

THE EFFECT OF PROFICIENCY LEVEL ON THE RATE OF RECEPTIVE AND
PRODUCTIVE VOCABULARY ACQUISITION

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A Master's Thesis

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ABSTRACT

THE EFFECT OF PROFICIENCY LEVEL ON THE RATE OF
RECEPTIVE AND PRODUCTIVE VOCABULARY ACQUISITION

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This study investigated the effect of proficiency level on the rate of receptive and productive vocabulary acquisition, in conjunction with an examination of materials and instruction. The study was conducted with the participation of 68 beginner and elementary level students, and their teachers at the English Language Preparatory School of Tokat Gaziosmanpaşa University.

The data was gathered through receptive and productive vocabulary tests, a one-to-one interview with teachers of the beginner and elementary groups, and materials analysis. After the administration of the pre-tests, the students continued their foreign language education for about three months until the administration of the post-tests.

The quantitative analysis demonstrated that the students at both levels improved their vocabulary both receptively and productively; however, the students at the elementary level gained more words in a shorter period of time. The qualitative

data analyses showed that instruction and the materials played a certain role in improving the students' vocabulary acquisition. However, the elementary groups' greater gains in vocabulary could not be satisfactorily explained by either the materials or instruction. It is possible that the results that could not be explained by either materials or instruction are because of differences in proficiency. The elementary students' higher level of proficiency appeared to allow them to benefit more from the materials and instruction in terms of vocabulary acquisition.

The study implied that teachers and curriculum designers should pay attention to the aim of the program. While selecting the materials and teaching methods, selected materials and teaching methods should be compatible with the aim of the program. The study also implied that providing a few more hours of instruction for the beginner students is not enough to help these students reach the same level of proficiency by the end of the year as higher level students. Even more hours of instruction per week and different instruction should be provided to lower level students in order to help them reach the required proficiency level by the end of the year.

Key words: Receptive vocabulary, productive vocabulary

ÖZET

AKTİF VE PASİF KELİME ÖĞRENME HIZINDA YETERLİLİK DÜZEYİNİN ETKİSİ

Murat Şener

Yüksek Lisans, Yabancı Dil Olarak İngilizce Öğretimi Bölümü

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Bu çalışma, aktif ve pasif kelime öğrenme hızında yeterlilik düzeyinin etkisini ders kitapları ve öğretim yöntemlerini ilişkilendirerek araştırmıştır. Çalışmaya 68 başlangıç ve başlangıç üstü seviyesindeki Tokat Gaziosmanpaşa Üniversitesi Hazırlık Sınıfı öğrencileri ve öğretmenleri katılmıştır.

Veriler aktif ve pasif kelime testleri, program öğretmenleriyle mülakat ve ders kitaplarının incelenmesiyle toplanmıştır. İlk testlerin uygulanmasından sonra öğrenciler ikinci testlerin uygulanmasına kadar yaklaşık üç ay boyunca yabancı dil eğitimlerine devam etmişlerdir.

Nicel çözümleme sonuçları her iki gruptaki öğrencilerin kelimelerini pasif ve aktif olarak geliştirdiklerini, fakat başlangıç üstü seviyesindeki öğrencilerin kısa bir sürede daha çok kelime öğrendiğini göstermiştir. Nitel çözümleme sonuçları ise öğretim yöntemleri ve ders kitaplarının öğrencilerin kelime öğrenmesinde önemli bir rol oynadığını göstermiştir. Fakat başlangıç üstü seviyesindeki öğrencilerin daha

fazla kelime öğrenmesi, ders kitapları ya da uygulanan öğretim yöntemleri tarafından tatmin edici bir şekilde açıklanamamıştır. Açıklanamayan sonuçların bu iki grubun yeterlilik düzeyindeki farklılığından kaynaklandığı düşünülmektedir. Başlangıç üstü seviyesindeki öğrencilerin ders kitaplarından ve öğretim yöntemlerinden kelime öğrenme açısından daha fazla fayda sağladıkları görülmüştür.

Çalışma, öğretmenlerin ve müfredat hazırlayanların programın amacını dikkate almasını önermektedir. Ders kitapları ve öğretim yöntemleri belirlenirken, seçilen ders kitapları ve öğretim yöntemleri programın amacıyla uyumlu olmalıdır. Çalışma ayrıca başlangıç grubu öğrencilerine sene sonunda aynı seviyeye gelmeleri için birkaç saat daha ders ilavesi yapılmasının yeterli olmayacağını, daha düşük yeterlilik seviyesine sahip öğrencilerin diğer yüksek yeterlilik seviyesine sahip öğrencilerle sene sonunda aynı seviyeye gelmeleri için daha fazla ders saati sağlanması ve farklı öğretim yöntemleri kullanılması gerektiğini önermektedir.

Anahtar kelimeler: Pasif kelime, aktif kelime

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CHAPTER I: INTRODUCTION

Introduction

Vocabulary is generally believed by second language learners (L2) to be essential for their mastery of a second language. A good indicator is that they always carry a dictionary with them instead of a grammar book (Krashen, 1989). Grabe and Stoller (1997) state that sufficient vocabulary size is the essential component in improving language proficiency. Lewis (2000) points out that the vocabulary size of language learners is considered to be of greater importance than their grammatical knowledge. In addition, Lewis (2000) ascertains that the most important distinction between high and lower level language learners is not the difference in their grammatical knowledge but in the size of their lexicons. For L2 learners in a university context, the amount of vocabulary to be acquired may seem daunting. However, a great number of words may be acquired either incidentally or through direct vocabulary study (Tekmen & Daloğlu, 2006). Materials and teaching may also play a part in this vocabulary acquisition. However, learners at different proficiency levels may show different rates of progress in their vocabulary acquisition. Thus, it may be beneficial for my institution and the literature to conduct a study to see the relationship between proficiency level and the rate of receptive and productive vocabulary acquisition, as well as the roles that materials and instruction play in vocabulary acquisition.

Background of the study

First language and second language researchers argue that vocabulary knowledge is essential for learners to reach language competence (Grabe, 1991). However, Nation (2001) points out that “words are not isolated units of language, but fit into many interlocking systems and levels” (p. 23). Because of this, there are many things to know about any particular word and there are many degrees of knowing.

Vocabulary knowledge may be considered in terms of receptive versus productive knowledge. Being able to understand a word is known as receptive knowledge and is normally connected with listening and reading. On the other hand, if one is able to produce a word when speaking or writing, then that is considered productive knowledge (Schmitt, 2000). Varying frequencies of words contribute to the difficulty of learning all of the words, either receptively or productively. A small group of high frequency words (the 2,000 most frequently used words) is very important to know since they cover a very large proportion of running words in spoken and written texts, whereas low frequency words are the words that one rarely meets in one’s use of the language (Nation, 2001).

According to Read (2000), many language learners think that learning a language means learning the vocabulary of the target language. Thus, they spend much time memorizing L2 words. However, Schmitt (2000) states that it is impossible for either second language learners or native speakers to master the complete lexicon. Goulden, Nation and Read (1990) ascertain that English-speaking university graduates may know about 20,000 word families. A word family consists of a base word/headword and its inflected and derived forms. For example, the word

family includes *accept, accepts, accepted, acceptable, acceptably, and acceptability* (Read, 2000). Nation (1990) points out that when a five-year-old second language learner goes to school, he initially needs to learn 2,500 words. In addition to this, he needs to learn another 1,000 words a year in order to catch up with the native speaker. In order for learners to read unsimplified materials, a large amount of vocabulary is needed (Nation, 2001). However, receptive knowledge of the 2,000 most frequent words is enough for one to understand 90% of the words in spoken discourse (Nation, 2001).

Laufer and Nation (1999) state that it is important for teachers to know something about their students' vocabulary knowledge since this may help teachers realize students' proficiency levels and design a suitable curriculum for their institutions. To assess vocabulary knowledge, different test types may be used for a variety of purposes. For instance, the first kind of test is a diagnostic test, which is used to find out where learners have difficulty. The second one is a short-term achievement test, which is used to see the recent condition of a studied group of words. The third one is a long-term achievement test, which is used to see how much vocabulary language learners know (Nation, 2001, p. 373). In addition to these tests, learners' vocabulary size may be estimated by Nation's Vocabulary Levels Test (VLT) (1983, 1990, cited in Nation 2001), which is well-known and widely used by researchers and teachers. It is a pen and paper test, comprised of a sample of 36 words for each of five levels of frequency ranging from the 2,000 most frequent words in English to the 10,000 most frequent words. Another test is Laufer and Nation's (1999) productive levels format. It is also a pen and paper test and it samples 18 items at each of the same five frequency levels. In the test, for each item,

a meaningful sentence context is presented and the first letters of the target item are provided. The last type of test is the computerized checklist test (Eurocenters Vocabulary Size Test). It was developed by Meara and his colleagues (Meara & Buxton, 1987; Meara & Jones, 1990, both cited in Nation, 2001). It incorporates non-words and samples real words from various frequency levels of the Thorndike and Lorge list (1944, cited in Nation, 2001). The program operates on a computer-adaptive principle, presenting words selectively to the test taker until an adjusted estimate of the individual's vocabulary size can be made, up to a level of 10,000 words (Read, 2000).

It is very difficult to formulate a theory of how vocabulary is acquired (Schmitt, 1995). Thus, there are a number of ways to learn vocabulary. One way of vocabulary learning is through direct teaching. With the help of this instruction, learners acquire vocabulary items with their definitions, translations, or in isolated sentences. In direct instruction, learners are aware of their learning (Nation, 1990). Direct instruction is related to intentional learning. In intentional learning, learners may acquire vocabulary by paying direct attention to information (Schmitt, 2000). Nation (2001) states that vocabulary learning occurs through systematic and explicit methods and during this learning process, learners engage in intentional learning. In intentional learning, learners are informed that they will be tested after an engagement in a learning task. In order to achieve these tasks, they may intentionally use some strategies (Hulstijn, 2005). As for incidental learning, it is achieved by reading a text without the intention to learn vocabulary. Schmitt (2000) points out that when a language learner uses language for communicative purposes, incidental

learning may occur. It has been argued that one may manage to learn a large amount of vocabulary through incidental learning (Nation & Waring, 1997).

According to data from learners' interviews and self-reports, learners use strategies in order to learn vocabulary. Learners may use strategies independently of a teacher and these strategies are the most important ways of learning vocabulary (Nation, 1990). The easiest way of learning vocabulary for most students is to memorize the words that they do not know (Cohen & Aphek, 1980). In addition, they may use dictionaries, make up word charts, practise words, learn words in context, repeat words, use mental imagery, and review previously learned words (Naiman, Frölich, Stern, & Todesco, 1975; O' Malley & Chamot, 1991; Oxford, 1990). Nist and Olejnick (1995) state that dictionaries can be substantial contributors to vocabulary learning. Lewis (2000) maintains that keeping vocabulary notebooks may help learners see each word many times. Thus, this contributes to vocabulary learning, making the vocabulary active when they meet it. Since it is not possible for learners to acquire all the vocabulary they need in the classroom, it is important for them to acquire vocabulary through self-study by doing speaking activities with their classmates, guessing words through affixes and context in reading, collecting words on index cards and making word lists.

Read (2000) states that native speakers of various ages and with various levels of education may acquire a great many words. This vocabulary acquisition rate may be fast from childhood to the years of formal education and it may be at a slower pace during adulthood. The reason for this slower pace is that native speakers acquire words incidentally when they speak and write, rather than through direct instruction. Schmitt (2000) states that direct teaching may help beginner level

language learners until they have enough vocabulary knowledge to start making use of any unknown words they meet in context. Jamieson (1976), in his study of the vocabulary development of non-native speakers in an English-medium primary school, suggests that although in some situations non-native speakers develop as much vocabulary as native speakers, non-native speakers' vocabulary growth does not occur at the same rate as native speakers' vocabulary growth. In addition, the gap between native speakers' vocabulary size and that of adult learners of English as a foreign language is very large. Despite the fact that they study English for several years, many adult learners' vocabulary size is not even 5,000 word families. On the other hand, a study by Milton and Meara (1995) shows that non-native speakers may have significant vocabulary growth in the second language environment. Fifty-three European advanced level language learners, in a study abroad program, approached a rate of 2,500 words per year over the six months of the program. One may infer from the study that this rate of vocabulary development may be similar to first language vocabulary development in adolescence. A study with learners of English in India (Barnard, 1961) demonstrated that learners gained a 1,000 to 2,000-word vocabulary. In order to learn these words, they studied for five years, taking four or five English classes a week. Yoshida (1978) conducted a longitudinal study on a young English learner. The learner studied English two or three hours at school and the learner's parents did not speak English at home. The study showed that the learner added nearly 260 to 300 words to his productive vocabulary after studying English for seven months. His receptive vocabulary was about 2.2 times his productive vocabulary. One may infer from the study that his receptive vocabulary growth was nearly 1,000 words in a year.

There are a number of studies on vocabulary acquisition related to receptive and productive vocabulary. For example, some researchers have looked at the receptive or productive vocabulary size (Laufer, 1998; Laufer & Paribakht, 1998; Morgan & Oberdeck, 1930; Waring, 1997) while other researchers have looked at whether receptive knowledge is gained before productive knowledge (Aitchison, 1994; Channell, 1988; Melka, 1997). However, Webb (2008) states that the proficiency level of students and vocabulary teaching are two factors that may have an important effect on vocabulary size. Since no study has looked at the difference in amount of vocabulary acquired over the same amount of time taking into consideration learners' proficiency levels, it is necessary to investigate the effect of proficiency level on the rate of receptive and productive vocabulary acquisition, in conjunction with an examination of materials and instruction.

Statement of the problem

Researchers and teachers have long been interested in measuring learners' receptive and productive vocabulary size in order to see how much receptive vocabulary knowledge learners need to comprehend a text or a listening task or how much productive vocabulary knowledge learners need to speak or write (Webb, 2008). Some of these (Hazenbergh & Hulstijn, 1996; Laufer & Goldstein, 2004; Laufer & Nation, 1995; Mochida & Harrington, 2006) have looked at testing receptive and productive vocabulary knowledge, whereas others (Laufer, 1998; Laufer & Paribakht, 1998; Webb, 2005 & 2008) have looked at receptive and productive vocabulary learning, the development of passive and active vocabulary, and the relationship between passive and active vocabularies. However, no study has looked at the relationship between proficiency level and the rate of receptive and

productive vocabulary acquisition. Since vocabulary instruction and the proficiency level of students are two factors that are likely to have a substantial effect on the rate of vocabulary acquisition, the present study may be beneficial by filling the genuine gap in the literature related to receptive and productive vocabulary acquisition for different types of learners.

English is taught in both compulsory and voluntary preparatory classes at most universities throughout Turkey. Gaziosmanpaşa University is one of the universities where students have voluntary education in English. At the beginning of the year, students are given a proficiency test and are placed accordingly in either beginner or elementary classes. By the end of the year, both groups are expected to acquire an upper-intermediate level of vocabulary knowledge, though they start the year with different proficiency levels. At present, there are two different levels of students (beginner and elementary) in my institution. Elementary level students are expected to have a larger vocabulary size than beginner level students. However both groups are expected to have upper-intermediate vocabulary knowledge in the final exam. I would like to see to what extent proficiency level affects vocabulary acquisition receptively and productively and to estimate students' rate of receptive and productive vocabulary growth according to their different proficiency levels. Do proficiency levels affect the rate of vocabulary acquisition in a negative or positive way and how much receptive and productive vocabulary do students acquire in a period of a few months? In addition to this, I would like to investigate the contribution of materials and instruction to the vocabulary acquisition of students at different proficiency levels.

