# Exploring the role of vocabulary depth and semantic set in EFL learners' vocabulary use in writing 

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#### Abstract

The role of depth of vocabulary knowledge in EFL writing performance has remained an under-researched issue. The present study was designed to investigate the role of depth of vocabulary knowledge and semantic set in making appropriate word choices in EFL learners' writing performance. Participants were 70 lowerintermediate and upper-intermediate EFL learners. Instrumentation included Oxford Quick Placement Test, Word Association Test (WAT), and two writing tests. The results of MANOVA and independent $t$-tests revealed that: a) depth of vocabulary knowledge played a fundamental role in appropriate use of words in a semantic set in lower-intermediate level but not in upper-intermediate level, b) depth of vocabulary knowledge had a significant role in overall writing performance only in upper-intermediate level, c) using words appropriately in a semantic set played a significant role in writing performance of the lower-intermediate participants, while the opposite was found for the upper-intermediate group. The results may promise implications for vocabulary and writing curriculum development and instruction.


Keywords: depth of vocabulary knowledge, semantic set, vocabulary use, writing, Word Association Test (WAT), EFL learners

## 1. Introduction

Vocabulary is considered as one of the most important components of language learning. Laufer (1998) referred to vocabulary as the necessary factor for comprehensible and easily-conveyed fluent messages in communication. Moreover, according to Read (2004), second language learners are aware of the fact that lack of vocabulary knowledge may hamper effective communication in the target language.

The crucial role of vocabulary in language learning has stimulated researchers to address its various aspects including incidental and intentional vocabulary acquisition (Hulstijn, 2001), spoken vocabulary (Adolphs \& Schmitt, 2003), written vocabulary (Albrechtsen, Haastrup, \& Henriksen, 2008), specific purpose wordlists (Coxhead, 2000), classroom vocabulary (Tang \& Nesi, 2003), and computer-adaptive vocabulary learning (Jones \& Plass, 2002). Classifying words in a semantic set may result in a more specified vocabulary aspect that makes the results of vocabulary research more specific and meaningful.
"Semantic set" refers to the relationship between different words that share a superordinate and numerous common elements in meaning (e.g. encourage, persuade, convince) (Erten \& Tekin, 2008; Warring, 1997). However, words have a "tendency to associate with a certain semantic set or sets, but the tendency often represented only a small percentage of the overall use of the word" (Nelson, 2006, p. 231).

In order for a learner to decide which words in a certain context may build semantic set(s), complicated word knowledge is required. Depth of vocabulary knowledge, as contrasted with breadth of vocabulary knowledge (Haastrup \& Henriksen, 2000; Read, 2000), may shed light on the process and quality of putting words in a lexically-related set. Depth of vocabulary knowledge refers to the quality-based knowledge of words and how well the learners know about different words (Read, 1993, 2000). This aspect of word knowledge mainly focuses on the idea that learners "should develop a rich and specific meaning representation as well as knowledge of
the words' formal features, syntactic functioning, collocational possibilities, register characteristics and so on" (Read, 2004, p. 155). In vocabulary literature, there have been some attempts by scholars to define learners' word knowledge ranging from knowledge of its frequency, functional use, and its syntactic and semantic behavior (Richards, 1976); form, position, function and meaning (Nation, 1990); referential meaning, syntagmatic relationship, and semantic and morphological features (Henriksen, 1999) to semantic network models of word knowledge (Miller \& Fellbaum, 1991) in which different aspects of a word come together to form a coherent whole of the full meaning of that lexical item.

Attention to the different aspects of word knowledge can enhance learning and instruction of productive skills. There are some inherent difficulties in writing which may partly originate from some special characteristics of this productive skill such as using a wider variety of words and low-frequency words (Weigle, 2002). This signifies the role of depth of vocabulary knowledge in producing a coherent text through using "proper words in proper places" chosen from among some semantically-related words. This appropriate use of words is in line with the interactionalist definition of vocabulary which highlights "the learners' ability to deploy their knowledge appropriately in particular context of use" (Read, 2007, p. 115).

