The Effect of Visually-Mediated Collocations on the Elementary EFL Learners' Vocabulary Learning

Abbas Kasraian[*]
Department of English Language
Islamic Azad University, Shiraz Branch
Shiraz, Iran

Imanppp@yahoo.com

Bahram Pakfetrat
Department of English Language
Islamic Azad University, Shiraz Branch

Shiraz, Iran

Abstract. When vocabulary teaching is taken into account in EFL classes in our Iranian state primary schools, teachers generally prefer to use classical techniques. The purpose of this study was to investigate the effect of visually-mediated collocations on the elementary EFL learners' vocabulary learning. In order to conduct this study, 60 students from two classrooms in an elementary school, participated in this study. The experimental group was taught new words using collocation techniques; the control group was taught new words using classical techniques such as synonym, antonym, definition and mother tongue translation. Both groups were given the same pre-test at the beginning of the term and after the classroom treatment, including 8 sessions of teaching English vocabulary through collocations, all the participants were given the same multiple-choice tests as a summative evaluation. The statistical finding in the pre-test revealed that the participants' performance had almost the equal mean score, while the performances of both groups in the post-test were significantly different. The result of the study indicated that the group receiving the method of teaching collocations had better performance in vocabulary test than teaching them using classical techniques. Teaching vocabulary through collocations can be effective factors in helping students remember the new words. Therefore, teachers of English could be encouraged to attach more importance to vocabulary teaching rather than the acquisition of grammar and the use of current vocabulary teaching strategies in their classes.

[*]Corresponding author

1. Introduction

Nowadays, with a high speed development of technology, knowing a foreign language has become more significant in an environment where information plays a decisive role. Vocabulary knowledge is central to language and of critical importance to the typical language learner (Zimmerman, 1997). English teachers prefer to use classical vocabulary teaching techniques such as utilizing synonyms, antonyms, mother tongue translation and definitions. As a result, students do not make any effort to reach the meaning, and it is inevitable that they probably will not remember the meaning of the new words, or even worse, they will not be able to use the new words. It is believed that there is a necessity of implementing new vocabulary teaching techniques in primary foreign language classes. As Siyanova and Schmitt (2008) advise, teachers should make fundamental changes in their vocabulary teaching pedagogies by focusing on phrasal elements rather than individual words.

For many years, teachers have not pad much attention to vocabulary learning strategies, which means students received less help from teachers in learning vocabulary. Learners tend to remember a word they meet every day rather than some words they just meet once. Therefore, learners have a deep-rooted idea: if they want to remember a new word, they should repeat this word again and again. Of course this belief is wrong. Many teachers realize that teaching vocabulary is not only to translate or explain its meaning, but also teach learners strategies to remember and use it. Hence, finding an efficient way of learning vocabulary has been widely discussed today.

With the recognition of the importance of vocabulary, many techniques and approaches to teaching and learning vocabulary have emerged, and collocation is just one of those techniques. It is a widely accepted idea that collocations are a very important part of the knowledge of second language acquisition, and they are essential to non-native speakers of English in order to speak or write fluently and accurately (Jan, 2007, p.134). English language teaching has changed its perspective on the

teaching and learning of vocabulary in foreign language classes. Students learning English as a foreign language are weak in collocation use. Rather than teaching vocabulary as single lexical items which causes a lexical incompetence on the part of learners, students must be made aware of the necessity of acquiring collocations.

Nowadays, there is a heated discussion in the academic circles that is how to efficiently remember English words. Through a variety of experiments and practice, using visual aids has become the method which is mentioned most frequently. Visual aids are available in many forms. One of the most common used forms in language learning is flashcards, which is available for the students to use them both inside or outside the classroom. Students take these flashcards with them, one side is the word they do not know, and the other side is the picture to explain this word. This method is very simple, understandable, and the word on the flashcard is easy to remember.

The researchers believe that using visual aids is more vivid than looking up in a dictionary. It adds interest and releases learners from a long list of vocabulary learning. In addition, using visual aids improves learners understanding and increases retention.