Research questions

This study will address the following questions:

1. What is the rate of vocabulary acquisition in Turkish EFL preparatory school students
 - a) at beginner level?
 - b) at elementary level?
2. What role do materials and instruction play in the vocabulary acquisition of these students?
3. What is the relationship between level of proficiency and rate of vocabulary acquisition of these students?

Significance of the study

There has been a lot of research on vocabulary size related to receptive and productive vocabularies. However, to my knowledge, no study has looked at how much vocabulary can be gained receptively or productively in a given period of time according to the proficiency levels of learners. Therefore, this study may contribute to the literature by providing a description of how or to what extent Turkish university preparatory school EFL learners acquire receptive and productive vocabulary, taking into consideration the effect of proficiency levels in English and the materials and instruction to which they are exposed.

Measuring learners' vocabulary size helps teachers estimate what words their students know and what frequency level they are most comfortable at. Knowing this provides teachers with necessary information for developing word lists for teaching, designing graded courses and reading texts, and preparing vocabulary tests (Nation,

1990). With the help of this study, EFL teachers may be made aware of the students' receptive and productive vocabulary size and the rate of vocabulary acquisition through which they may use activities and develop word lists and strategies, design graded courses, and prepare reading texts and vocabulary tests to foster receptive and productive vocabulary acquisition. In addition to that, this study may help EFL teachers see the effect of students' proficiency levels and the role of materials and teaching on students' rate of vocabulary acquisition.

Conclusion

This chapter included the background of the study, the statement of the problem, and the significance of the problem and the research questions. The next chapter will present the relevant literature on teaching and learning vocabulary, vocabulary size, and receptive and productive vocabulary. The third chapter will present the methodology, the participants, the instruments, and the data collection procedure. The fourth chapter will provide an analysis of the data. Finally, in the fifth chapter, conclusions will be drawn from the findings taking account of the research questions, and the pedagogical implications, limitations of the study and suggestions for further research will be discussed.

CHAPTER II: LITERATURE REVIEW

Introduction

This study aims to look at the relationship between proficiency level and the rate of receptive and productive vocabulary development of EFL learners, as well as the role of materials and instruction in vocabulary acquisition. This chapter reviews the literature on vocabulary, vocabulary acquisition, and vocabulary teaching and learning. In addition, rate of vocabulary acquisition and vocabulary size, and receptive and productive vocabulary are also examined in this chapter.

Words

Definition

Schmitt, Schmitt and Clapham (2001) state that “vocabulary is an essential building block of language” (p. 55). However, Read (2000) points out that the word is not an easy concept to define. While a lemma comprises a headword and some of its inflected and reduced (n’t) forms, a word family comprises a headword, its inflected form, and its closely related derivative forms (Nation, 2001). For instance, the lemma for *nation* includes *nation* and *nations*; however, the word family includes *nation*, *nations*, *national*, *international*, *nationalize* (Nation, 2001). Words are considered to belong to the same family when one can infer the meaning of a derived form from the base word with minimal effort (Nation, 2001; Read, 2000).

Receptive versus productive vocabulary

Since there are thousands of words in a language, it is almost impossible for a language learner to know all words with all their aspects. A learner knows different things about different words. He may know the form of a word but not its meaning, or come up with the meaning but not its form. A learner uses different words in different situations. The words a learner uses while speaking and writing may be different from the words he uses while listening and reading (Hulstijn, 1997). Nation (2001) and Schmitt (2000) maintain that vocabulary acquisition is identified as involving the progressive development of learners' mental lexicons. Words are at different stages of knowledge in a learner's mental lexicon, two aspects of which may be receptive knowledge and productive knowledge.

Researchers have written a great deal about receptive and productive vocabulary. Crow and Quigley (1985) point out that it is important to make a distinction between passive (receptive) and active (productive) vocabulary. However, researchers have done little work to distinguish between receptive and productive vocabulary. According to Melka (1982), people use the terms receptive and productive inconsistently. She claims that the distinction between receptive and productive is arbitrary. The terms receptive and productive are in relation to test items and degrees of knowing a word. They cannot be neatly separated. Receptive and productive knowledge is on the same scale and these two types of knowledge represent a continuum of knowledge. In contrast to Melka, Meara (1990) states that since active vocabulary has incoming and outgoing connections, other words may help activate them, whereas passive vocabulary needs external stimuli. That is, words belonging to passive vocabulary are activated by hearing or seeing their forms.

Passive vocabulary is not activated by associational links with other words. Active and passive vocabularies are not on a continuum, but they represent different kinds of associational knowledge. In this thesis, receptive and productive vocabularies are considered from Meara's point of view for the sake of convenience. As will be seen in the thesis, two separate instruments were used to measure receptive and productive vocabulary knowledge.

“The mechanics of vocabulary learning are still something of a mystery”, Schmitt, (2000, p. 4) states. However, one may be sure that second language learners do not acquire vocabulary instantaneously. They learn vocabulary items gradually, after being exposed to them several times (Schmitt, 2000). Learners may experience this incremental nature of vocabulary acquisition in a number of ways. Language learners may recognize and understand a word when they see it in a text or hear it in a conversation but be unable to use it on their own. Thus, this situation demonstrates that there are different degrees of knowing a word. These degrees of knowing may be thought of in terms of productive or receptive vocabulary knowledge. Productive knowledge of a word is to know about a word in order to use it while speaking or writing, whereas receptive knowledge of a word is to know about a word in order to use it while reading or listening (Crow, 1986).

According to Nation (2001, p. 26), “knowing words involves form, meaning and use.” Knowing and using a word receptively means that one should be able to recognize the word when one hears it and be familiar with its written form when one sees it. One should know its meaning and what it means in a certain context. In addition, one should recognize its structure, know its synonyms and antonyms, and recognize that the same word has certain collocations. On the other hand, from the

point of view of productive knowledge and use, one should be able to pronounce the word correctly with its correct intonation and spell it correctly in writing. One should know what word parts are needed to express the meaning, what word form may be used to express the meaning, and what other words one may use instead of this word. In addition, Schmitt (2000) maintains that a language learner does not have to use words receptively and productively at the same time. It is possible for one to see a student who may produce a word orally without any problems but cannot recognize it in writing. In the same way, one may see students who can often tell the meaning of a word in isolation but cannot use it appropriately in a context since they lack productive knowledge of collocation and register.

Nation (1990) points out that productive learning is more difficult than receptive learning, since productive learning involves extra learning of new spoken or written output patterns. Many L2 learners have more difficulty in using words productively in speaking and writing skills than recognizing words in listening and reading skills. In order to recognize words, learners may need to know only a few distinctive features of a word. However, for productive use, the learners' word knowledge has to be more precise (Nation, 1990). Webb (2005) states that a learner's receptive vocabulary may be larger than their productive vocabulary. In normal language learning conditions, receptive use generally receives more practice than productive use. For example, learners engage in more receptive activities such as looking up words in a dictionary, matching words with their definitions, or guessing from context, than productive activities such as writing exercises. Thus, one may infer that since vocabulary learning is predominantly receptive, it is very natural that learners gain more receptive knowledge than productive knowledge. Schmitt (2000)

states that language learners firstly acquire words receptively and they gain productive knowledge later.

High frequency words versus low frequency words

Mastering the complete lexicon of English is not possible for either second language learners or native speakers (Schmitt, 2000). One may infer that even native speakers may not acquire a large vocabulary. A large number of words cannot realistically be taught or learnt through explicit study. Thus, second language learners should pay attention to the most common words in their learning process since they may not learn the complete lexicon. Learners may benefit from knowing the most frequent words in any language since these words are the most useful and they give learners a basic set of tools for communication (McCarthy, 2001). One may see high-frequency words many times in a text. It is very important to pay attention to the 2,000 most frequent words because these words cover a very large proportion of the running words in spoken and written text and occur in all kinds of uses of the language, and learners should be taught these most frequent words (Nation, 2001). Nation (1990) assumes that about 87 percent of the words in a text are high frequency words. If a learner knows the most frequent 2,000 words, then he may understand most of the words in the text, although this may not be enough for complete understanding of the text.

On the other hand, learners may encounter a very large group of words which are called low frequency words. Learners see them infrequently since these words cover only a small proportion of texts (Nation, 2001). Proper nouns can be counted as low frequency words. Nearly four percent of the running words in a text are proper nouns. It is also possible to include technical words in the low-frequency

words list since they do not occur in all written texts, in contrast to high frequency words. Technical words are difficult to guess from the context. Learning technical words is closely connected with learning the subject. Thus, the reader should have sound background knowledge in that technical area (Nation, 1990). In addition to this, there are non-technical words that are seldom encountered. Many second language learners do not use these very low frequency words, preferring to use synonyms instead. Moreover, Nation (2001) states that it is possible to mark some low frequency words as being out-of-date, very formal, belonging to a particular dialect, or vulgar. Most low-frequency words in English are derived from Greek and Latin. While high frequency words are mainly short words which cannot be broken into meaningful parts, many low frequency words are comprised of more than one morpheme. For example, the word *impose* consists of two parts, *im-* and *-pose*, which occur in hundreds of other words – *imply*, *infer*, *compose*, *expose*, and *position* (Nation, 1990, p. 18).

Nation (1990) suggests that while teaching or learning vocabulary, teachers and learners should pay attention to high frequency words implicitly or explicitly since they occur in all kinds of texts very frequently. These words should be given high priority. However, teachers and learners should not spend so much time on low-frequency words since they are rarely met in one's use of the language. They cover a small proportion of any text. It is better to teach learners some strategies to deal with low frequency words.

Vocabulary Acquisition

One should know many things about a particular word (Nation, 2001). Ellis (1997) states that one should at least recognize a word and store it one's mental lexicon. In addition, the acquisition of the second language vocabulary requires a mapping of the word form onto a pre-existing conceptual meaning (Ellis, 1997). Furthermore, many researchers believe that learners acquire vocabulary incrementally (Schmitt, 2000; Nation, 1990). Schmitt (2000) states that if one needs to master a word, he should know a number of aspects of word knowledge. However, every aspect of word knowledge may not be learned, and some aspects may be mastered before others. For example, word meaning or spelling may be known by a learner; however, collocations may not be known.

If one sees a word for the first time, one picks up some sense of the form and meaning of that word. However, it is not possible for one to master the word fully in the first encounter with the word. When learners are exposed to a word many times, it may be possible for them to learn some other features of a word. For example, if one encounters a word in a written text, one may only recall the first few letters of the word. If one hears a word, then it is a verbal exposure and one may remember the pronunciation of the whole word. Henriksen (1999) provides a description of the various aspects of incremental development in vocabulary knowledge. The first aspect is the partial-precise knowledge dimension. In this dimension, learners may have varying degrees of knowledge a word from zero to partial to precise. The second aspect is the depth of knowledge dimension. Read (1993) broadly defines the concept of 'depth' as "the quality of the learners' vocabulary knowledge" (p. 357). Depth of knowledge requires mastery of a number of lexical aspects. The third aspect

is the receptive-productive dimension. The division between receptive and productive vocabulary is accepted by most researchers. They mainly agree that a learner firstly acquires a word receptively and then he uses the word productively (Henriksen, 1999; Nation, 2001; Read, 2000; Schmitt, 2000).

Furthermore, Schmitt (2000) points out that one may have good productive mastery over the spoken form of *predict*; however, one may not have good productive mastery over its written form. Various aspects of knowing a word need to be considered. Knowing a word requires more than just learning its meaning and form. If a learner needs to master the words like a native speaker or speak fluently, he should be aware of the aspects of word knowledge. The aspects of word knowledge are listed by Nation (1990) as follows.

1. The form of the word, which includes spoken form, written form and words parts
2. The meaning of the word, which includes form and meaning, concept and referents, and associations.
3. The use of the word, which includes grammatical functions, collocations, and how frequent the word is. (p. 31)

A native speaker of a language may need to know most or all of these aspects of word knowledge in his life in a wide variety of language situations, although it is difficult for him to have full command of each word in his lexicon (Schmitt & Meara, 1997). Nation (1990) states that most native speakers cannot spell or pronounce all the words they are familiar with, and they are uncertain about the meaning and use of many of them. Many words may be known receptively, but not

productively, and native speakers may not have knowledge of all of the above aspects of word knowledge for the words that they know receptively.

Thus, to know a word requires familiarity with all of its features. In the case of learning a second language, vocabulary acquisition is a very difficult process. Thus, second language learners may need much time to master a word fully. From this perspective, vocabulary acquisition is incremental (Schmitt, 2000). In order to speed up vocabulary learning, a direct vocabulary teaching approach may be employed by instructors (Nation, 1990).

Direct vocabulary teaching

There are thousands of word families in a language and it is difficult to teach or learn all of them. However, second language learners may acquire vocabulary through direct teaching, and their learning context differs from children learning their native language (Schmitt, 2000). Nation (2001) states that second language learners acquire words through systematic and explicit approaches in direct instruction. Teachers should explain the meanings, pronunciation and spelling of the words explicitly. For example, teachers may write sentences using the target words in different contexts and students may do some exercises on the words using a dictionary. For beginner level language learners, it may be necessary to teach difficult words through direct instruction until students learn enough vocabulary items to start guessing the meaning of words from the context (Schmitt, 2000). Through direct instruction activities, learners commit word forms to memory along with their meanings (Hulstijn, Hollander, & Greidanus, 1996).

Through direct instruction, learners acquire words with their definition, translations, or in isolated sentences (Nation, 1990). Since high frequency words are important for using the language to communicate, these words should be learned by direct instruction (Nation, 1990). If learners need to acquire vocabulary items in a short time period, then direct instruction may be preferred for the learners (Paribakht & Wesche, 1997). In addition, Tekmen and Daloğlu (2006) state that sometimes instructors teach words directly in order to remove an obstacle that prevents learners from comprehending a text or conveying a message. Oxford and Scarcella (1994) maintain that direct instruction is beneficial and necessary especially for adult learners since they may not learn a great deal of vocabulary only through meaningful reading, listening, speaking, and writing. Learners should be exposed to direct instruction for long-term retention and use of a large amount of vocabulary. Explicit learning focuses attention on the information to be learned (Schmitt, 2000).