## 2. Literature Review

### 2.1 Relationship between vocabulary knowledge and writing

Vocabulary is generally considered as the most important means through which one can convey or negotiate ideas in writing. On the other hand, writing can be a means of learning and practicing vocabulary. As Raimes (1983) maintains, the structure, idioms, and vocabulary that are taught to the language learners will be reinforced through the task of writing. However, the nature of vocabulary and writing is different. Albrechtsen, Haastrup, and Henriken (2008) point out this distinction by referring to lexical study as "declarative" and writing study as "procedural" and lexical inferencing as the interaction between the two.

As for the relationship between lexical knowledge and writing skill, some scholars have attempted to link them in terms of receptive and productive vocabulary (e.g. Engber, 1995). Most of the classifications of vocabulary knowledge are based on receptive measures of vocabulary simply because measuring productive vocabulary in writing is associated with specific difficulties. The vocabulary which learners produce is so bound to the immediate context of the writing task that it is extremely difficult to judge about the productive vocabulary of learners from a small sample of L2 compositions (Meara \& Fitzpatrick, 2000).

Ghadessy (1989) concluded that the difference between the compositions of primary third and primary sixth students in Singapore can be related to the use of content and function words. He further raised the question of to what extent the school syllabus is responsible for this difference. Also, as Brown and Payne (1994, cited in Muncie, 2002, p. 226) state, converting receptive vocabulary into productive vocabulary is the final stage in the process of vocabulary learning. Writing seems to be a useful language skill which can play a leading role in this regard. While writing, learners have enough time available to them in order to decide which words to use for a particular topic or to activate the less frequent but more appropriate words which till then were passive in their mental lexicon (Carson, 1997). This can be done through using bilingual dictionaries which may help learners in using sophisticated words in their writing and enhancing the quality of their texts (East, 2006). However, some other linguistic and metalinguistic factors may affect vocabulary knowledge and its use in writing (Schoonen et al., 2003).

### 2.2 Empirical studies on depth of vocabulary knowledge, semantic set, and writing

Depth of vocabulary knowledge has been found to play a significant role in productive skills, especially in writing. Batty (2007), in a study on depth of vocabulary and written/oral assessment, concluded that performance on Word Association Test (WAT), as a measure of depth of vocabulary knowledge, has a significant predictive relationship with the written section of Kanda English Proficiency

Test (KEPT) but does not have such a relationship with the oral vocabulary scores.

Learners' performance on the rhetorical structure of writing is reported to be influenced by depth of vocabulary knowledge. For example, Schneider and Connor (1990) concluded that depth of vocabulary knowledge affects fluent topic progression.

Investigating the impact of EFL learners' lexical proficiency on summary writing in English, Baba (2009) concluded that writing definitions, as a productive measure of depth of vocabulary knowledge, made a greater contribution to summary writing performance than reading comprehension. He further reported that the construct of summary writing may include the structure of semantic network of words and the ability to metalinguistically manipulate words as two fundamental aspects.

Therefore, based on the studies reviewed above, it can be argued that depth of vocabulary knowledge may prove significant in written production, bearing in mind the common problems and obstacles learners generally face in writing. One such obstacle is choosing form some semantically-related words in a certain semantic set. However, no single study was found in the current literature on the investigation of the role of semantic sets and depth of vocabulary knowledge in EFL learners' writing performance. The empirical studies on semantic sets mainly focused on the effect of teaching new vocabulary in a semantic set on vocabulary learning. Some researchers argue that learning new words in a semantic set makes the process of vocabulary learning complex and that the meaning of a word may interfere with another word. Consequently, it may have a negative effect on the retention of the words (Erten \& Tekin, 2008; Warring, 1997). Some other researchers, on the other hand, maintain that words should be learnt in semantic sets simply because this method reflects the natural organization of the mental lexicon (Aitchison, 1994; Hashemi \& Gowdasiaei, 2005).