2. Literature Review

This part of the study begins with a historical overview of the status that vocabulary has occupied up until the present day, followed by a discussion of the issue of what it means to know a word. The next section introduces the core subject, collocations. In particular, it starts by reviewing the studies that define the notion of collocation from the perspectives of the lexical composition trend, the semantic trend and the structural trend, as well as the current various definitions of collocations proposed by linguistic studies. This is followed by a distinction between collocations, idioms and word combinations. The topics covered also include the common classification of collocations, the importance of collocations, and collocations in the field of first and second language acquisition.

2.1. History of vocabulary in language learning

Up to the present day, vocabulary has been undervalued throughout its different stages, despite its crucial importance to language learners (Zimmerman, 1997).

The Grammar Translation Method was the main language-teaching methodology at the beginning of the nineteenth century. It put heavy emphasis on explicit grammar and accuracy as the method became controlled in nature, while little attention was given to vocabulary. Reading and translating literary materials was the focus of the content (Zimmerman, 1997). Vocabulary choice was based solely on the reading texts, and the necessary vocabulary was provided to students in the form of bilingual word lists (Schmitt, 2000).

Because the Grammar Translation Method's focus on analyzing the target language (rather than gaining the ability to use it) was seen as a shortcoming, the Direct Method emerged by the end of the nineteenth century. This method emphasized oral exposure to the target language with listening as the main skill, then speaking. It was thought that through interaction during the classes, students would acquire vocabulary naturally.

Vocabulary was seen, for the first time, as one of the most important aspects of second-language learning when the Reading Method emerged. In this method, emphasis was placed on developing criteria for selecting vocabulary content. The Reading Method aimed primarily at facilitating reading skills by improving vocabulary knowledge.

In 1972, Hymes introduced the concept of communicative competence which underscored the sociolinguistic and pragmatic aspects. This helped to shift the focus from language "accuracy" into "appropriateness". In other words, the emphasis on using the language for meaningful communication rather than grammatical accuracy gave birth to the Communicative Language Teaching approach (CLT). Though it was a meaning-based approach, vocabulary was given a "secondary status" that served as a support for issues of "functional language" such as how to make a request. Similar to the previous approaches, few instructions were given about how to handle vocabulary in CLT under the assumption that L2 vocabulary would take care of itself, like L1 vocabulary

(Schmitt, 2000).

Similar to the Communicative Language Teaching and other communicative approaches being developed, the Natural Approach appeared in 1977. It emphasized exposure, or comprehensible input, without reference to grammatical analysis, or resorting to the native language (Richards & Rodgers, 2001).

2.2. Collocation

The researchers have stated previously that vocabulary knowledge is the most essential element in learning a foreign/second language. However, vocabulary knowledge requires more than just knowing a set of isolated words or knowing their basic meaning. Within the realm of lexis, the area of collocation is of prime importance to second language learning in general and word knowledge in particular. Kim (2009) comments, "Truly knowing a word means not only knowing the meaning of the word but also knowing the words with which it frequently co-occurs" (p. 1).

The term collocation has been generally used to refer to a phenomenon in which certain words have the tendency to co-occur regularly within a language. Hence, the word 'lean' can exclusively collocate with meat, while the word 'heavy' has 'rain', 'meal', 'traffic', and 'smoker' as possible collocates (Bahumaid, 2006).

2.2.1. The lexical composition trend

The lexical composition trend is centered on the notion that words obtain their meanings from the words with which they co-occur. Firth (1957) is known as both the father of this trend, and was the first scholar to introduce the term "collocation" into lexical studies. He looks at collocation as a component separated from grammar.

2.2.2. The semantic trend

Scholarship on collocations as the focus of linguistic studies, can be traced back as early as 300 B. C. Greek Stoic philosophers, as Robins (1967) maintained, had acknowledged collocations in the studies of lexical semantics. They opposed the notion of "one word, one meaning," and highlighted the significant aspect of the study of the semantic structure of language: "word meanings do not exist in isolation, and they may

differ according to the collocation in which they are used" (p. 21).