Sökmen (1997) highlights a number of principles of direct vocabulary teaching (p. 239). The first principle is building a large sight vocabulary. Second language learners need help developing a large sight vocabulary in order to understand word meaning automatically (Schmitt, 2000). The second principle is integrating new words with old. It is done by some form of grouping similar words together. However, teaching similar words together may cause “cross-association”. Thus, learners may confuse which word goes with which. Nation (1990) states that about 25% of similar words taught together are typically cross-associated. The third principle is providing a number of encounters with a word. When a learner encounters a word five or six times, he may truly acquire it (Nation, 1990). The fourth principle is promoting a deep level of processing. Students learn words well

when a deeper level of semantic processing is required because learners encode the words with elaboration (Craik & Lockhart, 1972, cited in Sökmen, 1997). One way to involve the learner in deeper processing is to describe a target word to the student until the meaning is clear (Nation, 1990). The fifth principle is facilitating imaging and concreteness. Clark and Paivio (1991) point out that the mind has a network of verbal and imaginal representations for words and acquiring new vocabulary requires successive verbal and nonverbal representations that are activated during initial study of the word pairs. As for concreteness, learning is supported when material is made concrete (psychologically “real”). This may be achieved by giving personal examples, relating words to current events, and providing experiences with the words. The sixth principle is using a variety of techniques, and encouraging independent learning strategies. Sökmen (1997) gives a number of instructional ideas for teachers, such as ‘dictionary work’, word unit analysis, mnemonic devices, semantic elaboration, practicing collocations and lexical phrases, and oral production. Dictionary work and practicing good dictionary skills are useful as independent vocabulary acquisition strategies (Oxford, 1990). Nation (1990) maintains that students who use several vocabulary learning strategies are the most successful ones. As for encouraging independent learning strategies, it is not possible for students to learn all the vocabulary they need in the classroom. Thus, teachers should help students learn how to continue to acquire vocabulary on their own (Cohen & Apeh, 1980; Nation, 1990).

However, direct instruction of vocabulary may only provide some elements of lexical knowledge. It may not help learners master a great many vocabulary items since teachers will not be able to present and practice all of the creative uses of a

word that a student might come across (Schmitt, 2000). Another way for second language learners to learn large amounts of vocabulary is through indirect or incidental learning of vocabulary (Nation, 1990).

Incidental learning

Large quantities of words may not be learned only through intentional word-learning activities. Many words may be picked up during listening and reading activities. This ‘picking up’, usually referred to as incidental learning, occurs when the listener or reader tries to comprehend the meaning of the language heard or read, rather than to learn new words. Incidental learning may be defined as the accidental learning of information without the intention of remembering that information (Schmidt, 1994). According to Hulstijn (2005) incidental learning means learning from experiences which are not intended to promote learning; learning is not designed or planned, and learners might not be aware that learning is occurring. Incidental learning may happen during extensive reading, listening to television and radio, and guessing from context (Nation, 1990).

It is believed by many researchers that learners should encounter new vocabulary in meaningful contexts (Hulstijn, 1997) and they should be exposed to new vocabulary repeatedly in many different contexts. Krashen (1989) also states that learners gain a large number of words with the help of reading. Similarly, Joe (1998) and Fraser (1999) point out that learners gain a large proportion of their vocabulary incidentally from written text. It is true that incidental learning occurs, particularly through extensive reading in an input-rich environment, but at a slower rate, and acquisition while reading and growth of vocabulary knowledge through extensive reading is widely suggested (Huckin & Coady, 1999; Read, 2004). For

example, as a result of her study, Laufer (2003) suggests that students learn more vocabulary by reading than through direct instruction. Grabe and Stoller (1997) also reveal a similar finding that participants improve their vocabulary and reading comprehension through extensive reading. Pigada and Schmitt (2006) concluded in their study that through extensive reading, students increase their vocabulary, at least in terms of spelling, meaning and practical knowledge of the target words.

Nation (1990) states that language learners may enlarge their vocabulary partly from reading and listening. However, Hulstijn, Hollander and Greidanus (1996) give several reasons why readers often fail to learn the meanings of previously unknown words encountered in texts:

1. Sometimes, learners simply fail to notice the existence of unfamiliar words or believe that they know a word, when, in fact, they do not.
2. They sometimes notice the existence of unfamiliar words, but they decide to ignore them.
3. They primarily focus on the meaning and they may ignore the unfamiliar word form. In order to learn, they should not only focus particularly on the meaning of the target word, but also on the connection between the word's form and meaning
4. Often, the words may be so difficult that they may not be able to guess the words from the context. Learners also frequently make erroneous inferences and, therefore, they incorrectly learn words.
5. Readers do not resort to their dictionaries, especially when they read texts longer than a few hundred words.

6. Lastly, when learners once encounter a word in a text, this does not mean that acquisition of that word is guaranteed (p. 328).

On the other hand, some researchers have pointed out the factors which may promote incidental vocabulary learning. First, if an unknown word is explained elaborately, it may positively affect incidental learning. Thus, it may be easy for a learner to remember the inferred meaning (Mondria & Wit-de Boer, 1991). Second, readers pay more attention to the words in texts if the topic of the text is familiar to them (Hulstijn, 1993). Third, readers who have high verbal ability may pick up more words than readers who have low verbal ability. Fourth, dictionary use may positively affect incidental vocabulary learning (Knight, 1994).

Schmitt (2000) states that although explicit and incidental approaches have advantages and disadvantages, they are both necessary and should be seen as complementary in the course of learning vocabulary. One may learn a substantial number of high frequency words through explicit instruction since they are very important for using the language for communication. However, low frequency words should be learned incidentally through reading because they are not frequently used and they are large in number.

Vocabulary size

English is studied as a foreign language in many countries. At universities students have been educated through the national language in these countries; however, they need to study English texts related to their subjects. Thus, it may be useful to estimate a realistic minimum vocabulary size for these students. Knowing the first 2,000 words may increase how much input they are able to understand. Thus, students may understand more of the speech they are exposed to and more of

the written texts they read (Ellis, 1997). Acquiring 3,000-5,000 word families may be enough to begin to read authentic texts (Nation & Waring, 1997). If the material is challenging, as in university textbooks, students' vocabulary size may need to be closer to 10,000 word families (Hazenberg & Hulstijn, 1996). Nation and Waring (1997) state that if a learner wants to have a vocabulary similar in size to that of a native speaker, then a vocabulary size of 15,000-20,000 word families may be enough.

Language learners have certain vocabulary thresholds that determine whether they will be able to use or understand language successfully (Webb, 2008). For example, Nation (2001) states that receptive knowledge of the 2,000 most frequent word families may help learners to understand 90% of the words in spoken discourse. There are 54,000 word families in English and knowing at least 5,000 word families is required for reading to be enjoyable. Although educated adult native speakers know around 20,000 of these word families, they may manage reading comprehension with the much smaller number of 3,000-5,000 word families. In addition to this, 2,000-3,000 word families may be enough for productive use in speaking and writing (Hirsh & Nation, 1992).

There are several estimates of receptive and productive vocabulary size of non-native speakers in the literature. These studies have concluded that learners' receptive vocabulary is double that of productive vocabulary (Clark, 1993; Marton, 1977) or that receptive vocabulary may be even larger. For example, Laufer (1998) conducted a study in a typical comprehensive high school in Israel. She compared the amount of receptive and productive vocabulary in English known by 16-year-old and 17-year-old language learners in an L2 learning context using three different

types of tests. Test formats included the terms such as passive, controlled active and free active. The students' receptive vocabulary was measured by using the Levels Tests (Nation, 1983 & 1990, cited in Nation, 2001). Productive vocabulary was measured by using the productive version of the Vocabulary Levels Test (Laufer & Nation, 1999) and in order to measure lexical richness in free written expression, the Lexical Frequency Profile (Laufer & Nation, 1995) was used. The study demonstrated that with instruction, passive vocabulary size progressed well, and controlled active vocabulary also progressed but less than the passive. Free active vocabulary did not progress at all. Passive vocabulary size was larger than controlled active in both groups of subjects, but the gap between the two types of knowledge increased in the more advanced groups. The students at higher proficiency levels improved their free active vocabulary more than the students at lower proficiency levels.

In another study, Laufer and Paribakht (1998) used the same three measures to look at English as a second language (ESL) and English as a foreign language (EFL) learners. This was an important study since it investigated whether there was a similar passive/active vocabulary relationship in an ESL learning context as in an EFL context. Their results confirmed the general perception that learners' passive vocabulary is larger than their controlled active vocabulary. They also showed that learners with larger passive vocabularies also had larger controlled active vocabularies and slightly better free active vocabularies in written expression. In addition, they found that controlled active vocabulary development lagged behind and did not grow at the same rate as the learners' passive vocabulary, whether in an ESL or in an EFL context.

Waring (1997) conducted a study using the same Levels Tests that Laufer used. However, he used Japanese translations for the meanings on the receptive levels test. He added a 1,000 word level section below the usual 2,000 word starting level. The study demonstrated that language learners always gained higher scores on the receptive test than on the controlled productive test, with the difference in receptive and productive scores increasing at the lower-frequency levels of the tests. In other words, as the learners' vocabulary increases, their receptive vocabulary is larger than their productive vocabulary.

Webb (2008) investigated the receptive and productive vocabulary sizes of L2 learners. The participants were 83 native speakers of Japanese from three second-year EFL classes at a university in Japan. Two instruments, receptive and productive translation tests, were used to measure the participants' vocabulary size at three word frequency levels. The results showed that the total receptive vocabulary size of the students was larger than their productive vocabulary size. Both receptive and productive scores decreased as word frequency decreased and the difference between productive and receptive vocabulary size increased as frequency decreased. Webb concluded that learners who have a larger receptive vocabulary are likely to know more of those words productively than learners who have a smaller receptive vocabulary.

It may be inferred from these four studies that learners' receptive vocabulary size is greater than their productive vocabulary size and the results support the earlier findings of Morgan and Oberdeck (1930) that the size of receptive vocabulary exceeded that of productive vocabulary at five levels of word frequency. However, the ratio of receptive vocabulary to productive vocabulary may not be constant. As

learners increase their vocabulary, they may gain a greater proportion of receptive vocabulary. Learners may know a large proportion of the high frequency words both receptively and productively. Even though the various kinds of vocabulary knowledge are related to each other, one may see these kinds of vocabulary knowledge may develop in different ways.

It is difficult to carry out effective research on measuring the size of the lexicon. Meara and Nation propose the use of some standardized tests, the Levels Test and Eurocentres Vocabulary Size Test. They are simple to administer and sensitive to testing words from different frequency bands or a range of different specialist areas of lexis (Nation, 2001). They will be described in the next section.

Testing vocabulary size

A fundamental assumption in vocabulary testing is that one assesses knowledge of words (Nation, 2001). Learners require vocabulary tests in order to monitor their vocabulary development in language learning and to assess whether their vocabulary knowledge meets their communication needs (Read, 2000).

Before starting to consider how to test vocabulary, one should first discover the nature of what one wants to assess (Nation, 1990). In L2, language learners refer to their dictionaries to learn the meanings of words. From this perspective, a learner's vocabulary knowledge involves knowing the meanings of words. Thus, the purpose of a vocabulary test is to figure out whether language learners match each word with a synonym, a dictionary-type definition or an equivalent word in their L1 in vocabulary tests (Read, 2000; Oxford, 1990).

Read (2000) points out that one needs to answer a number of questions in order to realize what he needs to assess about vocabulary (p. 16). The first question is: does vocabulary consist of single words or should one consider words in terms of larger lexical items? One may encounter many fixed expressions (idioms) in a language and knowing these expressions may affect one's comprehension and production. When the definition of a lexical item is commonly agreed, the second question is: what does it mean to know such an item? For beginner level language learners, knowing a word means being able to match the unknown word with an equivalent word in their L1 or with an L2 synonym. Teachers conventionally design vocabulary test items on this basis. However, when learners' proficiency level improves, they are required to know more about words. Thus, alternative testing methods are used to assess lexical items. The third question is: what is the nature of the construct that one sets out to measure with a vocabulary test? Learners should know a lot about the vocabulary, grammar, pronunciation and spelling of the target language, but they also should use this knowledge for communicative purposes.

When one mentions vocabulary size, one refers to the number of words that a person knows (Read, 2000). Researchers have been attempting to measure native speakers' and second language learners' vocabulary sizes for a long time because it provides a sort of goal for second or foreign language learners. There are two major methods of assessing vocabulary size. The first method is based on sampling from a dictionary and the second method is based on a corpus or a frequency list derived from a corpus. In the first method, native speakers' total vocabulary size is measured by taking a sample of words from a large dictionary. Learners are tested on those words. As for second language learners, researchers try to estimate how many of the

more common words second language learners know based on test items created from a word-frequency list (Nation, 1990; Laufer, 1998).

When assessment of vocabulary knowledge is needed, teachers or researchers may use different test types for a variety of purposes (Nation, 2001). While measuring vocabulary size, researchers or teachers may use some test formats which are widespread (Read, 2000). These test formats are:

1. Multiple-choice items of various kinds
2. Matching words with synonyms or definitions
3. Supplying an L1 equivalent for each L2 target words
4. The check list (yes-no) test. This test asks students to say whether or not they know a word. (Read, 2000, p. 87)

Read (2000) states that there are two well known vocabulary tests. The two tests are Nation's Vocabulary Levels Test and Meara and Jones's Eurocentres Vocabulary Size Test (EVST) (p. 14).

These two tests are used for measuring vocabulary size. The Eurocentres Vocabulary Size Test is similar to the Vocabulary Levels Test in the sense that it is used to make an estimate of a learner's vocabulary size using a graded sample of words. These words cover a number of frequency levels. It is not a pen-and-paper test. Researchers administer the test by computer. The Vocabulary Levels Test is a diagnostic test and consists of five parts. These five parts include five levels of word frequency in English from the 2,000, 3,000, and 5,000 word levels, and words from the University word list and the 10,000 word level. In order to define the levels, researchers refer to the word frequency data in Thorndike and Lorge's (1944, cited in Schmitt, Schmitt, & Clapham, 2001) list (Read, 2000). The productive version of the

Vocabulary Levels Test (Laufer & Nation, 1999) is a cued recall test that involves subjects completing a word in a sentence. To limit the answers to the target vocabulary, the first letters of the words are provided (e.g. they will restore the house to its orig _____ state).

Rate of vocabulary acquisition

Vocabulary size is closely related to vocabulary growth, that is, to the number of new words students learn each year (Schmitt, 2000). English native speaker students may learn a great number of words during their early school years, as many as 3,000 per year on the average, or eight words per day. The number of words students learn varies. While some students learn eight or more words per day, some learn only one or two. For instance, early research on vocabulary growth resulted in estimates that students learned from as few as 1,000 words to as many as 7,300 new words per year (Beck & McKeown, 1991). For English-speaking university graduates, in order to have a vocabulary size of around 20,000 word families, one should expect that English native speakers will add roughly 1,000 word families a year to their vocabulary size (Nation & Waring, 1997). Vocabulary growth varies tremendously among students, and many learners acquire vocabulary knowledge at much lower rates than other students do. According to Beck and McKeown (1991), some factors may contribute to differential rates of vocabulary growth. For example, one of the factors is biological factors such as general language deficits and memory problems. The other factor is that there is a strong relationship between socio-economic status and vocabulary knowledge, and home factors may contribute a great deal to students' vocabulary knowledge.

Schmitt (2000) remarks that in contrast to the impossibility of learning every word in English, those figures mentioned (e.g. 1,000 words per year) above indicate that although ambitious, it is possible for second language learners to build a native-sized vocabulary. For example, Eringa (1974, cited in Melka, 1997) estimates that, in L2, after studying six years of French, high school students' vocabulary size may be 4,000-5,000 words, for a rate of 666-833 words per year and they may have a productive vocabulary of 1,500-2,000 words, for a rate of 250-333 words per year. Similarly, a study of a young second language learner by Yoshida (1978) found that the learner had about 260 to 300 words, for a rate of 37-43 words per month in his productive vocabulary after seven months of studying English. He only studied English for two or three hours a day at a nursery school. Tests demonstrated that his receptive vocabulary was about 2.2 times his productive vocabulary. This meant that he gained a receptive vocabulary of about 1,000 words in a year.

