the percentage of 96% to 72%. It is followed by Off List 17% to 12%. The Low Frequency Word is 11% to 2% and the Academic Word List is 9% to 0.7%. Since AWL list is the predictor of productive vocabulary knowledge, particularly when compared with the K1 and is found to be the least in percentage amongst the four categories, therefore, the level of productive vocabulary knowledge of the respondents is limited because of the dominance of K1 in the sample of essays written by the 150 respondents who responded in this study. The finding correlates with the Mokhtar et al. (2010) who investigated the vocabulary knowledge of ESL students in Malaysia and found to be limited. This consistency is attributed to the nature of

the respondents whom were also higher level students in public university. The result also concurs with Omar Ngo and Jamil (2013) who generated responses from ESL learners and identified vocabulary as a major area of difficulty faced by the students in essay writing. This correlation is associated with similar instrument which is essay writing. Additionally, Kaur et al (2008) also proved that limited vocabulary knowledge is a major problem faced by ESL learners in writing composition.

However, the writing quality of the respondents was measured on the basis of Organization, Content and Mechanics. The result of the assessment indicates that 69% of the respondents are fair writers. 10% prove to be good while 15% are weak. Only 6% of the respondents are excellent. In terms of the three components, mechanics –which entails grammar, spelling, punctuation and sentence construction –is the aspect of most difficulties faced by the respondents in which 64% label fair. 29% are weak and only 7% are identified as good. In terms of content which refers to the readability of the text, 61% are fair, 22% are good while 16% are marked as weak. Only 1% appears excellent. Additionally, organization encompasses logical presentation of ideas. In this regard, 78% of the respondents are considered fair, 7% are good, 9% are weak while 6% are considered excellent. Accordingly, the overall writing quality of the respondents is fair. Concurrently, the findings are in agreement with the Ghabool et al. (2012) who investigated the writing difficulties faced by ESL students and revealed that language use which entails sentence construction and punctuation were identified as the area of most difficulties faced by the students. Thus, the two components: language use and punctuation used by Ghabool et al are akin to the component of mechanics in the present study. The

correlation of the two findings is not surprising because the two studies used similar variables in assessing the writing quality of students and the use of similar instrument in eliciting the data which is writing task performed by the respondents. Furthermore, similar findings were also discovered by Darus and Subramanian (2009) who undertook a study on the most frequent errors committed by ESL students in writing English essay. The findings identified syntactic construction, lexical choice and word order amongst others as the most frequent errors committed by the ESL learners while writing English text. These aspects correspond with the component of mechanics used in the present study. The two studies differ considerably in the use of instrument used in assessing the essays, however, similar instrument was also used in eliciting the data which is writing task –an authentic materials written by students themselves. This might have been the reason why the two studies arrived at similar conclusions.

The Analysis also show a positive and significant correlation between vocabulary knowledge and mechanics, however, there is no evidence of correlation between vocabulary knowledge and other two variables –organization and content. This is because the component of mechanics used in the research involves grammar, punctuation, spelling and sentence structure, while content and organization are referred to logical presentation and readability of the text respectively. Therefore, vocabulary accounts for grammar, punctuation, spelling and sentence structure and is considered a strong indicator of writing quality. However, inadequate vocabulary knowledge would hinder effective essay writing. Even with the knowledge of content and organizations, if the vocabulary is limited the quality of writing would also be inadequate. Accordingly, the

vocabulary knowledge has strong impact on the quality of writing composition. The findings agree with Douglas (2010) who investigated the vocabulary knowledge and academic performance of native and non-native speakers of English and the findings concluded that vocabulary knowledge has accounted for the writing quality of undergraduate students. The similarities of the two findings are attributed to the use of instrument Vocab Profiler in assessing the vocabulary knowledge of the students. This view is strongly supported by Min, (2013) and Usman (2015). However, the findings contradict the outcome of Kim & Ryoo (2012). This is because the researchers themselves had admitted as part of the weaknesses of their research that some respondents were not able to produce 200 words in their essays and according to Laufer and Nation (1995) for the Free Active Vocabulary Test to be valid and reliable, the essay to be analyzed should be beyond 200 words. This might have been the reason why the findings are not correlated.

6. Conclusion and Recommendations

One of the fundamental issues emphasize in this study is the importance of vocabulary knowledge as the basis of improving writing composition, particularly at the tertiary level where learners are trained to be potential manpower. Therefore, teaching vocabulary should be given adequate attention in teaching writing skill in order to enable the learners realize its importance and enhance their productive vocabulary knowledge. Additionally, the language instructors should, at the initial stage, pay attention to vocabulary so as to enable the learners realize the nexus between vocabulary and writing skill. In this regard, it is important to note that instructors should explicitly teach

vocabulary both at the initial and later stage (Laufer, 1994; 1999). It should, however, be noted that teaching vocabulary in a precise manner will no doubt evolve vocabulary knowledge into active use in essay writing, and learners should also be guided on various techniques that would assist them in using new acquired vocabulary productively, particularly in writing task. Moreover, learners should be made aware of the influence of lexical knowledge on the quality of writing. This can be achieved through the teaching of vocabulary within the context of writing (Lee, 2003).

Emphatically, teaching vocabulary enhances the progress of learning. Although most of the language instructors focus more on grammatical paradigm in composition neglecting vocabulary which requires the needed attention since most of the errors that hinders comprehension is more or less of lexical than grammatical (Ellis, 2012). It is evident that proficient native speakers tend to use infrequent words in their text as opposed to the non-native speakers whose text is usually dominated by the high frequency words. To ameliorate the situation, receptive vocabulary knowledge should be expanded so as to metamorphose in to productive knowledge. This can be achieved through the use of Learner's Oxford Dictionary (word-finder) and Longman Language Activation, (1993) (Trappes-Lomax, 1997). These would guide the students on the use of appropriate vocabulary based on contextuality and situationality.

To explicate further, role play and other task-based activities would assist the students in improving their vocabulary knowledge because it allows the learners to participate fully and actively in learning process (Larsen-Freeman & Anderson, 2011). Composition is also an avenue of improving

writing quality in which students would be given a particular topic to prepare and present in the class. Such topic should reflect students' immediate environment. The teacher can assist the students with appropriate vocabularies where necessary. Usually, this type of technique requires the use of visual aids like pictures of related events, where students will be asked to write about the various events as depicted by the picture. Practice on the rudiments of writing skill practically should be emphasized rather than delivering lectures. The use of punctuations should equally be addressed because of the semantic implications that are attached to the usage and the role of capitalization should also be taken into cognizance. Similarly, learners should be motivated and encouraged while practicing the writing task through the support of the instructor. Also, some exercises that involved grammar, subject and predicate agreement, dictation and peer editing should be encouraged.

In conclusion, Effective written communication is instrumental in achieving academic success. It appears to be more challenging amongst the language skills, particularly in second language environment where learners rely heavily on classroom environment. In order to address the situation, vocabulary knowledge and writing quality should be measured regularly. Of course, this is what the present research has addressed. The study concludes that vocabulary knowledge plays an important role in determining the writing quality of writing even though there are other components. But the basic is vocabulary if the desired objective of writing an effective essay is to be achieved. Future study may be conducted from the perspective of specialized vocabulary (register).

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