In parallel to the lexical composition trend, the semantic trend explores collocations from the semantic point of view separately from the grammatical. The approach is an attempt to describe why words are combined with certain other words (Lehrer, 1974).

The semanticists regard the semantic properties of the lexical word as the key or basis for deciding what words are combined with other words. For example, 'rancid' collocates with 'butter', 'lard', 'oil', and 'salad dressing' since they all have the same semantic feature of "oily" in common (Decrarrico, 2001).

2.2.3. The structural trend

The structural trend consists of studies that are centered on the belief that collocation is affected by structure and hence collocational knowledge should be examined by taking into account their syntactic features (Hsu, 2002).

Mitchell (1971), one of the advocates and the leading figure in this approach, criticized the Neo-Firthians for their separation of lexical study from grammar. In his claim for the "one-ness of grammar, lexis and meaning" (p. 43), he contended that in order to determine the nature of collocation, linguists should consider grammar and lexis as one entity. Therefore, he proposed the notion of root to the study of collocations. According to Mitchell, the abstraction of a word form is called root, while word is the attachment of inflectional markings to the root. He claimed that collocations are of roots rather than of words and "are to be studied within grammatical matrices" (p. 65). For instance, Mitchell (1971) considered 'drink' as the root of the word 'drinker' and the conjunction of the roots 'heavy' and 'drink' in the example 'heavy drinker' or 'drink heavily' as collocations.

Nonetheless, Mitchell's argument that collocations are roots rather than made of words can't be generalized on every co-occurrence of roots. For instance, the collocation of the roots 'faint' and 'praise' is acceptable in 'she was damned by faint praise' but not in 'he praised her faintly' (Gitsaki, 1999).

2.2.4. Recent views of the definition of collocation

Since the introduction of Firth's concept of collocation, which explains meaning at the syntagmatic level, many researchers have encountered difficulties in providing a more rigorous way of defining collocation. Up until now, the definitions of collocation presented in various studies still lacked clarity and precision about the relation between lexical items' co-occurrence. Meanwhile, the criteria utilized by researchers, to determine collocations in a language, are various and manifest different views.

Among the many, varied perspectives and interests in defining the term "collocation," two major views can be identified. In one view, collocation is defined as the combination of lexical items at a certain distance that differentiate between frequent and non-frequent collocations. This view is referred to as the "statistically oriented approach" or "frequency-based approach" (e.g., Sinclair, 1991; Stubbs, 1995; Moon, 1998). In the other view, collocation is considered as a kind of word combination that is fixed to a certain degree, but not entirely. This view is called the "significance-oriented approach" or the "phraseological approach" (e.g., Cowie, 1993; Melcuk 1998; Hausmann, 1989). The advocates of the first view (frequency-based approach), are often concerned with the "computational analysis of syntagmatic relations" (Nesselhauf, 2005, p.12). However, researchers of the second view, usually work in the areas of lexicography or pedagogy.

2.2.5. Collocations, idioms, and free word combinations

If word combinations can form a continuum with idioms at one end and free word combinations at the other end, collocations are most likely to be placed in the middle (Gitsaki, 1999; Hsu, 2002). Idioms are described as relatively frozen expressions; they are fixed in structure, their meanings cannot be derived compositionally or retained from the meaning of their component words, and the lexical components cannot be substituted with synonyms (Bentivogli & Pianta, 2003). For example, one can say 'kick the bucket' (to die) but not 'kick the pail' or 'boot the bucket'. Also, in the previous example, there is no actual 'bucket' to kick. Free word combinations, on the other hand, are a combination of lexical items that abide by the general rules of syntax, and the lexical

components are not bound to each other; they can be freely replaced with other words (Benson et al., 1986). The verb 'write', for instance, can freely collocate with 'a letter', a 'book', 'an essay', and so on.