A small study by Jamieson (1976) looked at the vocabulary growth of non-native speakers in an English-medium primary school and found that, in a foreign language situation, non-native speakers' vocabulary grew at the same rate as native speakers' vocabulary. However, the initial gap that existed between the two groups was not closed.

In the literature, there is some encouraging news. In their study, Milton and Meara (1995) estimate that European exchange students learned an average of 275 English words per half year at home, whereas their vocabulary increase during six months at a British university averaged 1,325, a growth rate about five times larger in magnitude. They studied English in an English medium environment. However, they did not take English-language courses. Their courses included management,

science, and literature. There was a great deal of variation in the students' vocabulary improvement; however, most of them had the advantage of immersion into the L2, with the weaker students making the largest gains.

Laufer (1998) compared the amount of passive and active vocabulary of 16-year-old and 17-year-old learners in one year of school instruction in an EFL situation. The results showed that passive vocabulary increased by 1,600 word families in one year of school instruction, for a rate of approximately four words per day. The results of controlled active vocabulary showed non-linear progress. The 11th graders knew 850 words more than the 10th graders. As for the free active vocabulary, in spite of an impressive increase in passive vocabulary and good progress in controlled active vocabulary size, learners did not progress well in terms of free active vocabulary.

It has been claimed that for each year of early life, native speakers add on average 1,000 word families to their vocabulary (Nation & Waring, 1997). These goals are manageable for non-native speakers of English, especially for those learning English as a second language rather than a foreign language. However, students may show different rates of vocabulary acquisition. Webb (2008) ascertains that the proficiency level of students is a factor that is likely to have a substantial effect on vocabulary size. In the next section, the effect of proficiency levels on the vocabulary size of language learners will be reviewed.

Proficiency levels and rate of vocabulary acquisition

Many second language acquisition researchers believe that sufficient lexical knowledge is the essential component in developing language proficiency (Grabe & Stoller, 1997; Read, 2000; Nation, 2001). However, it is possible that the level of language proficiency affects how much vocabulary is learned. For example, Swanborn and de Glopper (2002) concluded in their study that the learner's level of reading ability was a significant factor in all three reading purposes: reading for fun, reading to learn about the topic of the text, and reading for text comprehension. Their results demonstrated that low ability readers learned very few words incidentally and that high ability readers were able to define up to 27 of every 100 unknown words when reading for text comprehension. That is, the study showed the difference between the proficiency levels since the higher level learners acquired more vocabulary than the lower level learners.

In a study examining the effect of topic familiarity, L2 reading proficiency, and L2 passage sight vocabulary, Pulido (2003) found significant positive correlations between L2 reading proficiency and L2 passage sight vocabulary and incidental vocabulary acquisition. In addition to this, reading proficiency was shown to have greater impact on lexical gains and retention than did sight vocabulary. The study demonstrated that the level of proficiency was a factor in vocabulary acquisition.

Laufer and Paribakht's (1998) study investigated the relationship among three types of vocabulary knowledge (passive, controlled active, and free active) of adult learners of English in Israel and in Canada. They examined the effect of four variables on the relationship between passive and active vocabulary: passive

vocabulary size, context of learning, length of residence in L2 context and knowledge of a related language (French). The subjects were at the intermediate and advanced proficiency levels in both EFL and ESL contexts. The result showed that the advanced students in both EFL and ESL contexts had higher mean scores than the intermediate students in both EFL and ESL contexts in all types of vocabulary knowledge. In addition, in respect to controlled active vocabulary, the advanced students in the EFL and ESL contexts had significantly higher mean scores than the intermediate students. That is to say, the different proficiency levels between the groups affected their vocabulary acquisition. The advanced students acquired more vocabulary than the intermediate students.

Tekmen and Daloğlu (2006) conducted a study looking at incidental vocabulary learning in terms of the relationship between proficiency level and number of words acquired. In this study, results showed that the advanced group gained a significantly greater number of words through reading than the intermediate and upper-intermediate groups. However, even though the upper-intermediate group acquired a greater number of new words than the intermediate group, the difference in gains between these two groups was not statistically significant. It may be inferred from the study that although the difference between the intermediate and upper-intermediate students' overall vocabulary scores was not statistically significant, the difference between their levels may have been small enough to blur any real distinctions between the two groups in terms of lexical acquisition.

These studies demonstrate that learners who differ in their proficiency levels may develop their vocabulary at different rates in both L1 and L2 contexts. Read (2000) suggests that an issue that has not received sufficient attention in lexical

research is the relationship between language proficiency and a learner's vocabulary size. Similarly, Webb (2008) points out that the proficiency level of students and vocabulary instruction are two factors that are likely to have a substantial effect on vocabulary size. Since no study has looked specifically at the difference in the amount of vocabulary acquired over the same amount of time taking into consideration learners' proficiency levels, there is a need to investigate the relationship between proficiency level and the rate of receptive and productive vocabulary acquisition.

Conclusion

This chapter focused on the literature relevant to the study. Vocabulary acquisition, teaching and learning vocabulary, receptive and productive vocabulary, vocabulary size, and rate of vocabulary acquisition were reviewed in this chapter. Information on the previous research about the receptive and productive vocabulary was briefly presented to provide the general framework for the present study. It has been revealed that there has been no research on the relationship between proficiency level and the rate of receptive and productive vocabulary acquisition. The next chapter will present the methodology of a study that attempts to fill the gap in the literature.

CHAPTER III: METHODOLOGY

Introduction

This study investigates the relationship between proficiency level and the rate of receptive and productive vocabulary acquisition. It also examines the role of materials and instruction in vocabulary acquisition.

The study addresses the following research questions:

1. What is the rate of vocabulary acquisition in Turkish EFL prep school students
 - a) at beginner level?
 - b) at elementary level?
2. What role do materials and instruction play in the vocabulary acquisition of these students?
3. What is the relationship between level of proficiency and rate of vocabulary acquisition of these students?

In this chapter, information about the participants, instruments, procedures of the study, and methods of the data analysis will be provided.

Setting

This study was conducted at Gaziosmanpaşa (GOP) University English Language Preparatory School. The department consists of two sections: preparatory classes and foreign language classes in faculties and/or schools, both of which provide students with foreign language education. Attending the preparatory program is not compulsory at GOP University, but all the students from every department are allowed to attend the program. A placement test is conducted in order to select and

place the students in appropriate classes in the beginning of the term. Students are expected to have an upper-intermediate English language level and understand what they read or hear in the foreign language and communicate in both written or spoken language when they graduate from the program.

When the research was conducted, there were 68 enrolled students and four classes in the preparatory program at GOP University. Two of the classes were beginner level, one of which was an evening class, and the other two classes were elementary level, one of which was also an evening class. Beginner level students are exposed to 26 hours of English instruction and elementary level students are exposed to 22 hours of English instruction every week. Beginner level students take a main course class for 12 hours and have 12 further hours of focused practice. Elementary level students take a main course class for 10 hours and have 10 further hours of focused practice. Both levels have two hours of additional reading and vocabulary classes. In main course lessons, beginner and elementary level students are taught grammar, vocabulary and the four skills. In the focused practice lessons, students have more exercises which are parallel to the main course lessons. The purpose of the reading classes is to improve students' reading skills and develop their vocabulary knowledge. Moreover, in order to improve their receptive skills, students have two hours of video lessons included in the focused practice lessons. Students take several pop quizzes and three mid term exams in an academic year. At the end of the year, students must take a final exam. According to their scores, students get a certificate which shows their proficiency level.

Participants

The participants were 68 beginner and elementary level students. Thirty-nine of the participants were females and 29 of them were males. The participants' ages ranged between 18 and 32. Most of the participants had taken English classes at high school before attending preparatory school. The information about the participants can be seen in Table 1.

Table 1 – Information about the participants

Gender	Beginner (Prep.2- 4)	Elementary (Prep. 1- 3)
Males	18	11
Females	19	20

Five teachers in the preparatory school also participated in the study. All of the five participant teachers graduated from an English Language Teaching program. Their teaching experience ranged from 1 to 19 years. Four of the five participant teachers had master's degrees. Educational background information about the participant teachers can be seen in Table 2.

Table 2 – Teachers' educational background information

Background Information			
Participant Teachers	<i>Graduation Program</i>	<i>Master's Degree</i>	<i>Teaching Experience</i>
Teacher A	ELT	√	19 years
Teacher B	ELT	√	5 years
Teacher C	ELT		3 years
Teacher D	ELT	√	11 years
Teacher E	ELT	√	1 year

Instruments

This study included both quantitative and qualitative data. The quantitative data was collected through Vocabulary Levels Test. The tests were made up of four sections, the receptive and productive 1,000 word level tests and the receptive and productive 2,000 word level tests. The tests (all four sections) were used as pre-tests and post-tests in the study. The qualitative data was gathered from the materials used by the teachers and the students during the research period and from interviews with the teachers in this study.

Receptive Vocabulary Levels Test

The Receptive Vocabulary Level Tests (Nation, 1990) comprised two sections, the 1000 word level test and the 2000 word level test. In the 1000 word level receptive test (R1K, where “K” stands for “thousand”), students answered 39 items by writing T if the sentence was true, N if it was not true, and X if the students did not understand the sentence (see Appendix A for the 1000 word level receptive test). In the 2000 word level receptive test (R2K) (Schmitt, Schmitt, & Clapham 2001), students answered 30 items by matching one of six words to one of three definitions (see Appendix B for the 2000 word level receptive test). The words in the definitions come from West’s General Service List of English Words (1953, cited in Nation, 2001)

The Vocabulary Levels Test was originally designed by Paul Nation (1983, 1990, cited in Nation, 2001). It was based on West’s (1953, cited in Nation, 2001) General Service List (GSL). The Levels Test is composed of separate sections which measure a learner’s vocabulary knowledge from a number of distinct frequency

levels. The original Levels Test included the 2,000, 3,000, 5,000 and 10,000 frequency levels. The new version of the Levels Test (R2K), which was developed by Schmitt, Schmitt and Clapham (2001), is composed of words from the lists drawn up by Thorndike and Lorge (1944, cited in Schmitt, Schmitt, & Clapham, 2001), Kucera and Francis (1967, cited in Schmitt, Schmitt, & Clapham, 2001) and from the General Service List (GSL) (West, 1953, cited in Schmitt, Schmitt, & Clapham, 2001). In this test, words are taken in a stratified sampling from the Thorndike and Lorge list, with reference to frequency data from Kucera and Francis and the GSL. The target words for the test used in this study are taken from the 2,000-level word list, while the definitions are taken from the 1,000-level word list. As for the 1000 word level receptive test (R1K), the test measures the first 1,000 words of the General Service List (West, 1953, cited in Nation, 2001).

Productive Vocabulary Levels Test

The Productive Vocabulary Levels Test was developed by Laufer and Nation (1999). The test samples 18 items at each of the 2,000, 3,000, 5,000, University Word List (UWL), and 10,000 word levels. The test uses the items from the original Levels Test.

The Productive Vocabulary Level Test comprised two sections, the 2,000 word level test (P2K), which consisted of 18 items (see Appendix C for the 2,000 word level productive test) and the 1,000 word level test. The productive 1,000-word level test (P1K) consisted of 31 items (see Appendix D for the 1,000 word level productive test). For both the productive 2,000 and 1,000 word level tests, the structure is a c-test style. The students were presented with the words in isolated sentences containing blanks; however, some of the letters of the words were already

given in order to limit the possibilities of word choice to complete the sentences (e.g. they will restore the house to its orig ____ state). Since a productive 1,000 word level test (P1K) did not exist, it was prepared by the researcher. While developing the 1,000 level productive test, the target words were chosen from the words tested in the 1,000 level receptive test. The researcher wrote the sentences for this test by using high frequency words (words within the first 500 most frequent words), which were checked by putting the sentences into VocabProfiler (<http://www.lex tutor.ca/vp/eng/>). The researcher developed two tests, which were version A and version B, to determine the appropriate number of letters to be given as clues to the target words. In order to be sure whether the target words had enough clues for students to answer, the researcher asked colleagues to do the two forms of the tests. After considering the colleagues' feedback, the researcher decided how many letters to give as clues to the target words, made appropriate changes and decided on a single version of the test.

The receptive and productive 1,000 word level tests and the receptive and productive 2,000 word level tests were piloted at Hacettepe University. Twenty-two elementary level students participated in the pilot study. Participants in the pilot study finished the tests in 45 minutes without having trouble with the instructions or any part of the test.

Oral interviews

Oral interviews with the instructors were conducted after the administration of the vocabulary size tests at the beginning of April. The instructors were interviewed one by one in a quiet room. The researcher wanted to learn their general attitudes towards vocabulary and vocabulary instruction during the research period.

They were asked about how they dealt with vocabulary during the research period, whether they focused on receptive or productive knowledge of words, whether they focused only on the vocabulary words highlighted by the textbook, and whether they taught or encouraged any vocabulary learning strategies (see Appendix E for the interview questions). The interviews were held in English. The interview protocols were tape-recorded and transcribed for data analysis soon after.

Materials evaluation

The materials were evaluated in terms of vocabulary exercises and the frequency levels of the vocabulary by the researcher. The evaluation included the pre-intermediate level of the textbook *Success* and the elementary level of a reading and vocabulary course book called *Focus on Reading* (Flaherty & Bean, 2006). The course book *Success* is composed of two books. The first one was the students' main course book (McKinlay & Hastings, 2007), and the second one was the workbook (White & Fricker, 2007), which was used in the focused practice course. During the research period, the beginner students studied ten units from the pre-intermediate level main course book and workbook. The elementary students studied the same ten units, along with two further units from the same books. Both the beginner and elementary students studied the same four units from the reading and vocabulary course book. The vocabulary frequency percentages, number of vocabulary exercises (receptive and productive), and vocabulary exercise types were evaluated in order to see what vocabulary the students were exposed to during the research period.

Procedure

The purpose of the study was determined in November. The design of the study and the participants were determined at the beginning of December. After that, permission to conduct the study was received from the director of the program.

The productive 1,000 word level test was designed in the first week of December. The pilot study for all four tests was conducted at Hacettepe University on the 12th of December. The pre-test was administered on the 29th of December before the participants finished the first semester at Gaziosmanpaşa University. Before administering the tests, the researcher talked to the teachers on the phone and informed them about the test formats and concepts. The participants' teachers administered the tests in the classroom settings. Each student completed the 1,000 level productive and receptive vocabulary tests and 2,000 level productive and receptive vocabulary tests successively. In order to help students understand the instructions easily, L1 instructions were given in addition to L2 instructions for both receptive and productive sections. Firstly, students were given the productive version of the 1,000 word level test and then the receptive version of the 1,000 word level test. Next, they were given the productive version of the 2,000 word level test and then the receptive version of the 2,000 word level test. The tests were completed during one class hour. The post-tests were given in the same way on the 7th of April in the second term. The pre-tests and post-tests were the same.