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## 3. This Study

As Nation (2001, p. 178) asserts, "vocabulary plays a significant role in the assessment of the quality of written work". This productivity of vocabulary in writing seems to be problematic in that some students may know what words to use syntagmatically in their writing but do not know what words to use paradigmatically in relation to a particular semantic set. In this regard, depth of vocabulary knowledge may play a significant role and help them towards appropriate use of words in writing. This may be particularly true when it comes to the role of depth of vocabulary knowledge in writing performance as a productive skill, bearing in mind Read's (2007) suggestion of including appropriateness of vocabulary use in the scoring criteria for evaluating learners' writing performance. Also, Aitchison (1994) holds that there has been a tendency in vocabulary literature to disregard the role of depth of vocabulary in terms of semantic networking on vocabulary acquisition and proposed the need for research on the complex nature of vocabulary and semantic sets. Similarly, Henriksen (1999) stresses that deep understanding of paradigmatic relations, as one aspect of the complex nature of words, is necessary to develop precise understanding of words and put this knowledge into productive use. In light of the above-mentioned empirical studies on depth of vocabulary knowledge and semantic sets, it can be predicted that semantic sets and depth of vocabulary knowledge can provide learners with complex vocabulary knowledge which may, in turn, influence their use of words in writing. To investigate this issue, the following research questions were formulated:

1. Does depth of vocabulary knowledge have any significant role in EFL learners' appropriate use of words in a semantic set in writing performance?
2. Does depth of vocabulary knowledge have any significant role in EFL learners' overall writing performance?
3. Does appropriate use of words in a semantic set have any significant role in EFL learners' overall writing performance?

Based on the above research questions, the corresponding nullhypotheses were formulated and probed in this study.

## 4. Method

### 4.1 Participants

A sample of 70 lower-intermediate and upper-intermediate EFL learners were selected based on the results of the Oxford Quick Placement Test (2001). The participants were male and female high school students whose ages ranged from 17 to 25 years. They had a background of studying English in an evening language institute in Iran for about 4 years, in addition to their normal mainstream English education at junior and senior high school levels. Normally, there is no systematic emphasis on writing skill in Iranian English programs at institutes. However, the learners are typically required to hand in at least 4 writings during each semester. The rationale behind selecting this sample was the nature of the study which required participants with a good mental lexicon (i.e. the ability to use different words in context) and, of course, a reasonably good command of English writing.

### 4.2 Instruments

A proficiency test, a vocabulary test, and four writing tests were utilized in this study:

Oxford quick Placement Test (2001, version 1): This test was administered to the participants in order to assure that the participants were at the lower-intermediate and upper-intermediate level of English language proficiency. The test consists of 60 items and participants were supposed to answer it in 30 minutes (see appendix A for the scoring criteria).

Word Association Test (WAT): This test, originally developed by Read (1993), was used to measure the participants' depth of vocabulary knowledge. It consists of a list of 40 prompt words, each followed by a list of eight words four of which are related to the prompt word semantically while the others are not. The four related
words are selected to represent three semantic relations; namely, paradigmatic, syntagmatic, and analytic. Read (1993) reported a reliability (KR-20) index of .092 and Nassaji (2006) reported its split-half reliability as .089 . Each correctly-chosen word weighted one point. The following is a sample item:
sudden

| beautiful | quick surprising <br> thirsty | changedoctor noise <br> school |
| :--- | :--- | :--- | :--- |

Writing tests: Four writing tests, two for each proficiency level, were used in this research. For each writing test, a list of words was given to the learners along with a topic. They were asked to write a short essay using the given words in at least 100 words for lower intermediate level and 250 words for upper-intermediate level. Among the given words, there were words in a particular semantic set (including metonymy, synonymy, etc.), but learners were expected to choose only five words and use them appropriately in their writings (see appendix B). The themes of the writing tests were chosen from the range of topics covered in the language learners' main course books (i.e. Top Notch series) so that no expert knowledge was needed. Also, the target words were selected from among the ones participants had already covered in their previous course books to make sure that they know the meaning of the words and to prevent them from using avoidance strategy in word selection when they do not know the meaning of a word. To improve the reliability of the writing tests, another rater rated the writing papers based on Jacobs et al.' (1981) scoring scheme. The resulting Pearson correlations were .802 and $.715(\mathrm{~N}=20)$ for the first and second topic of the lower-intermediate learners' writing tests and .849 and .813 $(\mathrm{N}=20)$ for the first and second topic of the upper-intermediate learners' writing tests.

