

gender differences of teachers as not both of the genders are equally interested in technology or they differ in the field of interest in using it.

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ENGLISH LEARNERS' PROFILES OF PRODUCTIVE VOCABULARY: A STUDY WITH TURKISH ELT MAJORS

The present study aimed to investigate the English learners' profiles of productive vocabulary, which is accepted an important predictor of second language proficiency. Through the lexical analysis of 40 participants' argumentative essays, the proportions of vocabulary use and lexical densities were examined. The findings indicated that the participants had limited productive vocabulary knowledge since they mostly used high frequent and function words and the proportions of low frequent and academic words were low and they did not vary vocabulary use much in the essays.

Key words: vocabulary, learning, knowledge, language education.

Vocabulary knowledge is of great importance for language learning and teaching. It is widely agreed that vocabulary is a fundamental component to understand and use language (Nation, 2001). To define such an important component, different approaches have been adapted so far (Richards, 1976; Nation, 1990; 2000; Henriksen, 1999). The concepts of receptive and productive vocabulary are commonly referred traits of vocabulary knowledge definitions that could describe the continuum a learner passes during vocabulary learning from not knowing to rich competence (Henriksen, 1999; Schmitt, 2000; 2010; Nation, 2001). In general terms, receptive vocabulary knowledge can be defined as being able to recognize and understand a word while listening and/or reading. On the other hand, to be able to produce a word while speaking and/or writing is defined as productive vocabulary knowledge (Schmitt, 2000; Zareva, 2005, Henriksen, 1999). The receptive and productive vocabulary knowledge and their distinction have been widely investigated in literature to explain different aspects of vocabulary knowledge (Zareva, 2005)

and to reveal the effects of vocabulary knowledge on other language skills (Lee & Munice, 2006).

However, the majority of vocabulary research so far has been conducted on receptive vocabulary knowledge because receptive vocabulary knowledge is considered as prior to producing vocabulary and it is much easier to measure. (Nation, 2001; Lee & Muncie, 2006). Yet, productive vocabulary carries great importance as learners could prove their vocabulary knowledge by using it productively (Webb, 2005). Therefore, it is considered as more elusive, more difficult to learn and possibly more fragile (Nation & Waring, 1997). Owing to different cognitive processes and extra output patterns required for the productive vocabulary, this dimension distinguishes from receptive vocabulary and deserves more attention (Nation, 2000; Waring, 1997).

As it has been widely realized that measuring receptive knowledge, particularly vocabulary size alone, can no longer provide a satisfactory description of second language (L2) learners' vocabulary knowledge due to its multidimensional structure

(Zareva, 2005), it is essential to investigate the productive vocabulary knowledge separately (Nation, 2001; Webb, 2005; Schmitt et al, 2010). In this way, learners' competence to use different word types (i.e. high frequent, low frequent, academic words; function and content words) as well as to vary the words in writing (i.e. lexical density) could be revealed so that their language proficiency can be evaluated more effectively.

Addressing to this need, the present study aimed to investigate Turkish EFL (i.e. English as a Foreign Language) learners' profiles of productive vocabulary focusing on their competence to use and vary the word types in writing. In line with this aim, the research question of "What are Turkish EFL learners' profiles of productive vocabulary?" was asked.

Touching upon the issue of vocabulary use, which is mostly problematic for many learners (Lee & Munice, 2006), it is hoped to gain more insights about what kinds of vocabulary EFL learners use mostly or least and whether they could vary the use of vocabulary in writing. The findings of this study could shed light on the learners' possible vocabulary problems and their vocabulary tendencies in writing.

Second Language Productive Vocabulary

Productive vocabulary covers expressing a word meaning through speech or writing, accessing it from lexicon and finally producing the proper spoken or written form (Henriksen, 1999; Laufer, 1998; Nation, 2001). Laufer (1998) acknowledged that mere memorization of a word form in a given context without understanding its meaning cannot be called productive vocabulary. The learners' active involvement into the production activity and use of word in a context is essential for productive vocabulary learning.

Productive vocabulary has been mostly associated with the size of vocabulary used in learners' written and spoken discourse (Laufer & Nation, 1995; Laufer & Paribakht, 1998). On the bases of frequency bands, in which the words families are categorized ranging from high frequent to low frequent as well as academic vocabulary, the total number of vocabulary uses have been calculated through some programs calculating the distribution of the word families according to frequencies such RANGE (Nation, 1990) and Vocabprofile/Lexical Frequency Profile (LFP) (Laufer, 1995) and Lex30 (Meara & Fritzpatrick, 2000). LFP is the most commonly used lexical analysis program that measures the proportion of high frequent and academic

words in learners' writing. Lee and Muncie (2006) investigated the secondary school students' productive vocabulary through LFP program in context of post reading composition task. The studies applied this lexical analysis program agreed that LFP has different advantages over other instruments measuring productive vocabulary, it gives a detailed picture of lexical richness, using the three frequency levels rather than the more simpler 'frequent' and 'sophisticated' levels. (Laufer & Nation, 1995) Moreover, it can discriminate the learners who use 'frequent' and less frequent words instead of the ones that vary their limited vocabulary. (Muncie, 2002; Morris & Cobb, 2004) Thus, the findings of LFP could reveal the productive side of lexical competence effectively.