While the receptive tests were marked by the researcher, the productive tests were marked by two other experienced EFL teachers. Right and wrong answers were determined according to an answer key for both receptive and productive tests. While marking the receptive 1,000 word level test, each correct True (T) and Not True (N)

was scored as one point. For the receptive 2,000 word level test, each correct match was awarded one point. A score out of 39 for the 1,000, and of 30 for the 2,000 word level test was given by the researcher. While marking the productive tests, a score out of 31 for the 1,000, and of 18 for the 2,000 was given by the researcher and the second rater. Spelling errors were accepted as long as it was clear that the students knew the word. The raters did not pay attention to grammatical mistakes. The inter-rater reliability was 100% in marking the productive tests.

Data analysis

This study included quantitative and qualitative data. Quantitative data was gathered from the receptive and productive vocabulary tests. The data collected from the tests was analyzed through Statistical Package for the Social Sciences (SPSS) Version 11. The mean values and standard deviations of scores on the receptive and productive pre- and post-tests were computed for each proficiency level. The groups were compared to make sure that they were similar. The pre- and post-test scores and gain scores of the two groups, the beginner and elementary, were also compared. Through extrapolation and calculation of the number of words that the groups learned per hour during the research period, the rate of acquisition for each group was determined.

In order to analyze the tape-recorded interviews, they were transcribed. The researcher read the transcriptions many times and searched for different points relating to the way instructors' dealt with vocabulary and vocabulary instruction during the research period. The materials were evaluated in order to see how much and what vocabulary exposure the beginner and elementary groups had during the research period. The vocabulary exercises in the materials were examined to

determine what kind of vocabulary exercises the groups studied. In addition, highlighted vocabulary words in the vocabulary exercises and all of the vocabulary in the materials which cover the units that the groups studied during the research period were examined in terms of their frequency levels.

Conclusion

This chapter provided detailed information about the participants, the instruments used in the study, the data collection procedure, and the methods of data analysis. The next chapter will present the results of the data analysis.

CHAPTER IV: DATA ANALYSIS

Introduction

This study was designed to investigate whether proficiency level is a factor in students' rate of receptive and productive vocabulary acquisition, as well as the roles of instruction and materials.

The answers to the following questions were sought in the study:

1. What is the rate of vocabulary acquisition in Turkish EFL preparatory school students
 - a) at beginner level?
 - b) at elementary level?
2. What role do materials and instruction play in the vocabulary acquisition of these students?
3. What is the relationship between level of proficiency and rate of vocabulary acquisition of these students?

The study was conducted at Gaziosmanpaşa University Language Preparatory School. Four classes participated in the study, including two beginner classes, with a total of thirty-seven students, and two elementary classes, with a total of thirty-one students.

This chapter will present an analysis of the data provided from receptive and productive vocabulary tests administered as pre- and post-tests in late December and late March, as well as an analysis of the data gathered from interviews with the instructors and materials' evaluation.

Data analysis procedure

This study included both quantitative and qualitative data. Quantitative data was gathered through receptive and productive vocabulary tests. The data collected from the test results were analyzed using Statistical Package for the Social Sciences (SPSS) Version 11. After scoring the tests, the medians, means and standard deviations for each test were calculated. Then, the differences among the four classes in the pre-tests were analyzed to make sure that the two beginner classes and the two elementary classes were similar to each other. Afterwards, the differences between the pre- and post-tests for the beginner and elementary groups and the gain scores for each level were compared separately. The gain scores were also used to calculate rates of acquisitions for each group.

Qualitative data was gathered through interviews with the instructors and analysis of materials. The interviews showed the attitudes of the instructors towards vocabulary and vocabulary instruction during the research period and academic year. In analyzing the data resulting from the interviews, the researcher looked for themes related to the instructors' attitudes toward and practices in teaching vocabulary. The second part of the qualitative data included materials analysis. The materials were analyzed in terms of their vocabulary content, including the types and numbers of vocabulary exercises, and the frequency levels of the words included in the materials.

Results

Results of the receptive and productive vocabulary tests

In the receptive 1,000 word level test (R1K, where "K" stands for "thousand"), the students were expected to answer 39 items by writing T if the

sentence was true, N if it was not true, and X if the students did not understand the sentence. Each correct T and N was scored as one point. In the receptive 2,000 word level test (R2K), the students were expected to answer 30 items by matching English definitions with vocabulary words, and each correct match was scored as one point. In the productive 1,000 (P1K) and 2,000 (P2K) word level tests, the students were to write an appropriate word, some of whose letters were given, in the sentence context provided for them. As to scoring, each correct word was awarded one point. An item was considered correct when it was semantically correct, that is, the appropriate word was used to express the intended meaning. If used in the wrong grammatical form, for example, stem instead of past tense, it was not marked as incorrect. A word with a spelling error which did not distort the word (e.g. *recieve* instead of *receive*) was not marked as incorrect either. Most of the incorrect answers included non-words. The P1K and P2K word level tests consisted of 31 and 18 items respectively. The mean scores of the pre-tests and post-tests for the beginner and elementary classes for all vocabulary levels can be seen in Table 3.

Table 3 - All means, all classes, pre- and post- receptive and productive tests

Pre- and post-tests	Class	N	Mean	Class	N	Mean
R1K pre	Prep.2 beginner	23	14.43	Prep.1 Elementary	17	18.53
	Prep.4 beginner	14	12.43	Prep.3 Elementary	14	14.21
R2K pre	Prep.2 beginner	23	4.52	Prep.1 Elementary	17	6.29
	Prep.4 beginner	14	4.86	Prep.3 Elementary	14	5.43
P1K pre	Prep.2 beginner	23	5.35	Prep.1 Elementary	17	10.59
	Prep.4 beginner	14	4.43	Prep.3 Elementary	14	9.29
P2K pre	Prep.2 beginner	23	2.17	Prep.1 Elementary	17	1.94
	Prep.4 beginner	14	2.29	Prep.3 Elementary	14	1.93
R1K post	Prep.2 beginner	23	17.09	Prep.1 Elementary	17	23.29
	Prep.4 beginner	14	16.71	Prep.3 Elementary	14	19.00
R2K post	Prep.2 beginner	23	7.04	Prep.1 Elementary	17	11.12
	Prep.4 beginner	14	6.14	Prep.3 Elementary	14	9.71
P1K post	Prep.2 beginner	23	10.74	Prep.1 Elementary	17	12.59
	Prep.4 beginner	14	9.00	Prep.3 Elementary	14	11.29
P2K post	Prep.2 beginner	23	3.87	Prep.1 Elementary	17	4.06
	Prep.4 beginner	14	2.36	Prep.3 Elementary	14	4.43
R1K 39 points possible, R2K 30 points possible, P1K 31 points possible, P2K 18 points possible, N = Number of students						

The R1K pre-test data are normally distributed. However, since the data for the R2K, P1K, and P2K word level pre-tests are not normally distributed for the beginner and elementary groups, and since the beginner and elementary classes did not have the same number of students, non-parametric statistics were used to analyze the data. The median scores for the pre-tests for all vocabulary levels can be seen in Table 4.

Table 4 - Pre-test median values for beginner and elementary classes

PRE-TEST				
	R1K	P1K	R2K	P2K
	Mdn	Mdn	Mdn	Mdn
Beginner-2	14.00	5.00	4.00	2.00
Beginner-4	12.50	4.00	5.00	2.00
Elementary-1	18.00	10.00	5.00	2.00
Elementary-3	14.50	8.50	5.00	2.00
Mdn = Median, R1K 39 points possible, R2K 30 points possible, P1K 31 points possible, P2K 18 points possible				

It was necessary to first investigate whether the two beginner classes were similar to each other and whether the two elementary classes were similar. Looking at the pre-test median scores, one may see that the two beginner groups' median scores are similar for all tests. The Mann-Whitney U tests confirmed that there are no significant differences between the two groups on any of the tests. The table also shows that the elementary-1 group appears to have a higher median score than that the elementary-3 group on the R1K test but that the median scores for the other three tests are the same or similar. The Mann-Whitney U tests confirmed that there is no difference between the two classes for the P1K, R2K, and P2K tests, but that the difference between the two medians for the R1K test is significant ($U = 69.500$, $p < .05$, $r = -.35$), representing a medium effect size.

It was also necessary to find out whether the two classes at each proficiency level were similar on the post-tests. The median scores for the post-tests for all vocabulary levels for the beginner and elementary classes can be seen in Table 5.

Table 5 - Post-test median values for beginner and elementary classes

POST-TEST				
	R1K	P1K	R2K	P2K
	Mdn	Mdn	Mdn	Mdn
Beginner-2	18.00	10.00	8.00	3.00
Beginner-4	17.00	9.00	6.50	2.00
Elementary-1	25.00	12.00	9.00	4.00
Elementary-3	17.00	10.00	9.00	4.00
Mdn = Median, R1K 39 points possible, R2K 30 points possible, P1K 31 points possible, P2K 18 points possible				

According to the post-tests results, the beginner group's median scores are similar on all tests. The Mann-Whitney U tests revealed no significant differences between any of the medians except for the P2K test. The beginner-2 group, for the

P2K, has a median score of 3.00, and this median score is higher than that of the beginner-4 group (Mdn = 2.00). The difference is significant ($U = 88.000$, $p < .05$, $r = -.38$), with a medium effect size.

For the elementary group, one may see that one of the elementary groups, elementary-1, appears to have higher median scores on both the R1K and P1K post-tests than the other elementary group, elementary-3. The Mann-Whitney U tests demonstrate that there is no difference between the two classes for the P1K, R2K, and P2K tests, but that the difference between the two medians for the R1K post-test is approaching significance ($U = 70.500$, $p < .053$, $r = -.34$), and it represents a medium effect size.

Even though there is at least one test at each proficiency level for which the difference between the two classes at the same level is significant, it is thought that the groups are similar enough to be considered as just two levels, beginner and elementary. However, these slight differences within the groups will be considered when drawing conclusions about any differences between the levels. The results of the pre- and post-test median scores for all vocabulary levels for both beginner and elementary groups can be seen in Table 6.

Table 6 - Pre- and post-tests median values, beginner and elementary groups

	Pre-tests		Post-tests	
Number of Students	37	31	37	31
Levels	Beginner (Mdn)	Elementary (Mdn)	Beginner (Mdn)	Elementary (Mdn)
R1K	14.00	15.00	18.00	20.00
R2K	5.00	5.00	7.00	9.00
P1K	4.00	9.00	9.00	10.00
P2K	2.00	2.00	3.00	4.00
Mdn = Median, R1K 39 points possible, R2K 30 points possible, P1K 31 points possible, P2K 18 points possible				

Looking at Table 6, it appears that the elementary group has higher median scores on the R1K and P1K pre-tests than the beginner group, but the scores for the R2K and P2K tests are the same. The Mann-Whitney U test confirmed that there are significant differences between the two groups only for the R1K and P1K pre-tests. There is a significant difference between the beginner and elementary groups for the R1K test ($U = 407.500$, $p < .05$, $r = -.25$), representing a small effect size, and the difference is also significant for the P1K test ($U = 204.500$, $p < .001$, $r = -.55$), with a large effect size.

On the post-test, it appears that the elementary group again has higher median scores than the beginner group, for all tests. The Mann-Whitney U test demonstrated that these differences are significant for the R1K, R2K, and P2K tests. There is a significant difference between the beginner and elementary groups for the R1K test ($U = 385.500$, $p < .05$, $r = -.28$), and it represents a small effect size. There is a significant difference between the beginner and elementary groups for the R2K post-test ($U = 298.500$, $p < .001$, $r = -.41$), representing a medium effect size. There is also a significant difference between the beginner and elementary groups for the P2K post-test ($U = 412.000$, $p < .05$, $r = -.25$), with a small effect size. However, for the P1K post-test, there is no significant difference between the beginner and elementary groups.

Thus, according to the results of the pre-tests, at the beginning of the study, the beginner and elementary groups had similar vocabulary knowledge at the R2K and P2K levels, but the elementary group's scores were slightly higher at the R1K level, and markedly higher at the P1K level. However, on the post-tests, the elementary group has significantly higher scores than the beginner group on all but

the P1K test. It may be inferred that the elementary group learned more vocabulary at the R1K, and P2K levels. However, the beginner group caught up with the elementary group on the P1K post-test.

In order to see how much progress the two groups made over the three months, it was necessary to compare the pre- and post-test median scores at each proficiency level. The median scores for all vocabulary levels for the beginner level students can be seen in Table 7.

Table 7 - Pre- and post-tests median values for beginner level students

Beginner Level	Median (Pre-test)	Median (Post-test)	Wilcoxon Signed Ranks
R1K	14.00	18.00	T = 99.00, p < .001, r = -.41
R2K	5.00	7.00	T = 106.00, p < .005, r = -.34
P1K	4.00	9.00	T = 2.00, p < .001, r = -.60
P2K	2.00	3.00	T = 75.50, p < .001, r = -.38
R1K 39 points possible, R2K 30 points possible, P1K 31 points possible, P2K 18 points possible			

The post-test median scores appear to be higher than the pre-test scores, suggesting that the beginner level learners improved their vocabulary at all vocabulary levels both receptively and productively. A Wilcoxon Signed Ranks test was conducted to compare the median scores of the pre-tests and post-tests. This difference between pre-test and post-test median scores is significant for all tests.

It was also necessary to look at the elementary group's pre- and post-tests results in order to see how much progress they made over the same amount of time as the beginner group. The median scores for all vocabulary levels for the elementary level students can be seen in Table 8.

Table 8 - Pre- and post-tests median values for elementary level students

Elementary Level	Median (Pre-test)	Median (Post-test)	Wilcoxon Signed Ranks
R1K	15.00	20.00	T = 28.50, p < .001, r = -.55
R2K	5.00	9.00	T = 0, p < .001, r = -.62
P1K	9.00	10.00	T = 47.00, p < .001, r = -.44
P2K	2.00	4.00	T = 6.00, p < .001, r = -.55
R1K 39 points possible, R2K 30 points possible, P1K 31 points possible, P2K 18 points possible			

According to the results of the pre- and post-tests, the elementary level learners also appear to have shown improvement for all vocabulary levels both receptively and productively. The Wilcoxon Signed Rank test confirmed that this improvement is significant at all levels.

To summarize how each group's vocabulary learning progressed during the research period, the beginner group appeared to improve their vocabulary knowledge on all tests, with the biggest improvement at the R1K and P1K levels. As for the students in the elementary group, they showed less improvement on the P1K test than on the other three tests, but they improved their vocabulary knowledge at all levels.

It was necessary to look at the gain scores of the beginner and elementary groups to compare the progress they made during the research period. The median gain scores for the beginner and elementary groups can be seen in Table 9.

Table 9 - Gain score median values for beginner and elementary groups

	Gain Scores			
	R1K	P1K	R2K	P2K
	Median	Median	Median	Median
Beginner	4.00	4.00	2.00	1.00
Elementary	4.00	2.00	4.00	2.00
R1K 39 points possible, R2K 30 points possible, P1K 31 points possible, P2K 18 points possible				

In looking at Table 9, it appears that the elementary group has higher median gain scores on the R2K and P2K tests, but the beginner group appears to have a higher gain score on the P1K test. The Mann-Whitney U test confirmed that there is no significant difference between the groups' gain scores for the R1K test but that the differences between the gain scores are significant for the P1K, R2K, and P2K tests. The beginner group has a significantly higher median gain score on the P1K test (Mdn = 4.00) than the elementary group (Mdn = 2.00) ($U = 272.000$, $p < .001$, $r = -.31$), and it represents a medium effect size. However, the elementary group's median gain score is significantly higher on the R2K test (Mdn = 4.00) than that of the beginner group (Mdn = 2.00) ($U = 366.500$, $p < .05$, $r = -.45$), with a medium effect size. In addition, for the P2K test, the elementary group again has a higher median gain score (Mdn = 2.00) than the beginner group (Mdn = 1.00) ($U = 357.000$, $p < .005$, $r = -.33$), representing a medium effect size.