### 4.3 Data collection procedure

Initially, in order to ensure the proficiency of the participants, the Oxford Quick Placement Test was administered to the subjects. Based on the results of this test, 70 EFL learners at lowerintermediate and upper-intermediate proficiency levels were selected. In the next stage of the study, participants took part in the writing test. Then, Word Association Test (WAT) was administered to them. The rationale behind this order of test administration was to prevent sensitization of students to the purpose of the research. The time allocated for the writing test and WAT was 30 minutes each. While administering WAT papers, participants were encouraged to give only four answers, even if they were not sure whether the given answer was correct or not (Read, 1993). All the tests were administered during the participants' class hours.

The WAT papers were scored according to the exact scoring method and based on the answer key developed by Read (1993). The final score for each participant was calculated in percentile rank. Scoring participants' writing papers was done in two phases. In the first phase, the writing papers were scored based on the Composition Profile of Jacobs et al. (1981) to assess the participants' overall writing quality. This scheme of writing assessment is an analytic one. The writing papers were assessed according to five aspects: content (30 points), organization (20 points), vocabulary ( 20 points), language use ( 25 points), and mechanics ( 5 points). The rationale behind using this scale was its emphasis on 'effective word choice and usage' and 'appropriate register' which are both considered as fundamental aspects of depth of vocabulary knowledge. In the second phase of scoring writing papers, the essays were assessed based on the appropriate use of five of the given words in the test items as it was explained above. The target vocabulary item was scored as appropriately used if it was appropriate in terms of: a) variations of function and situations, b) syntactic behavior, c) forms of derivations, and d) different layers of meaning according to Laufer's (1990), Nation's (1990), and Richards' (1976) taxonomies

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of knowing a word. Participants were given 1 point for the appropriate use of each of these four components (adding up to a sum of 40 points for each participant). To cross-check the decisions made as to the participants' appropriate use based on the categories mentioned, use of words was checked against what is suggested in Oxford Advanced Learners' Dictionary (2008), Longman Dictionary of Contemporary English (2005), and Oxford Collocation Dictionary (2009).

### 4.4 Data analysis

Based on the results of WAT, and following Nassaji (2006), participants were divided into two groups: lexically-skilled and lexically-less skilled. The learners whose scores fell at or below the $50^{\text {th }}$ percentile rank were classified as lexically less-skilled and those whose scores fell over the $50^{\text {th }}$ percentile were classified as lexicallyskilled. Then the data obtained from the writing tests, which were scored based on appropriate use of words in a semantic set and the analytic scoring scheme, were analyzed using a MANOVA statistical procedure. The participants were put into two groups again based on their scores in the second phase of scoring the writing papers (i.e. Those who got 30 and above seemed to have used more appropriate words in their writings and were placed in one group and those who got below 30 seemed not to have used appropriate words in appropriate places and were placed in another group). Then an independent sample $t$-test was run to probe whether using appropriate words in a semantic set related to a particular theme had any role in EFL learners' writing performance, with appropriate us of words in a semantic set as the independent variable and scores of the first phase of scoring the compositions as the dependent variable.

## 5. Results

As indicated earlier, the participants were divided into two groups of "lexically-skilled" and "lexically-less skilled" according to their
scores on WAT. Table 1 presents the distribution of the participants in these two groups and across proficiency levels.

Table 1: Distribution of participants based on the results of WAT

| Level | $\mathbf{N}$ | Depth Quality |
| :--- | :--- | :--- |
| Lower- intermediate | 26 | Lexically-skilled (high depth) |
|  | 11 | Lexically-less skilled (low depth) |
| Upper-intermediate | 13 | Lexically-skilled (high depth) |
|  | 20 | Lexically-less skilled (low depth) |

In order to probe the first two null hypotheses predicting no significant role of depth of vocabulary knowledge in EFL learners' appropriate use of words in a semantic set and overall writing performance, a MANOVA test was run. The dependent variables were overall writing performance and appropriate use of words in a semantic set. Level of depth of vocabulary knowledge (i.e. high or low) was considered as the independent variable. Table 2 shows the overall results for the two proficiency levels.