2.3. Collocation in first and second language acquisition

The existence of collocations has been acknowledged by the majority of linguists in the field of first-and second-language acquisition. According to Bloom (1973, cited in Miyakoshi, 2009), young children acquiring their first language produce unanalyzed chunks that an adult would recognize as multi-morphemic, such as 'lemme-see', 'i-wannado-it'. This phenomenon questions the validity of the general assumption that most children start producing only one word at a time.

The importance of collocations in the process of first-language acquisition was highlighted by Wray (2002). He describes several essential roles of collocation in learning a first language. By using collocations, young children supplement gestures and other nonlinguistic behaviors when conveying salient messages prior to the development of their rule-governed language. Thus, children store and use complex strings before developing their grammatical knowledge. For example, a child may produce the string 'what's-that?' before knowing the internal makeup of wh-questions. Another role that the use of collocations can play is to "reduce the child's processing load once novel construction is possible" (p.128). This allows the child to maintain fluency while obtaining control of processing.

The significant role of collocations in the acquisition and use of a first language was also underlined by Peters (1983). In her study, Peters reveals that young children adopt both a gestalt (holistic) and an analytic (inferential) approach to acquiring a language. Children begin by extracting speech formulas from adults and then store and later reuse them creatively as both analyzed or segmented units and unanalyzed or whole chunks.

In the field of second language acquisition, children seem to have many advantages over adults with regard to the acquisition of collocations. Leaving aside the biological factor, children interact with other children who are very lenient to incomprehension. They are also involved

with various types of "ritualized play" that presents them with highly anticipated, constant, and contextualized language.

In conclusion, findings in the area of both first-and second-language acquisition have underscored the role of collocations in language acquisition. While collocations are important building blocks in children's language acquisition, the researchers believe that collocations also play a significant role in adult second-language learning. The relevance of these findings to the current study lies in the need for developing ESL/EFL learners' collocational knowledge, which results from the process of learning and storing the collocations they encounter.

2.4. The importance of collocation

Brown (1974), who is one of the first advocates to emphasize the importance of collocations in L2 learning and their incorporation in the EFL/ESL classroom, points out that increasing students' knowledge of collocation helps improve oral proficiency, listening comprehension, and reading speed. Moreover, she argues that learning collocation enables learners to observe language chunks in the speech and writing of native speakers and consequently use these word combinations in their own speech. According to Brown, collocations, along with context and concept, should be incorporated when introducing new words to advanced learners because of their vital importance in language learning.

The important role that collocations play in the development of EFL learners' communicative competence is underscored by Yorio (1980). Yorio claims that conventionalized language forms, including collocations, "make communication more orderly because they are regulatory in nature" (p.438).

2.5. Empirical studies on collocation

Although both the importance of, and the need for, research on collocations have long been acknowledged, it is only in recent years that experimental research on EFL/ESL learners' collocational knowledge has been systematically conducted. Many of these studies have reported learners' insufficient knowledge of collocations, as well as the difficulties learners encounter in dealing with collocations on both the receptive and productive levels.

Channell (1981) was among the earliest researchers to conduct a study on overall knowledge of collocations. In Channell's study, a group of eight EFL learners with advanced-level proficiency were asked to fill in a collocational grid. The grid consisted of four adjectives as its vertical axis and fifteen nouns as its horizontal axis. The findings reveal the learners' inability to produce a significant number of acceptable collocations: only 111 (40%) out of 272 collocations were marked as acceptable. This is despite the earners' familiarity with the words included in the test. Moreover, Channell notes that "it is essential to present a good number of typical collocations at the moment a word is first acquired. This is particularly true for students who have little access to native speakers with whom they can 'try out' the collocational possibilities of new words they learn" (p.120). At the end of her paper Channell maintains that a collocational grid, which can be a useful aid in strengthening vocabulary knowledge, is of vital importance to ESL/EFL learners.

3. Objectives of the Study

The goal of this study is to find out whether teaching vocabulary through collocations will result in better vocabulary learning than teaching vocabulary using classical techniques such as definition, synonym, antonym, and mother tongue translation. Our purpose is to show the contribution of collocations to vocabulary learning of students in English Foreign Language (EFL) classes at state high schools in Iran.