It may be inferred that the elementary group progressed faster at the R2K and P2K levels, the beginner group progressed faster at the P1K level, and both the beginner and elementary groups gained the same amount of vocabulary at the R1K levels. The beginner group's faster progress at the P1K level apparently allowed them to catch up with the elementary group at this level.

The Amount of vocabulary acquired and the rate of acquisition

In order to answer the first research question, which addresses the rate of vocabulary acquisition of beginner and elementary learners, it was necessary to learn how many words both groups acquired over the research period. The number of vocabulary acquired by the two groups of students can be seen in Table 10.

Table 10 – Number of words acquired

	Voc. Levels and Number of Items	Median Gain Scores	Number of Words Acquired
Beginner	R1K (39)	4.00	$4/39 \times 1,000 = \mathbf{102}$
	actualR2K (19)	1.00	$1/19 \times 1,000 = \mathbf{53}$
	P1K (31)	4.00	$4/31 \times 1,000 = \mathbf{129}$
	actualP2K (11)	1.00	$1/11 \times 1,000 = \mathbf{91}$
Elementary	R1K (39)	4.00	$4/39 \times 1,000 = \mathbf{102}$
	actualR2K (19)	2.00	$2/19 \times 1,000 = \mathbf{105}$
	P1K (31)	2.00	$2/31 \times 1,000 = \mathbf{65}$
	actualP2K (11)	2.00	$2/11 \times 1,000 = \mathbf{182}$

In order to learn how many words were acquired by the two groups, the same basic equation was used for all the tests. That is, the gain score was divided by the number of the words on the test and multiplied by the number of the words sampled by the test. It should be noted here that the R2K and P2K tests include words from both the 1K and 2K frequency levels. Thus, in order to accurately calculate the number of 2K words acquired and the rate of acquisition of 2K words, the 1K words on these tests were disregarded, and these tests were re-scored in order to calculate actual 2K words. The gain scores were then re-calculated to reflect only gains in 2K words. In the equation for the 2K tests, the gain scores were multiplied by 1,000. The result for the R1K test shows that the beginner and elementary groups learned approximately 102 words at the R1K level. As for the P1K test, while the beginner group learned approximately 129 words, the elementary group learned 65 words at

the P1K level. For the R2K test, the result shows that the beginner group learned approximately 53 words. In contrast, the elementary group learned approximately 105 words at the R2K level. The equation for the P2K test shows that although the beginner group learned 91 words, the elementary group learned 182 words at the P2K level over the research period.

In order to investigate the rate of vocabulary acquisition of the two groups, another calculation was done. The results can be seen in Table 11.

Table 11 - Rate of acquisition

	Voc. Levels	Eng. Instruction Received	Rate of Acquisition
Beginner	R1K (39)	9 weeks x 26 hours = 234	$102 / 234 = .436$ words per hour
	actualR2K (19)	9 weeks x 26 hours = 234	$53 / 234 = .226$ words per hour
	P1K (31)	9 weeks x 26 hours = 234	$129 / 234 = .551$ words per hour
	actualP2K (11)	9 weeks x 26 hours = 234	$91 / 234 = .388$ words per hour
Elementary	R1K (39)	9 weeks x 22 hours = 198	$102 / 198 = .515$ words per hour
	actualR2K (19)	9 weeks x 22 hours = 198	$105 / 198 = .530$ words per hour
	P1K (31)	9 weeks x 22 hours = 198	$65 / 198 = .325$ words per hour
	actualP2K (11)	9 weeks x 22 hours = 198	$182 / 198 = .919$ words per hour

The research period covered almost nine weeks. However, over these nine weeks, the beginner group received more hours of instruction than the elementary group. The beginner group received 26 hours of English instruction per week. Thus, over the research period, they received 234 hours of English instruction (9 weeks x 26 hours = 234), whereas the elementary group received 22 hours of English instruction per week, resulting in 198 hours of English instruction over the nine weeks of the research period. In order to figure out the rate of acquisition, the same calculation was done. That is, the number of words acquired was divided by the number of hours of English instruction received. The results show that for the R1K level, the beginner group learned .436 words per hour. In contrast, the elementary group learned .515 words per hour. For the P1K level, while the beginner group

learned .551 words per hour, the elementary group learned .325 words per hour. As for the R2K level, although the beginner group learned .226 words per hour, the elementary group learned .530 words per hour. The result for the P2K level showed that the beginner group learned .388 words per hour. In contrast, the elementary group learned .919 words per hour. When the rate of all receptive (R1K + R2K) vocabulary acquisition was considered, the beginner group learned .662 words per hour receptively, and the elementary group learned 1.045 words per hour receptively. As for the rate of productive (P1K + P2K) vocabulary acquisition, while the beginner group learned .939 words per hour productively, the elementary group learned 1.244 words per hour productively.

To sum up, the results show that receptively, the elementary group gained more words at both levels, and overall, than the beginner group. In addition, the beginner group gained more 1K vocabulary than 2K vocabulary. However, the elementary group gained about the same number of words at each level. The beginner group acquired more vocabulary productively at each level than they did receptively, and they also acquired more overall vocabulary productively than they did receptively. In addition, like the beginner group, the elementary group acquired more vocabulary productively overall than receptively; unlike the beginner group, the elementary group acquired more receptively than productively at the 1K level, and more productively than receptively at the 2K level. While the beginner group gained more vocabulary at the P1K level than at the P2K level, the elementary group gained more at the P2K level than at the P1K level. However, it should be noted that all of these results rely on extrapolations, and thus should be treated with caution. In particular, the gain score for the P2K test is based on an extremely small sample of

the 2,000 word level. However, the extrapolations for the 1K levels tests are based on larger samples, and so they are more likely to reflect the number of words acquired. Nevertheless, even though these extrapolations should be treated with caution, it is thought that they are useful in showing differences in vocabulary acquisition between the two groups. The next section will investigate whether the differences between the two groups can be explained by materials and instruction.

Students' exposure to vocabulary and vocabulary teaching

In order to answer the second research question, which addresses the role of materials and instruction in the vocabulary acquisition of beginner and elementary level students, it was necessary to examine the materials used and the vocabulary instruction carried out in the students' classes. The beginner group in this study comprised two preparatory classes. Beginner level students took a main course class for 12 hours and had 12 further hours of focused practice. In addition, they had two hours of reading and vocabulary classes. In main course classes, the beginner level students used a main course book called *Pre-Intermediate Success* (McKinlay & Hastings, 2007), and in focused practice courses, they used the workbook (White & Fricker, 2007) that accompanies this book. The beginner group studied ten units, Units 1 through 10, during the research period. In addition, for reading and vocabulary classes, they used a book called *Focus on Reading* (Flaherty & Bean, 2006). During the research period they covered four units, from Unit 6 to Unit 9.

The elementary group also comprised two preparatory classes. The elementary level students took a main course class for 10 hours and had 10 further hours of focused practice courses, and two hours of reading and vocabulary classes. The elementary classes used the same course book, workbook and reading book as

the beginner classes. However, they covered two more additional units than the beginner classes, up to Unit 12. In the reading book, they covered the same units.

Materials

The main course book comprises fourteen units. In the textbook, all language skills, including grammar, vocabulary, reading, listening, speaking, and writing, are given importance. There is a strong focus on vocabulary input and practice in the textbook, which gives importance to the revision and recycling of words. The textbook is based on the assumption that students at pre-intermediate level may have particular difficulty in maintaining their fluency and need help in developing strategies for learning vocabulary. There is a strong focus on the practice of fixed and semi-fixed phrases, based on research showing that second language learners acquire language more quickly and effectively by learning in chunks rather than by learning single words. Pawley and Syder (1983) point out that the best way to explain how learners produce nativelike sentences and use the language fluently is that in addition to knowing the structure of the language, they may store hundreds of preconstructed clauses in their memory and use them while producing sentences. Thus, learners are likely to acquire words in memorized chunks.

Approximately fifteen or twenty words are focused on in each unit. New vocabulary is presented through separate vocabulary sections in the reading lessons. The separate vocabulary sections include word formation exercises, word webs and exercises on prepositions and phrasal verbs. Through these sections, students study vocabulary receptively and productively; however, the exercises mostly address the receptive use of vocabulary. There is an interactive approach to learning vocabulary. Vocabulary sections are not just selections of exercises based around a particular

lexical set. The textbook includes mini lessons which very often finish with a speaking exercise in which students are expected to use (productively) the vocabulary they have just learnt. In the textbook, there are “Mind the Traps” boxes to draw students’ attention to any exceptions to the rule and areas of special difficulty. In addition, vocabulary is consolidated and practiced in the revision sections. In the textbook, each unit has “think back” sections. In each section, there are four or five vocabulary exercises which mostly practice receptive knowledge. In addition, after every two units, there are vocabulary and grammar sections. In each vocabulary and grammar section, there are three or four vocabulary-related exercises which mostly focus on the receptive knowledge of words.

The workbook also comprises fourteen units. The new vocabulary from the course book is revised in the workbook. The exercises provide practice for all the vocabulary from the wordlist in order to help students remember the words to which they have just been introduced. In the workbook each unit has five or six vocabulary exercises, most of which focus on the receptive knowledge of words. In addition, the workbook has self-assessment tests after each two units. There are two or three vocabulary exercises in the self-assessment section. The exercises in the self-assessment tests also mostly focus on the receptive knowledge of words. In addition, there is a special exercise called “Extend your vocabulary”. Through this exercise, students practice the vocabulary they know as well as learn new meanings of familiar words or expressions. Approximately 30-40 vocabulary items are focused on in each unit.

The workbook is very consistent and compatible with the main course book in terms of the presentation of the vocabulary. The wordlists in the workbook are

presented in a gray panel next to the exercises. Students do the exercises and refer to the wordlist. After students have completed the exercises, they should be able to remember the words. By folding the wordlist, students can check if they remember them all.

As for the reading and vocabulary book, it has twenty units in all. *Focus on Reading* is intended to provide elementary level supplementary reading material. The reading texts are grouped into themes. It is based on a vocabulary size of 250 word families. Approximately twenty vocabulary items are focused on in each unit. In the reading book, each unit has two vocabulary exercises with twenty items. Both vocabulary exercises focus on the receptive knowledge of words. The gap filling and matching exercises help students develop their vocabulary. Vocabulary definitions are not given. Vocabulary items for the gap filling exercises are taken from the texts and given in a box for the students to fill in the blanks in a different meaningful context. For the matching exercises, students are asked to choose the synonyms from the box and match these synonyms to the highlighted words given in different sentences. In the next section, more information is given about the types and numbers of exercises and their focus on receptive or productive knowledge of words. By investigating this, it may be inferred what kinds of vocabulary both groups were exposed to during the research period.

Vocabulary exercises

There is a strong focus on vocabulary input and practice in the students' book and workbook. The main course book and workbook include similar types of vocabulary exercises. The type of activities, the number of activity types and their

focus on receptive and productive knowledge of words in the units of the textbooks covered during the research period can be seen in Table 12.

Table 12 - Type of activities and number of activity types

Main Course Book and Workbook (1-10) & Reading and Vocabulary Book(6-9)										
Type of Activities		The Number of Activity Types			MC		WB		R & V	
					R	P	R	P	R	P
		MC	WB	R&V						
1	Gap Filling	12	31	4	√		√		√	
2	Multiple Choice	1	1	-	√					
3	Multiple Choice Cloze	-	2	-			√			
4	Cross word Puzzle	1	-	-		√				
5	Word-list Completion	3	7	-	√		√			
6	Matching	4	7	4	√		√		√	
7	Odd-one-out	1	1	-	√		√			
8	C-test	1	1	-		√		√		

R = Receptive Focus, P = Productive Focus, MC = Main Course, WB = Workbook, R&V = Reading and Vocabulary Book

The main course book and workbook have some activities which need to be explained. For example, in the gap-filling exercises, students are asked to fill in the gaps with the answers in the box provided for them. In the vocabulary cross word puzzle exercise, students are given the meaning of the target words and are expected to retrieve the words and fill in the boxes from left to right. In the word list completion exercises, students find the words from the word list and they write the words according to their parts of speech. For example, in the exercise, the verb form of *accommodate* is given and students are asked to write the noun form of the word *accommodation* by looking at the word list. In the odd-one out exercises, students are given several words, all but one of which are related to each other; the students must circle this word to show it does not go with the others. In the c-tests, students fill in the gaps with words, but some initial letters are provided to help them guess the words.

The elementary and beginner groups were exposed to the same number of exercises and exercise types from Units 1 to 10, as well as the same exercises in the four units in the reading book. Since the elementary classes also covered Units 11 and 12, they were exposed to eight additional gap-filling exercises, three word-list completions, and two matching exercises in the students' book and workbook. All of these exercises helped students develop their receptive knowledge of words.

In general, students were mostly exposed to receptive knowledge of words since the exercises mainly focus on the receptive knowledge of words. However, in the main course book there are also writing and speaking activities in every unit which allowed the students to use the new words productively.

Vocabulary profile of highlighted words

A number of vocabulary items are highlighted through the vocabulary exercises in the textbooks. The word frequency levels for the highlighted words in Units 1 through 10 in the main course book and workbook, and Units 6 through 9 in the reading and vocabulary book were examined through VocabProfiler (<http://www.lex tutor.ca/vp/eng/>). The highlighted vocabulary items in the vocabulary exercises were entered into the vocabulary profiler in order to find out the percentage and number of 1K and 2K words, Academic Word List (AWL) words, and off-list words, in terms of types and tokens. 1K and 2K words are the words within the 1,000 and 2,000 word frequency levels. AWL represents academic vocabulary. Off-list words are the words which include neither 1K and 2K words nor Academic Word List words. Tokens are all of the words in a text. All of the words in a text are counted as tokens. As for types, they are the different words that appear in a text.

Words are counted as types only the first time they occur in a text. The frequency levels for these highlighted vocabulary items can be seen in Table 13.

Table 13 - Frequency of highlighted vocabulary, MC and WB (1-10), R and V (6-9)

MC and WB (1-10), R and V (6-9)	Types	Tokens	Percent
1K Words (1-1000)	301	676	56.81%
2K Words (1001-2000)	168	220	18.49%
AWL Words (academic)	45	57	4.79%
Off-List Words	186	237	19.92%

As seen in Table 13, most of the vocabulary to which students were exposed is in the 1,000 word frequency level, with almost nineteen percent of the words in the 2,000 word frequency level and twenty percent in the off-list words. Some examples of the words which fall into off-list words category are *archaeological*, *astronomer*, *atmosphere*, and *chemistry*. The textbook authors might have chosen to include these words in the highlighted words since they are actually important to understanding the texts in which they are included.

Since the elementary group studied two more units than the beginner group, it was necessary to focus on the words which were highlighted in the vocabulary exercises throughout these two units. The results can be seen in Table 14.