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Table 2: Test of between subject effects

| Independent variable <br> Sig. Partial Eta Squared | Dependent variable | F |
| :---: | :---: | :---: |
|  |  |  |
| DVK (lower-intermediate) | Semantic Set | 6.0484 |
| .019** 147 |  |  |
|  | Writing Performance | 2.371 |
| $.133^{\text {a }}$. 063 |  |  |
| DVK (Upper-intermediate) | Semantic Set | 2.806 |
| . $104^{\text {a }}$. 086 |  |  |
| . $004{ }^{*}$ | Writing Performance $.250$ | 10.004 |

*: significant at 05 . a: not significant at .05 . DVK: Depth of Vocabulary Knowledge

As Table 2 shows, for the lower-intermediate level, depth of vocabulary knowledge has a significant role in appropriate use of words in a semantic set ( $\mathrm{F}=6.0484, \mathrm{p}=.019, \mathrm{p}>.05$ ), but not in writing performance ( $\mathrm{F}=2.371, \mathrm{p}=.133, \mathrm{p}<.05$ ) while, for the upper-intermediate level, the reverse was observed. Therefore, the two null hypotheses were only partially rejected.

In order to probe the third null hypothesis predicting no significant role of appropriate use of words in a semantic set in EFL learners’ overall writing performance, independent $t$-tests were run. Descriptive statistics for the writing scores of participants in the two proficiency levels categorized based on appropriate use of words in a semantic set are illustrated in Table 3 below.

Table 3: Descriptive statistics for writing tests based on appropriate use of words in a semantic set

| Level Mean | SD | Semantic Set | N |
| :---: | :---: | :---: | :---: |
| Lower-intermediate 28.7200 | 5.16817 Appropriate users |  | 25 |
|  |  |  |  |
|  |  | Inappropriate users | 12 |
| 24.4167 | 5.26495 |  |  |
| Upper-intermediate$81.1000$ |  | Appropriate users | 20 |
|  | 10.44232 |  |  |
|  |  | Inappropriate users | 13 |
| 76.3333 | 12.8 |  |  |

As Table 3 displays, in the lower-intermediate level, appropriate word users had a larger mean on writing performance than inappropriate word users ( 28.7200 and 24.4167 , respectively). The same pattern of results was obtained for the upper-intermediate level ( 81.1000 and 76.3333 , respectively). However, the effect size for the lower-intermediate and upper-intermediate groups were 2.7 and .41 , respectively; showing that appropriate users did significantly better in overall writing performance than inappropriate users only in lower-intermediate level. Table 4 presents the results of the independent sample $t$-test for the means of writing scores of these two groups.

Table 4: Independent sample $t$-test for writing performance of the two proficiency levels

| Independent Variable | F | Sig. | t | df | sig. (2-tailed) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Writing (lower-intermediate) | . | 017 | .898 | 2.929 | 35 |
| Writing (upper-intermediate) | .272 | .606 | 1.147 | 30 | $.006^{*}$ |

[^0]The results of the independent $t$-test shows that the difference between the mean scores of the two groups (i.e. appropriate and inappropriate word users) was meaningful in the lower-intermediate level $(\mathrm{t}=2.929, \mathrm{p}<.05)$ but not in the upper-intermediate level $(\mathrm{t}=$ $1.147, \mathrm{p}>.05$ ). Therefore, the null hypothesis was rejected for the lower-intermediate level, whereas it was retained for the upperintermediate level. It means that appropriate use of words in a semantic set has a significant role in overall writing performance of lower-intermediate EFL learners only.

## 6. Discussion

In this article, the role of depth of vocabulary knowledge and appropriate use of words in a semantic set in vocabulary use in EFL writing performance was investigated. The participants were divided into two groups in two phases: lexically skilled and lexically less skilled based on their scores on WAT and appropriate users and inappropriate users based on their scores on the second phase of scoring the writing papers.