4. Research Question

Based on the objectives, this study is going to find answer to the following question:

Does teaching new words through visually-mediated collocations result in a better learning of new vocabularies?

5. Method

5.1. Participants
Two groups of male students (30 in each group aged 12-13) participated in this study, one as the control group and the other experimental

group. These students were in the 8th grade of the elementary level at high school. They were studying "English for Schools" (Prospect) (By: Alavi, & Sharbian,2014). The groups controlled by a test to ensure that they were in the same level of English proficiency. All pupils had been studying English for two months, with the same number of class hours a week. All the students involved in the study were monolingual native speakers of Persian and were learning English as a foreign language. The study consists of 8 sessions (one session per week) and every session would last for an hour and a half.

5.2. Instruments

The main instruments which were used in this study included a pretest and a post-test. The participants took the pre-test at the beginning of the study in order to know the level of their knowledge. A pre-test was administered while the post-test was given at the end of the semester. In the post-test, the participants were asked to answer 30 multiple choice items of lexical collocations. In comparison with the pre-test, the researchers could evaluate the effect of teaching vocabulary through visually-mediated collocations. To evaluate the participants' performance and give a quantitative mark, the number of the collocations that have been used correctly and relevantly were counted. The final score of both groups were compared and analyzed.

5.3. Materials

The basic material for this study was the "English for Schools" (Prospect) (By: Alavi, & Sharian,2014), which contained eight units and each unit contained a conversation, pronunciation, listening and reading, and speaking and writing. The units of this book were covered during an academic semester separately in two different classrooms. The control group learners received new words with their Persian equivalents and some examples. On the other hand, the experimental group learned new words through collocations; that is, the teacher taught them collocation without Persian equivalents.

5.4. Procedures

At the beginning of the semester, the participants were chosen according to convenient sampling from four classes and they were located in

two groups namely control and experimental. At this stage, the pre-test was used to measure the participants' prior knowledge in collocations (collocational competence) and their level of homogeneity which were given at the very beginning of the study before any classroom treatment. This pre-test included 30 multiple-choice items. All the correct answers were the lexical collocations from the recommended syllabus (English for Schools "Prospect") By: Alavi, & Sharbian (2014). All the participants took an equal test (pre-test) to evaluate their ability in answering vocabulary multiple choice items.

Based on the school time-table all the participants attended the class once a week. The post-test had been administered was almost the same as the content of the pre-test (there was a trivial change in the choice not in the number of the item). It must be mentioned that the designed multiple choice tests in pre-and post-tests were both based on the lessons one to four of "English for Schools" (Prospect) (By: Alavi, & Sharbian, 2014).

The collected data through this step was as summative evaluation and the major data to evaluate and measure the participants' performance in using lexical collocations in vocabulary multiple choice items. The collected data not only presented the level of participants' performance in vocabulary multiple choice items in both groups, but also it presented the effect of the methods of teaching collocations on the participants' performance and advantages or disadvantages of collocations in teaching and learning in EFL or ESL.

6. Data Analysis

After collecting the data, correcting the answer sheets, and giving scores, the SPSS software (version 19) was used and descriptive statistics such as mean, standard deviation, and variance were calculated. Moreover, inferential statistics such as paired samples t-test and independent samples t-test were employed to analyze the data and to find out whether teaching vocabulary through Visually-Mediated collocations were effective on the Elementary EFL Learners' Vocabulary learning or not.

Two groups of 30 male students (control and experimental) who participated in the study were given a pre-test in the first session of the

semester. The primary purpose of giving the pre-test was to measure these EFL learners' vocabulary knowledge. After correcting and scoring the students' answer sheet in the pre-test step, the obtained data was subjected to t-test.