Table 14 - Frequency levels, highlighted vocabulary, MC and WB (11-12)

MC and WB (11-12)	Types	Tokens	Percent
1K Words (1-1000)	65	98	52.41%
2K Words (1001-2000)	20	26	13.90%
AWL Words (academic)	14	15	8.02%
Off-List Words	43	48	25.67%

In looking at Table 14, it may be inferred that students were exposed to mostly 1,000 and 2,000 word frequency levels since a little more than half of the

vocabulary comes from the 1,000 word level and almost fourteen percent of the vocabulary comes from the 2,000 word level. In addition, almost twenty-six percent of the vocabulary is classified as off-list words (e.g. *soundtrack*, *biopic*, *vandal*, and *fiction*). As mentioned previously, these words might have been chosen to include in the highlighted words because they are important to comprehending the texts.

The two sets of words (the highlighted words for Units 1-10 and four units from the reading and vocabulary book, and the highlighted words for the two extra main course units) were compared to see how many words there were in common. The result can be seen in Table 15.

Table 15 – Comparison, highlighted words, MC and WB (1-10), R and V (6-9) vs. MC and WB (11-12)

MC and WB (1-10) R and V (6-9)	SHARED	MC and WB (11-12) Unique
1190 tokens	54 common tokens	133 tokens
700 types	31 common types	111 types

As seen in Table 15, 31 words of the 142 highlighted words were seen in both sets of words. This means that the elementary students had already seen these 31 words in the previous units and they saw these words again in the two extra units. However, the beginner students were only exposed to these words in the units that both groups studied. In addition, the elementary group saw 111 new highlighted words (unique words) in the two extra units and these words were not seen by the beginner group.

Vocabulary profile of all texts

The actual instruction during the research period covered almost nine weeks, from the beginning of February to the administration of the post-tests, at the end of March. During this time, the beginner students' total in-class reading vocabulary exposure included ten units from both the main course book and workbook, and four units from the reading course book.

In order to see what word frequency levels the beginner and elementary groups were exposed to throughout the research period, it was necessary to look at the vocabulary frequency levels of the texts and vocabulary exercises all together for all units covered for the main course book, workbook, and reading and vocabulary book. The frequency levels of the words for the ten units of the main course book, workbook, and for the four units of the reading book can be seen in Table 16.

Table 16 - Frequency levels, all texts, MC and WB (1-10), R and V (6-9)

MC and WB (1-10), R and V (6-9)	Types	Tokens	Percent
1K Words (1-1000)	1,374	15,470	77.79%
2K Words (1001-2000)	568	1,771	8.91%
AWL Words (academic)	187	477	2.40%
Off-List Words	957	2,168	10.90%

Looking at Table 16, it may be deduced that most of the words in the materials are from the 1,000 word frequency level and almost nine percent are from the 2,000 word frequency level. Since the elementary group studied two more units from the Units 11 to 12, it was also necessary to look at the word frequency levels to see what frequency levels the elementary group was exposed to in the two extra units. The frequency percentages of the words for the two additional units of the main course book and the workbook can be seen in Table 17.

Table 17 - Frequency levels, all texts, MC and WB (11-12)

MC and WB (11-12)	Types	Tokens	Percent
1K Words (1-1000)	606	2,540	74.36%
2K Words (1001-2000)	175	355	10.39%
AWL Words (academic)	52	88	2.58%
Off-List Words	250	433	12.68%

As it is seen from Table 17, the additional two units include more vocabulary from the 1,000 word frequency level and ten percent of the vocabulary is from the 2,000 word frequency level. When the two extra units were compared to the materials seen by both groups in terms of the percentage of vocabulary from the 1K and 2K word frequency levels, the two sets of materials included almost the same distribution of word frequency levels.

The entire texts and vocabulary exercises in Units 1 through 10 in the main course book and workbook, and Units 6 through 9 in the reading and vocabulary book and the entire texts and vocabulary exercises in Units 11 and 12 in the main course book and work book were compared in order to see how many new words the elementary students saw, as well as how much repetition there was from the previous units, or how many more repetitions of the words the elementary students saw. The result can be seen in Table 18.

Table 18 – Comparison, all words, MC and WB (1-10), R and V (6-9) vs. MC and WB (11-12)

MC and WB (1-10) R and V (6-9)	SHARED	MC and WB (11-12) Unique
19,886 tokens	2,700 common tokens	716 tokens
3,086 types	674 common types	409 types

As seen in Table 18, 674 words of 1083 words were found to be shared in the two sets of words. This means that 674 words were seen by the beginner and elementary groups in the previous units. However, 409 words (unique words) were new words the elementary group was exposed to through two extra units, and these words also were not seen by the beginner group.

As it is seen, in terms of the highlighted words, the two additional units allowed the elementary group to see more new vocabulary (104 words) than the beginner group. When the entire texts and vocabulary exercises were taken into account, through two extra units, the elementary group was again exposed to more new vocabulary (409 words) than the beginner group.

In the light of the information given above and the quantitative part of the data, it may be inferred that the beginner and elementary groups' vocabulary improvement and progression at different levels may have been affected by the number and types of vocabulary exercises in the shared material, extra vocabulary for the additional two units for the elementary classes, and all the vocabulary items in the shared material.

According to the results, both groups gained vocabulary receptively. Materials may have played a role in the gains in the receptive knowledge of vocabulary of the students. First, the textbook contains vocabulary of which a large

percentage is at the 1K and 2K word levels. Second, the exercises in the textbook are predominantly focused on receptive knowledge. Thus, in these respects, the materials to which they were exposed could have played a role in this gain.

In addition to gaining vocabulary receptively, both groups also gained vocabulary productively. This may also be explained by the role of the materials in the vocabulary acquisition. The materials have some exercises which aim at productive knowledge of words. Thus, this may have helped both groups improve their vocabulary productively.

The elementary group gained more words receptively at the 2K level than the beginner group. This larger gain by the elementary group may not be explained by the materials. The elementary group was exposed to more vocabulary since they were exposed to more units, as was seen in Table 15. They saw an extra 111 highlighted words (unique words) through these additional two units. It is possible that these extra 111 highlighted words may account for the 52 extra words apparently learned by the elementary students at the 2K level (see table 10). However, because the frequency profile of the 111 highlighted words shows that only 10% of were at the 2K level (see table 17), it is unlikely that these 111 extra highlighted words can account for the 52 extra 2K words learned by the elementary students.

Receptively, while the beginner group acquired more 1K vocabulary than 2K vocabulary, the elementary group acquired about the same number of words at the 1K and 2K levels. This difference between the two groups may not be explained by the materials. The extra two units that the elementary group saw contained about the same proportion of 1K to 2K words as the previous units. Thus, it would not make sense that exposure to two more units would result in such an increase in 2K words.

The beginner group learned more productively at each level than they did receptively ($P1K > R1K$, $P2K > R2K$), and they also learned more overall productively than they did receptively ($P1K + P2K > R1K + R2K$). This also may not be explained by the materials. Since the materials overwhelmingly focus on receptive knowledge, there is no reason that the materials would have helped the learners gain more vocabulary productively than receptively. However, it is important to be aware of the fact that the extrapolations on which these conclusions are based should be treated with caution, particularly from the P2K test.

The elementary group learned more productively overall than receptively, like the beginner group. In contrast to the beginner group, the elementary group learned more receptively than productively at the 1K level, and more productively than receptively at the 2K level. This may not be explained by the materials since there is no reason that the materials would have helped the learners gain more vocabulary productively at any level. In addition, there is no explanation, coming from the materials, for why the elementary group learned so many more words at the P2K level, since there is no change in the nature of the vocabulary exercises in the two extra units to which the elementary group was exposed.

While the beginner group gained more at the P1K level than at the P2K level, the elementary group gained more at the P2K level than at the P1K level. This may not be explained by the materials since the extra two units that the elementary group was exposed to did not contain enough productive emphasis to explain the large difference between the two groups in terms of 2K words, even if there was a big enough difference in 2K words in general.

Since there are results that cannot be explained by the materials, it was necessary to look for other explanations. In the next section, differences in the vocabulary acquisition of both groups will be investigated taking into account the instruction provided by the teachers in their courses.

Teaching

There were five teachers who taught the beginner and elementary classes which were included in the study. These teachers were interviewed one by one for five to ten minutes in a quiet room in order to explore their general attitudes towards and methods of vocabulary instruction during the research period. The interviews were held in English. General information about the teachers, their courses and classes can be seen in Table 19.

Table 19 - Information about the teachers, their courses and classes

Classes	COURSES		
	<i>Main Course</i>	<i>Focus Practice Course</i>	<i>Reading and Voc. Course</i>
Elementary-1	Teacher B	Teacher A	Teacher E
Elementary-3	Teacher B	Teacher A	Teacher E
Beginner-2	Teacher C	Teacher D	Teacher E
Beginner-4	Teacher C	Teacher D	Teacher E

All of the five participant teachers generally showed a positive attitude towards vocabulary and vocabulary instruction. However, in the interviews, there were some important different points about vocabulary and vocabulary instruction revealed by the instructors teaching different classes. One of the important different points was how instructors dealt with vocabulary from the beginning of the research period until the administration of the post-test at the end of March.

Teachers **A** and **B** taught the main course and the focus practice course for the elementary group and they stated that:

Teacher **A**: *I mainly tried to use the activities in the book related to vocabulary items which were suitable for the students' proficiency levels.*

Teacher **B**: *We were in good contact with Teacher A since we taught the same classes. Thus, firstly, we tried to focus on the vocabulary related exercises in the book.*

As seen in the responses of the elementary classes' instructors, their handling of vocabulary was limited to studying the vocabulary related exercises. However, the instructors of the beginner classes Teachers **C** and **D** stated different points:

Teacher **D**: *At the beginning of the term, I was teaching words directly because the students had great difficulty while reading the sentences and small paragraphs and then we studied the exercises. I wanted to teach the words quickly to help my students understand the passages and exercises in the book.*

Teacher **C**: *Word acquisition is very difficult for second language learners. Thus, in order to motivate and help the students learn more vocabulary, I tried to use vocabulary games while doing the exercises in the main course book.*

As seen in the responses of the beginner classes' instructors, they dealt with vocabulary differently than the elementary classes' instructors. The elementary classes' instructors focused on only the vocabulary exercises; however, in addition to doing the exercises, the beginner classes' instructors dealt with vocabulary through direct teaching of words and playing vocabulary games.

Since Teacher E taught reading and vocabulary for all the classes, her way of dealing with vocabulary did not differ between the two levels and she stated some common points with the other instructors:

Teacher E: *I sometimes used pictures. What is more, I tried to create a context related atmosphere to the new vocabulary I was going to teach. I also tried to find some real-life examples to associate the words and their meanings. For example, in order to teach the word 'celebrity', I was talking about the most popular (say famous) people in Turkey to have my students come to the conclusion that celebrity means 'a famous person'. I also used the word-meaning match and fill-in-the-blanks (words in sentences) exercises in the book to teach the new vocabulary. Using students' first language is a technique which I used whenever I needed.*

The second point was whether they focused on receptive or productive knowledge of words. The elementary classes' instructors stated that they mainly focused more on receptive knowledge than productive knowledge because the vocabulary exercises in the textbooks mainly included receptive use of vocabulary. However, they sometimes encouraged productive use of vocabulary.

Teacher A: *Receptive words and productive words are very important for students to understand passages and they use them in their real life situations and they meet words while they are listening and reading. I sometimes encouraged students to use the words productively in their writing and speaking activities, but because of their proficiency levels, they had difficulty in using the words productively. Actually, I wanted them to make sentences to follow up. For example, I wanted them to ask questions after studying reading texts. Based on the text, I*

wanted them to use the words from the texts. However, I mainly focused on receptive knowledge of words

Teacher **B**: *I mainly focused on receptive knowledge of words since I wanted them to know many words receptively first. I believe that firstly we should develop our students' receptive knowledge of words. First, they should know many words receptively and then we may help them use these words productively.*

As seen from the responses of the elementary classes' instructors, they give great importance to receptive and productive use of words. They mainly focused on receptive knowledge of words because students had lower proficiency levels and they believed that students had difficulty in reading and listening. Thus, they needed to know more words receptively first. However, the instructors of the beginner classes stated different points about receptive and productive knowledge of words:

Teacher **C**: *I mainly focused on productive knowledge of words in my classes because they have to use the words that they had learned. In order to improve their productive knowledge of words, after reading a passage with new words, I gave some worksheets which included these new words and we played some vocabulary games such as taboo, silent acting or board games and they began to use new words by the help of these games.*

Teacher **D**: *I focused on receptive knowledge of the words but not too much. Students were memorizing the meanings and pronunciation of the words. On the other hand, the exercises in the workbook provided opportunities for students to use words productively. Since the receptive vocabulary exercises were easier, I mainly focused on productive vocabulary exercises. I tried to encourage them to use the words productively.*

As seen from the responses of the beginner classes' instructors, they claim that they mainly focused on productive knowledge of words through productive vocabulary exercises, worksheets, and vocabulary games. Thus, in terms of receptive and productive knowledge of words, one may see that the attitudes of beginner classes' instructors are different than those of elementary classes' instructors.

In the reading course, Teacher E mostly focused on receptive knowledge of words since in reading courses receptive knowledge of words is emphasized. In addition to this, she helped the students use words productively in written and speaking exercises.

Teacher E: I focused on receptive knowledge of the words so that students understand what they were reading. When it comes to the productive knowledge of the words, first of all, I wanted my students to form sentences with the words we learned. So, the first step was mostly sentence based. Later on, at the end of the class, I had an activity where students are encouraged to use the new words orally or in a written way. That could be writing a paragraph, story, letter etc. or talking about an event, a memory, etc.

The third point was whether instructors focused only on the vocabulary words highlighted by the textbook. The elementary classes' instructors stated that they mainly focused on the words that were highlighted by the textbooks because students were tested on these words in quizzes, mid-term exams and final exam.

Teacher A: Yes, actually, first, I focused on the words that were highlighted but when I noticed that students had some difficulty in understanding general topic, and general meaning of the text then I felt obliged to teach them the words that may

hamper their understanding of the comprehension. In addition to this, we prepared quizzes and tests according to these vocabulary items.

Teacher **B**: *Since there were too many words in the textbook, I only focused on the words which were highlighted by the textbook. I did not need to focus on extra words out of the textbook.*

As seen from the responses of the elementary classes' instructors, Teacher **B** focused only on highlighted words in courses. However, in addition to highlighted words, Teacher **A** also focused on words that were not highlighted. The beginner classes' instructors also stated that they paid attention to the words that were highlighted by the textbooks. However, in addition to this, they gave importance to some collocations and phrasal words which were useful for the students' daily lives.

Teacher **C**: *Of course, highlighted words are important but sometimes there were so many words which were not suitable for the students' daily lives highlighted in the text books. It was not possible for our students to use these words in their daily lives. Thus, I usually tried to focus on phrasal verbs and words which I believed they were used commonly in their daily lives.*

Teacher **D**: *I mostly focused on the words that were highlighted by the textbook; however, I helped students pay attention to collocations which were in the book and I helped them use some of these collocations which were suitable for their daily life.*

When focusing on the vocabulary words highlighted by the textbook was taken into account in reading classes, Teacher **E** stated similar points to the other instructors:

Teacher **E**: *I mostly focused on the words that the book suggested me to teach. Since the students were exposed to vocabulary in the students' and workbook, I thought that the reading book was suggesting enough vocabulary. So, I did not teach extra vocabulary out of the reading course book.*

The fourth point was whether the instructors taught or encouraged any vocabulary learning strategies. The elementary classes' instructors commonly stated that when the students did not know the meaning of a word, they had a tendency to look it up in their dictionary at first; however, the instructors did not let the students look up the words in their dictionary but they helped the students try to guess the meaning of unknown words from the context.