Our results confirmed that depth of vocabulary contributes to selecting and using the best words in a semantically-related set. In other words, when an EFL learner encounters a set of words with a shade of similar meaning, depth of knowledge can be of help in observing nuances of differences in word usage. However, the present study documented this significant role in lower-intermediate and not in upper-intermediate level. One explanation can be that upper-intermediate participants might focus more on derivational and syntactic behavior of words among the criteria of appropriateness set for this study. On the other hand, lower-intermediate learners might pay more attention to the semantic aspects of words. Also, these results are in line with the findings of Hashemi and Gowdasiaei (2005) indicating that teaching words in a semantic set may result in increasing learners' depth and breadth of vocabulary knowledge. Therefore, it can be pointed out that the relationship between depth of vocabulary knowledge and semantic set is a bidirectional one, at least for lower-intermediate learners.

The contrast in the results of the role of depth of vocabulary knowledge in overall writing performance between lowerintermediate and upper- intermediate participants can be explained in light of what Schoonen, et al. (2003) refer to as overshadowing the effect of vocabulary knowledge on writing performance by linguistic and metalinguistic abilities of writers which need common cognitive skills. In other words, when it comes to use of words other than those presented in a semantic set in writing, lower-intermediate participants may try to focus on linguistic abilities such as grammar and syntactical knowledge in writing more than upper-intermediate learners. It is probable that upper-intermediate EFL learners think about which words to choose in a semantic set due to their more advanced knowledge of language in terms of vocabulary (i.e. different layers of meaning and functional behavior of words). This may render the effect of depth of vocabulary in lower-intermediate participants' compositions less significant than that of other linguistic abilities. The results are in line with the findings of Grabe and Kaplan's (1996) study on the role of breadth of vocabulary on the writing performance. They found out that learners with higher proficiencies used a variety of words in their compositions far above learners with lower proficiencies. This study supports their findings in that depth of vocabulary could also play a role in compositions of higher proficiency learners in comparison to lower proficiency ones. Also, this contrast in the role of depth of vocabulary in compositions of the two levels may be because of genre sensitivity of lowerintermediate learners in language skills especially in writing. They may not be able to manifest their depth of vocabulary knowledge in writing in some genres, like the descriptive genre that was included in the writing tests of this study requiring breadth as well as depth of vocabulary knowledge. Baba (2009) found a high level of contribution of definition writing of the intermediate Japanese learners, as a measure of depth of vocabulary knowledge, to summary writing. During summary writing tasks, EFL learners have access to the original source and can reflect on different words in the text to be summarized and consequently choose the best from among a set of words in their summaries. However, during descriptive
writing, they do not have such accessible resources and their knowledge may not be manifested due to their relative weakness in active vocabulary knowledge. The results of the present study for upper-intermediate level supports Baba's (2009) claim that knowledge of semantic relations, viz semantic set, may improve the quality of writing. However, the results of this study contradict Batty (2007) who found a significant relationship between WAT scores and scores of the written section of Kanda English Proficiency (KEPT) for the Japanese intermediate EFL learners but not for the upper-intermediate ones.

As it was stated above, those lower-intermediate EFL learners who used words in a semantic set appropriately could achieve higher scores in their compositions. It helped them use a variety of words correctly related to a certain concept. This is in line with Engber (1995) who investigated the extent to which lexical richness and accuracy were related to writing quality for intermediate learners. She found that those who used a variety of words appropriately obtained higher scores on their compositions. She also highlighted the fact that the scorers of L2 compositions were negatively affected by using words inappropriately and that they took the lexical errors into account in scoring the compositions. In other words, taking the results of this study into account, appropriate use of words in a semantic set may also affect writing scores positively. In line with this, East (2006) asserted that allowing learners to use bilingual dictionaries may result in an increase in lexical sophistication, measured by LFP based on a variety of lexis used, and this "has potentially positive benefits in terms of enhancing writing quality" (p. 194). In other words, one way of improving appropriateness of use of words in a semantic set may be use of bilingual dictionaries while writing (East, 2006).