Table 1: Descriptive statistics of participants' performance in pre-test of the control and experimental group

instruction		N	Mean	Std. Deviation	Std. Error Mean
Pre-test	Experimental	30	13.00	2.560	.467
	Control	30	13.00	3.494	.638

As it can be seen, Table 1 presents the obtained scores of the control and experimental groups in the pre-test. This table contains N= number of students, Mean = mean score of the EFL learners, Std. Deviation=Standard Deviation and Std. Error= Standard Error of these groups' performance in the pre-and post-tests.

Table 2: Independent samples test

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
pretestscore	Equal variances assumed	4.569	.037	.000	58	1.000	.000	.791		-1.583	1.583
	Equal variances not assumed			.000	53.168	1.000	.000	.791		-1.586	1.586
posttestscore	Equal variances assumed	3.794	.056	-3.125	58	.003	-2.367	.757		-3.882	-.851
	Equal variances not assumed			-3.125	54.872	.003	-2.367	.757		-3.884	-.849

Table 2 presents the participants' performance in the pre-test and post-test. This independent sample t-test displays the statistical significant difference of experimental group after the classroom treatment. The Sig (2 tailed) column show that the difference between both group's performance is not significant in pre-test, because P value is more than .o5 (1.000). However, in the post-test P is less than .05 (P =.003), so this level is significant. Therefore based on this finding, the treatment has been meaningful.

7. Conclusion

Researching the collocational problems and devising exercises, the researchers recognize that the teachers should train students in collocation from the early stages. It is actually very difficult for the students at high-beginning level to tackle the exercises. Nevertheless, the students can notice what natural collocation is from these activities and become conscious of this area. It seems that one big reason why so many Iranian EFL learners stay at elementary level for such a long time nearly forever in spite of their interest to acquire English is that they dislike making errors in their production. In summary, the results showed that collocations present a source of difficulty for English language learners. Therefore, collocations need more attention from L2 curriculum designers and teachers.

The results show that most Iranian EFL learners have lack of collocational knowledge and they have some problems at the productive level of language. The EFL learners' problems can be enumerated under the following headings:

a. Lack of collocational knowledge

b. Insufficient language competence

c. Inability in productive level of language

The statistical analysis revealed that teaching vocabulary through collocations results in a better learning of the words than presenting them using classical techniques. Teaching vocabulary through collocations can be an effective factor in helping students remember the new words easily

in multiple choice items. Therefore, teachers of English could be encouraged to attach more importance to vocabulary teaching rather than the acquisition of grammar and the use of current vocabulary teaching strategies in their classes.

8. Implications of the Study

Along with previous studies on collocations, this study confirmed L2 learners' lack of collocational knowledge. The results showed that there is a need for more attention to the teaching of collocations. Thus, the following pedagogical implications can serve as a framework for teaching collocation. Since the educational language environment plays an important role in learning collocations, as shown in this study, it may be useful to employ authentic texts in the teaching of collocations in an EFL context. Such texts seem to offer a richer environment for exposure to collocations than in some typical EFL textbooks where the input is modified. "When students see words in authentic contexts, they learn how the words function and what their typical collocations are" (Burger & Gallina, 2008, p.7).

L2 teachers should introduce collocations to their students to raise their awareness of the importance of this phenomenon. Instructors should demonstrate the idiosyncratic nature of collocations as well as the distinctions among them. For instance, when a student questions the difference between 'wound' and 'injury', teachers usually try to provide definitions to such pairs. However, this is not a complete explanation of the terms and can lead to problems. Hence, it is best to use the collocational fields of the two words to reveal differences in usage. For example, English speakers say 'stab wound' rather than 'stab injury' and 'internal injuries' rather than 'internal wounds' (Lewis, 2000). Moreover, the need to develop strategies for the acquisition of collocations is very important. Students can be taught to observe collocations and practice using them in either spoken or written forms outside of the classroom. In addition, one way to improve students' knowledge of collocations is to encourage them to use English collocation dictionaries whenever they are uncertain about the usage of a particular word.

References

Bahumaid, S. (2006). Collocations in English-Arabic translation. *Babel, 52,* 133-152.