The common finding emerged from the LFP analyses in those studies is that that learners could produce high frequent vocabulary more than the low frequent ones (Nation, 2001; Lee & Munice, 2006). The learners avoid using the words that they are not sure about the meanings and use (Laufer & Nation, 1995).

In addition to the proportion of high and low frequent vocabulary use in writing, lexical density has been accepted as another indicator of productive vocabulary knowledge (Schmitt, 2000). It refers to the availability of a wide variety of basic and sophisticated words (Wesche & Paribakht, 1996). Schmitt (2000) explained the simple logic underlying this issue that if most of the words is repeated several times, then fewer different words (i.e. types) need to be known. On the contrary, if few words are repeated, then more types are to be included in the text. Another measure of lexical density is the presence of content versus grammatical words. In this regard, texts with a higher proportion of content words are said to be lexically diverse whereas few content words in the text are labelled as low diverse (Laufer & Nation, 1995).

The significance of vocabulary for language education is accepted in literature indisputably (Nation, 2001; Schmitt et al, 2010). The increasing studies on vocabulary have pointed out that learners have problems and deficiencies while using vocabulary (Webb, 2005). Thus, learners' productive vocabulary knowledge requires special attention in vocabulary research. This study attempted to touch upon this important issue.

Participants and Instruments

The participants of the study consisted of 40 Turkish EFL learners attending to 2nd year at the Department of English Language Teaching at Education Faculty of Anadolu University. These stu-

dents had academic writing course in which they had learned and practiced vocabulary use.

These participants' productive vocabulary knowledge was measured in terms of the lexical analysis of academic writing. Thus, the data of the study was collected through an academic writing task. For this task; one of the dependent writing tasks of TOEFL exam was chosen since these prompts have been asked to a large population, and these tasks are considered as valid and reliable. The writing prompt, which was taken from TOEFL exam conducted in 2004, is "Schools should allow students evaluate teachers. Do you agree or disagree? Use specific reasons and examples to support your opinion."

Then, to determine the participants' profiles of productive vocabulary, all texts were typed into the Vocabprofile, which is available on www.lexutor.ca. Considering that Laufer and Nation's (1995) assumption that 250-300 word length is sufficient to

have an efficient analysis, 250 words of each student's essay were typed into the program. The outputs of each analysis were filed and the proportions of the vocabulary distributions were noted down.

Results

To determine the participants' profiles of productive vocabulary knowledge, the use of high, low and academic words, use of function, content words and lexical density were accepted as the indicators of the profiles. Thus, their argumentative essays were analyzed with Vocabprofile and the ratios of 1k+2k, AWL words, lexical densities of the essays and the percentage of function and content word uses were determined. The two high frequency categories (words in the 1-1000 and 1001-2000 most frequent bands) were taken together to describe the use of high frequent words. An example output of analysis is presented in the following.

Home > VocabProfilers > English (Alt-arrow-left to preserve settings) > Output

EDIT-TO-A-PROFILE SPACE

WEB VP OUTPUT FOR FILE: Emine MELEK ARLI

Words reategorized by user as 1k items (proper nouns etc): UNTITLED NONE (total 0 tokens)

| | Families | Types | Tokens | Percent | |
|---------------------------------------|----------|----------|------------|-----------------|---|
| K1 Words (1-1000): | 93 | 112 | 224 | 89.24% | Words in text (tokens): 250 |
| Function: | ... | ... | (133) | (52.99%) | Different words (types): 135 |
| Content: | ... | ... | (91) | (36.25%) | Type-token ratio: 0.54 |
| > Anglo-Sax =Not Greco-Lat/Fr Cog: | ... | ... | (46) | (18.33%) | Tokens per type: 1.86 |
| K2 Words (1001-2000): | 10 | 11 | 14 | 5.58% | Lex density (content words/total) 0.47 |
| > Anglo-Sax: | ... | ... | (5) | (1.99%) | |
| 1k+2k | | | ... | (94.82%) | <i>Pertaining to onlist only</i> |
| AWL Words (academic): | 7 | 7 | 7 | 2.79% | Tokens: 245 |
| > Anglo-Sax: | ... | ... | (2) | (0.80%) | Types: 130 |
| Off-List Words: | 2 | 5 | 6 | 2.39% | Families: 110 |
| | 110+? | 135 | 251 | 100% | Tokens per family: 2.23 |
| | | | | | Types per family: 1.18 |
| | | | | | Anglo-Sax Index: 75.92% |
| | | | | | (A-Sax tokens + functors / onlist tokens) |
| | | | | | Greco-Lat/Fr-Cognate Index: (Inverse of above) 24.08% |

The obtained descriptive statistics were presented in Table 1 and illustrated in Figure 1.