However, in the upper-intermediate level, using words appropriately in a semantic set does not play a role in participants' achievement of higher writing scores. This contradiction with the results obtained in lower-intermediate level may confirm the effect of proficiency level in role of appropriate use of words in a semantic set in overall writing performance. In addition, appropriate use of a
variety of words related to a certain concept brings coherence to lower-intermediate participants' writing performance and this may affect scores on writing quality (McCarthy, 1991). For compositions written by upper-intermediate learners, however, this coherence might be the consequence of good content arrangement and topical knowledge rather than appropriate use of words in a semantic set.

## 7. Conclusion

This study investigated the role of depth of vocabulary knowledge in writing performance of EFL learners in general and in appropriate use of words in a semantic set in writing in particular. The results attested to the significant role of depth of vocabulary knowledge in appropriate use of words in a semantic set only in lower-intermediate level. However, this aspect of vocabulary knowledge was found to have a significant role in writing performance in upper-intermediate level, but not in lower-intermediate. Furthermore, the results indicated a significant difference in writing performance of the lower-intermediate EFL learners who used words appropriately in a semantic set. Such a difference was not found in the upperintermediate level.

It appears that using words in a semantic set appropriately and depth of vocabulary knowledge contribute to each other, especially in the lower proficiency level. However, this may be overshadowed by other aspects of language knowledge such as linguistic and metalinguistic knowledge. Moreover, based on our findings, it can be concluded that using words appropriately in a semantic set can enhance learners' writing quality. This highlights the point that words in a semantic set, if used appropriately, make the text more coherent and this, in turn, may affect the raters' decision about the overall quality of writing performance (Baba, 2009).

As for the pedagogical implications of the study, the findings suggest that vocabulary and writing curriculum developers and course designers may put increasing emphasis on depth of vocabulary knowledge and words in a semantic set to enrich their

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programs. In addition, material developers should include some sections related to depth of vocabulary knowledge in writing course books with emphasis on appropriate use of words in compositions based on the knowledge of depth of vocabulary and topic of compositions.

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Exploring the role of vocabulary depth and semantic set

## Appendices

Appendix A: Scoring criteria of Oxford quick placement test

| Proficiency Level | cut off points |
| :---: | :---: |
| breakthrough | $1-18$ |
| elementary | $19-25$ |
| lower-intermediate | $26-35$ |
| upper-intermediate | $36-45$ |
| lower-advanced | $46-55$ |
| upper-advanced | $56-60$ |

## Appendix B: Writing Tests

Lower-intermediate level
Instruction: Read the following two topics carefully. For each, you should choose ONLY FIVE of the given words and use them appropriately in your essays. Please write your essays in at least 100 words.

1. Write a short essay about "what a doctor needs to be able to do to handle his/her job perfectly".

Choose five of the words below and use them appropriately in your essay.
talent - skill - adventure - qualify - experience - ability - power
2. Write a short essay about how new technology has affected people's everyday life. Choose five of the words below and use them appropriately in your essay.
latest - fresh - innovation - novel - developed - state of the art modern - contemporary

Upper-intermediate level
Instruction: Read the following two topic carefully. Choose ONLY FIVE of the given words and use them appropriately in your essay. Please write your essay in at least 250 words.

1. What do you think about the following idiom? Does it mean we should always save money and spend none? Write a short essay and discuss your ideas.
A penny saved is a penny earned

Choose five of the words below and use them appropriately in your essay.

$$
\begin{gathered}
\text { mean (adj. }) \text { - frugal }- \text { save }- \text { expense }- \text { financial }- \text { stingy }- \text { tight } \\
\text { fisted }
\end{gathered}
$$

2. Some people think that it is not good to make people buy goods. They themselves should make the decision freely and this honesty is a good advertisement. However, some others believe that in order to have a good business, customers should be influenced in one way or another. How do you feel? Do you think businessmen should influence people to buy? Why / why not?

Choose five of the words below and use them appropriately in your essay.

$$
\begin{gathered}
\text { endorse - promote }- \text { prove }- \text { convince }- \text { indulge }- \text { persuade }- \\
\text { encourag }
\end{gathered}
$$


[^0]:    *: significant at . 05 .
    a: not significant at 05 .
    dependent variable: appropriate use of words in a semantic set