Benson, M., Benson, E., & Ilson, R. (1986). *The BBI combinatory dictionary of English.* Amsterdam: John Benjamins Publishing Company.

Bentivogli, L., & Pianta, E. (2003). *Beyond lexical units: Enriching wordnets with phrasets.* In proceedings of the research note sessions of the 10th conference of the European chapter of the association for computational linguistics (EACL' OS), 67-70. Budapest, Hungary, April 2003.

Brown, C., & Payne, M. E. (2000). Five essential steps of processes in vocabulary learning. *Paper presented at the TESOL Convention,* Baltimore.

Brown, D. (1974). Advanced vocabulary teaching: The problem of collocation. *RELC Journal, 5*(2), 1-11.

Channell, J. (1981). Applying semantic theory to vocabulary teaching. *ELT Journal, 35*(2), 115-122.

Cowie, A. P. (1993). *Multiword lexical units and communicative language teaching.* In P. Arnaud & H.

Cowie, A. (1988). Stable and creative aspects of vocabulary use. In Carter, R. and McCarthy, M. (Eds.), *Vocabulary and Language Teaching.* Harlow: Longman, 80-95.

Decarrico, J. (2001). *Vocabulary learning and teaching,* in M. Celce-Murcia (Ed.) (2001) Teaching English as a second or foreign language (3rd ed), Heinle & Heinle: Boston, 285-300.

Firth, J. R. (1957). *Modes of meaning.* In J. R. Firth (Eds.), Papers in linguistics, (190-215). Oxford: Oxford University Press.

Gitsaki, C. (1996). *The development of ESL collocational knowledge.* Ph.D. thesis, Center for Language Teaching and Research, The University of Queensland, Brisbane, Australia.

Gitsaki, C. (1999). *Second language lexical acquisition: A study of the development of collocational knowledge.* Bethesda, MD: International Scholars Publications.

Hsu, J. (2002). *Development in collocational proficiency in a workshop on English for general business purposes for Taiwanese college students.* Unpublished doctoral dissertation, Indiana University of Pennsylvania, Pennsylvania.

Jackson, H. (1988). *Words and their meaning.* London: Longman Group UK Limited.

Jaén, M. M. (2007). A corpus-driven design of a test for assessing the ESL collocational competence of university students. *International Journal of English Studies, 7*(2), 127-147.

Kim, D. H. (2009). *A study on the use of lexical collocations of Korean heritage learners: identifying the sources of errors.* Unpublished thesis, University of Sothern Colifornia,Colifornia.

Lehrer, A. (1974). *Semantic fields and lexical structure.* Amsterdam: North-Holland publishing Company.

Peters, A. (1983). *The units of language acquisition.* Cambridge: Cambridge University Press.

Richards, J. (1976). The role of vocabulary teaching. *TESOL Quarterly, 10,* 77-89.

Robins, R. (1967). *A short history of linguistics.* London: Longman.

Schmitt, N. (2000). *Vocabulary in language teaching.* Cambridge: Cambridge University Press.

Sinclair, J. M. (1991). *Corpus, concordance, collocation.* Oxford: Oxford University Press.

Sinclair, J. M. (1966). *Beginning the Study of Lexis,* In Bazell, C.E. Catford, J.C, Halliday, M.A.K & Robinson, R.H. In Memory of F.R.Firth, Longman Siyanova, 269-293.

Siyanova, A., & Schmitt, N. (2008). L2 learner production and processing of collocation: a multi-study perspective. *Canadian Modern Language Review, 64*(3), 429-458. doi:10.3138/cmlr.64.3.429

Wray, A. (2002). *Formulaic language and the lexicon.* Cambridge: Cambridge University Press.

Yorio, C. (1980). Conventionalized language forms and the development of communicative competence. *TESOL Quarterly, 14*(4), 433-442.

Zimmerman, C. B. (1997). Historical trends in second language vocabulary instruction. *In J. Coady & T. Huckin (Eds.),* Second language vocabulary acquisition: A rationale for pedagogy (1st ed., 5-19). Cambridge: Cambridge University Press.