Table 1
The Productive Vocabulary Profiles for All Participants

| | n | Min. | Max. | Mean | SD |
|-----------------|----|-------|-------|-------|------|
| 1k+2k | 40 | 88.14 | 96.85 | 92.68 | 7.67 |
| AWL | 40 | 1.56 | 9.60 | 5.42 | 1.76 |
| Function Words | 40 | 45,82 | 60,40 | 53,40 | 3,78 |
| Content Words | 40 | 29,60 | 43,03 | 35,56 | 3,34 |
| Lexical Density | 40 | ,40 | ,54 | ,46 | ,038 |

The percentage of the use of 1k, which refers to 1.000 level words, and of 2k, for 2.000 level words was higher than AWL words. 92.67% of the words in all participants' essays belonged to the 2.000 and 3.000 word levels, which were high frequent words.

On the other hand, only 5.42% of the words in the essays were from academic word list. Thus, it could be interpreted that the productive vocabulary of the participants mostly consisted of high frequent words, and their levels of academic word use was not so high.

As other indicators of productive vocabulary, the use of function and content words was explored; it was seen that function words were used more (mean = 53, 40) than content words (mean = 35, 56). Thus, the mean of lexical density of the essays, including content words, was 46.

The general picture emerging from this analysis was that L2 learners in this study had a limited productive vocabulary since they mostly used high frequent words at 1.000 and 2.000 frequency levels

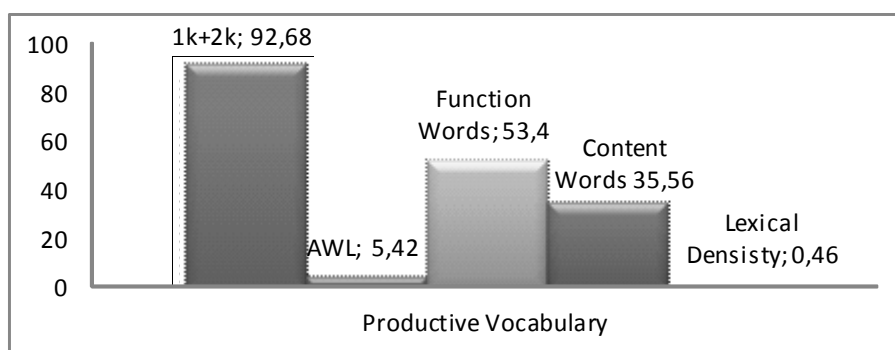


Figure 1. Distribution of Productive Vocabulary Indicators in the Essays

and more function words than content word, thus their lexical density was also limited.

Discussion and Conclusion

As an important predictor for learners' second language proficiency, the learners' vocabulary knowledge, particularly their mastery of vocabulary use was investigated in the study. When the participants' profiles of productive vocabulary were examined in terms of the proportions of vocabulary types and lexical density in their academic writing task, it was found out that there was a high proportion of high frequent vocabulary use (92, 68). In order to make sense about this finding, it would be beneficial to compare them with the lexical frequency profile obtained for learners in other studies. For instance, Munice (2002) found that the learners produced 12% high frequent words (1k+2k) as a result of processing writing tasks. In the same way, Morris and Cobb (2004) detected average 11,6% high frequent vocabulary use for Canadian university students while Tschirner (2004) found out that 22% of the German students mastered the 2000th word level productively. Comparing the figures estimated in those studies with the ones in the present study, it could be stated that the participants in this study mostly relied on high frequent vocabulary while explaining their arguments. This finding is consistent with other studies on vocabulary which put forth that L2 learners tend to comprehend; process and produce higher frequency words (Crossley & Salsbury, 2010; Ellis, 2002; Laufer & Goldstein, 2004).

In addition, Laufer and Nation (1999) stated that a learner may be able to produce a sentence with an infrequent word when required to do so by the teacher but be reluctant to use when left to his own devices, as in composition writing task and choose to use a simpler more frequent word of a similar meaning. Such reluctance is often a result of uncertainty about the word's usage and lack of confidence caused due to limited L2 vocabulary. In this regard, Read (2000) also pinpointed the learners'

used avoidance and paraphrasing strategies not to use low frequent vocabulary. Crossley et al (2010) also explained the reliance of high frequent vocabulary in writing referring the discrepancy between L1 and L2 vocabulary knowledge. Due to limited vocabulary knowledge in L2 in comparison to their native tongue, the learners tend to use more words of general rather than specific meaning.

In addition to high reliance on high frequent words, it was observed that the participants used function words (42, 82) more than content words, which caused low lexical density. Thus, it could be interpreted that the participants in this study did not vary their vocabulary while writing; they relied on the function words instead of content words which are at lower frequency band. This finding can be also explained with the learners' avoidance to use the words that they are not sure (Read, 2000; Laufer & Nation, 1995).

Consequently, it was seen that the participants preferred to explain their arguments mostly with high frequent vocabulary and function words. Their essays were mostly with low lexical density so their profile of productive vocabulary seemed limited. This finding is alarming considering their language proficiency. In this sense, intensive vocabulary instruction and training on vocabulary learning strategies could be offered. However, to discuss these findings on limited productive vocabulary in detail, further studies that could evaluate the productive vocabulary of university students cross-sectionally in conjunction with other vocabulary measures would be valuable.

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