Teacher **A**: *I wanted students to guess the words and most of time I wanted them not to feel frustrated if they did not know the words. I advised them not to resort to their dictionary at first.*

Teacher **B**: *Students generally do not force themselves to understand the passages and guess the meaning of the unknown words. However, during my courses, I helped them guess the meaning of the unknown words by showing some clues for the unknown words to guess. Later, I let them look the words up in their dictionaries.*

As seen in the responses, the instructors who taught in elementary classes mainly used guessing the words from the context and dictionary use strategies. However, the instructors who taught beginner classes used vocabulary notebooks as a different strategy in addition to the guessing the words from the context strategy.

Teacher **C**: *I always told my students that you cannot carry a dictionary wherever you go. So, you should find some ways to deal with unknown vocabulary.*

Thus, you should be able to guess the unknown word from the context. So, I taught them how to catch the clues for the unknown words in the text. However, in addition to this, I encouraged them to keep vocabulary notebooks since they always complained about forgetting the words easily. I think it helped them.

Teacher **D**: *I, of course, encouraged my students to use vocabulary learning strategies such as sorting out the words according to their parts of speech. Moreover, I tried to teach them how to guess the meaning of an unknown word from the context by using some clues such as prefixes, suffixes, the topic of the text etc.*

As seen from the responses, all the instructors encouraged and taught their students some strategies in order to help them to deal with unknown vocabulary. However, one of the instructors who taught the beginner classes encouraged her students to use vocabulary notebooks as a different strategy in addition to guessing the meaning from context.

Finally, Teacher **E** gave some information about teaching or encouraging vocabulary learning strategies which were also common strategies that the other instructors used in their courses.

Teacher **E**: *I wanted my students to use monolingual dictionary of English. But, they mostly tended to use a bilingual dictionary. I really think using a monolingual dictionary is better in second language development. I had some group work in which students matched the meaning of the words with the word itself but this time wasn't on the book but on pieces of papers so that students can move around the classroom and find their matches. I also wanted students to guess the meanings of some highlighted words after they read the text.*

As it is seen from the responses, although there were some common points, the instructors who taught main course and focused practice courses stated different points on their vocabulary and vocabulary instructions. These different points were important to understand what vocabulary the students were exposed to and how the students were presented with vocabulary. These different points may help to understand whether the instruction provided to both groups affected their vocabulary acquisition.

The beginner level learners were exposed to different vocabulary instruction than the elementary groups. Thus, this may have affected their receptive or productive vocabulary acquisition rate. In other words, different instruction provided to the students in both groups may explain the results. For example, both groups improved their receptive vocabulary. This may be explained by the instruction provided to both groups since teachers in both groups give great importance to receptive knowledge of words. Both groups also improved their vocabulary productively since the teachers gave some attention to productive vocabulary.

However, receptively, the elementary group acquired more words at the 2K level than the beginner group. In addition, when overall receptive vocabulary was considered, the elementary group acquired more words than the beginner group. This may be explained by the instruction. The elementary group's teachers mainly focused on receptive knowledge of words in their courses. However, the teachers for the beginner group may have focused more on productive vocabulary than the teachers for the elementary group. It may be inferred that the students in the elementary group were exposed to receptive knowledge of words through vocabulary

exercises, texts, and teacher instruction so much that they developed their vocabulary faster than the beginner group at the R1K and R2K levels.

While the beginner group acquired more R1K vocabulary than R2K vocabulary, the elementary group acquired nearly the same number of words at each level. This may be explained by the instruction both groups had. The teachers of the beginner group focused on words that they thought were important to the students' daily lives. It is likely that those important words are very high frequency words (1K words). That might account for the fact that the beginner students learned more 1K words than 2K words. Since the teachers for the elementary group focused on the highlighted words, they were probably focusing on a mix of words at different frequency levels; thus, the elementary students gained vocabulary at different levels.

The beginner group showed more progress at each level productively than they did receptively. In addition, when overall productive vocabulary was considered, they also learned more productive vocabulary than they did receptive vocabulary. The extrapolations from the productive levels tests should be treated with caution, since they were based on a very small sample. However, it is clear that the students did make gains productively, and these gains may be explained by the instruction they received. In addition to doing vocabulary exercises, the beginner group was exposed to different activities such as filling in worksheets after reading passages and focusing on productive vocabulary exercises rather than the receptive exercises. In addition to focusing on the receptive knowledge of words, the beginner group's teachers mainly focused on the productive knowledge of words through productive vocabulary exercises, worksheets, and vocabulary games. Thus, this may have helped the beginner group progress faster productively than receptively.

When overall productive vocabulary was taken into account, the elementary group improved their productive vocabulary faster than their receptive vocabulary, like the beginner group. In addition, in contrast to the beginner group, the elementary group improved their receptive vocabulary faster than their productive vocabulary at the 1K level, and improved productive vocabulary faster than receptive vocabulary at the 2K level. Instruction provided for the elementary group does not explain this since there is no reason that the instruction would have helped the elementary group make greater gains productively at any level. When dealing with vocabulary, the elementary group's teachers only focused on vocabulary exercises. Since the exercises in the textbooks mainly focus on the receptive knowledge of words, there is no explanation, coming from the instruction, that would explain why the elementary group learned so many more words productively at the 2K level.

While the beginner group progressed faster productively at the 1K level than at the 2K level, the elementary group progressed faster at the 2K level. Different types of instruction provided for the beginner groups may help to explain their faster progress at the P1K level. The beginner and elementary groups were exposed to different strategies. For example, while both groups were exposed to strategies for guessing the words from context, which is related to receptive vocabulary, some of the students in the beginner group were exposed to a different strategy, keeping a vocabulary notebook. Since keeping a vocabulary notebook may contribute to productive vocabulary, it may have helped the beginner group progress faster than the elementary group at the P1K level. In addition to having students keep vocabulary notebooks, the beginner students were also exposed to productive knowledge of words through productive vocabulary exercises, worksheets, and

vocabulary games. However, while there is no explanation, coming from the instruction, that explains why the elementary group progressed faster at the 2K level than at the 1K level, there is an explanation for the beginner group's slower progress at the P2K level even though productive emphasis was given importance in their courses. That is to say, since the beginner teachers stated that they focused on words that were important to the students' daily lives, these words might have been 1K words. Thus, the beginner learners may have gained more at the P1K level than at the P2K level.

Proficiency level and rate of acquisition

It will be remembered from the analysis of the vocabulary pre- and post-tests that the beginner group improved their vocabulary on all tests, with the biggest improvement at the R1K and P1K levels. The elementary group showed less improvement on the P1K test than on the other three tests, but they improved their vocabulary knowledge at all levels. The elementary group progressed faster at the R2K and P2K levels, the beginner group progressed faster at the P1K level, and both the beginner and elementary groups gained the same amount of vocabulary at the R1K level. The beginner group's faster progress at the P1K level apparently allowed them to catch up with the elementary group at this level.

Some of these results may reasonably be explained by either the materials or the type of instruction used. First, both groups developed their vocabulary receptively and productively. Second, the elementary group gained more words receptively at the 2K level than the beginner group. Third, the beginner group gained more 1K vocabulary than 2K vocabulary, but the elementary group gained approximately the same number of words at each level receptively. Fourth, the

beginner group learned more at each level productively than they did receptively, and they also learned more overall productively than they did receptively. However, this result should be treated with caution, given the small sample of 2K words from which the extrapolations were drawn. Fifth, the beginner group gained more vocabulary words at the P1K than at the P2K. As was shown in the previous sections, these results may be attributed to either materials or instruction, or both.

However, there are also some results that cannot be easily explained by either the materials or the type of instruction used. First, the elementary group gained more vocabulary productively overall than receptively, like the beginner group. However, in contrast to the beginner group, the elementary group gained more vocabulary receptively than productively at the 1K level, and more productively than receptively at the 2K level. Second, the beginner group acquired more 1K vocabulary than 2K vocabulary receptively. Nevertheless, the elementary group acquired nearly the same number of words at each level. In addition, there is some question whether the extra materials to which the elementary students were exposed could have accounted for their greater gains in receptive vocabulary.

As was mentioned in the previous sections, these results cannot be explained by either the materials or the type of instruction received. It is important to point out that for the elementary group, these higher rates of vocabulary acquisition were achieved in fewer hours of instruction. In addition, the elementary group covered more material in a shorter time period. The results that may not be explained by either materials or instruction may be due to the students' proficiency levels. Proficiency levels may have affected their rate of receptive and productive vocabulary acquisition. That is to say, students at higher proficiency levels are

expected to know more vocabulary words and be better at the four skills (reading, writing, speaking, and listening) than students at lower proficiency levels. Since some of the students in the elementary group were more skilled at these abilities and knew more vocabulary at the beginning of the term, they may have been able to learn more words through the texts and activities in their courses. Thus, the elementary group may have developed their vocabulary faster at all levels except P1K than the beginner group even though they had fewer hours of instruction than the beginner group. The beginner group was unable to catch up with the elementary group (except at the P1K level), possibly due to their lower proficiency level, even though they were provided with more hours of instruction. As was stated previously, the beginner group's better performance at the P1K level can be explained by the differences in the instruction they received; however, this gain in productive vocabulary apparently came at the expense of gains in receptive vocabulary.

Conclusion

This chapter reported the analysis of the quantitative and qualitative data gathered through the instruments of the study. According to the data analysis, there are some results that may be explained by either the materials or the type of instruction used. However, there are also some results that cannot be explained by either the materials or the type of instruction used. It is possible that the results that cannot be explained by either the materials or the type of instruction received are due to differences in proficiency. The following chapter will answer the research questions, discuss the findings, and present the implications of the study in the light of its results and limitations.

CHAPTER V: CONCLUSION

Introduction

The effect of proficiency level on the rate of receptive and productive vocabulary acquisition, and the role of materials and instruction in vocabulary acquisition were investigated in this study, which was conducted in the Preparatory School of English at Gaziosmanpaşa University with two groups of sixty-eight beginner and elementary level students. Receptive and productive 1,000 and 2,000 word level tests were administered in late December as a pre-test and the same tests were administered in the same way as a post-test at the beginning of April. Nonparametric statistics were used to analyze the results of the tests in the study. In addition, pre-tests and post-tests within each group and between the two groups were compared. In a qualitative analysis, the teaching materials were evaluated and the interviews with the instructors were transcribed in order to reveal their methods of dealing with vocabulary during the research period. This chapter includes the general results and discussion, limitations, pedagogical implications of the study and suggestions for further study.

General results and discussion

This section will answer the research questions of this study and discuss the findings in the light of the relevant literature.

Research question 1: Rate of vocabulary acquisition at beginner and elementary level

This research question is answered by looking at the extrapolations from the test results. In order to calculate how many words were acquired, the gain score was divided by the number of the words on the test and multiplied by the number of the words sampled by the test. In order to find out the rate of vocabulary acquisition of the beginner and elementary groups, the number of words acquired was divided by the number of hours of English instruction received.

The number of words acquired and rate of acquisition of the two groups were examined taking into account the research period of almost nine weeks. While the beginner group received 26 hours per week of English instruction, the elementary group received 22 hours per week of English instruction. Over the research period, the beginner group received 234 hours of English instruction; however, the elementary group received 198 hours of English instruction. The findings show that, at the 1K level, the beginner group acquired receptively .436 words per hour. However, the elementary group acquired the same number of words in 198 hours, for a rate of acquisition of .515 words per hour. It is evident from the result that the vocabulary gap between the two groups at the R1K level is not very large. However, the gap between the two groups at the R2K level is greater than at the R1K level. While the beginner groups acquired .226 words per hour, the elementary group acquired .530 words per hour. Productively, at the P1K level, the beginner group acquired .551 words per hour. However, the elementary group learned .325 words per hour. It is interesting that the beginner group developed their vocabulary at the P1K level faster than the elementary group. As for the P2K level, while the beginner

group acquired .388 words per hour, the elementary group acquired .919 words per hour. It is evident from the result that the elementary group improved their vocabulary at the P2K level faster than the beginner group.

When the acquisition of the total receptive and productive number of words is considered, the beginner group acquired receptive knowledge of 155 words (102 at the R1K level + 53 at the R2K level) in 234 hours, for a rate of .662 words per hour. The elementary group acquired receptive knowledge of 207 words (102 R1K + 105 R2K) in 198 hours for a rate of 1.045 words per hour. As for the total productive vocabulary acquisition, the beginner group acquired productive knowledge of 220 words (129 P1K + 91 P2K) in 234 hours for a rate of .939 words per hour; however, the elementary group acquired productive knowledge of 247 words (65 P1K + 182 P2K) in 198 hours for a rate of 1.244 words per hour. This result does not support the previous finding by Griffin and Harley (1996), who state that since vocabulary learning is predominantly receptive, learners are more likely to gain receptive knowledge than productive knowledge. In addition, Laufer's (1998) results were also not confirmed in this study. In her research, she studied advancement in passive, controlled active and free active vocabulary over one year of education. She found that passive vocabulary grew faster than active vocabulary. Similarly, Morgan and Oberdeck's (1930) results were also not confirmed. In their research, they measured the second language receptive and productive vocabulary sizes of five classes of university students learning German. They found that the size of receptive vocabulary exceeded that of productive vocabulary at five levels of word frequency. The results suggest that at lower levels, receptive knowledge increases faster than productive knowledge, and at later levels, production develops faster than reception

but never to the point that it equals reception. Waring (1997) conducted a study using the same levels tests that Laufer used. However, he used Japanese translations to explain the meanings of words. He also added a 1,000 word level section below the usual 2,000 word starting level. His study demonstrated that language learners always gained higher scores on the receptive test than on the controlled productive test, in contrast to the findings of the present study. However, as was mentioned in the previous sections, the extrapolations for the productive tests used in the present study should be interpreted with great caution since they were drawn from small samples. Thus, while the results in this study are not consistent with those of the studies mentioned above, they cannot be considered to have disproved the findings of these other studies. It is possible that with a larger sample of words on the productive tests, the findings of this study might have more closely resembled those of the other studies.

Research question 2: The role of materials and instruction in vocabulary acquisition

While the elementary group was exposed to 22 hours of English instruction per week, the beginner group was exposed to 26 hours of English instruction per week during the academic year. The two groups were also exposed to the same materials from Units 1 to 10 in the main course book, workbook, and Units 6 to 9 in the reading and vocabulary book. However, only the elementary group studied two extra, Units 11 and 12, in the main course book and workbook. Thus, it may be predicted that the additional four hours of English instruction per week for the beginner group and the two extra units for the elementary group may have affected their vocabulary acquisition at the 1,000 and 2,000 frequency levels.

It is possible that materials and instruction played a role in the receptive and productive vocabulary acquisition of the two groups. In terms of materials, the books contained a large percentage of vocabulary at the 1K and 2K word levels and the students in both groups were exposed to receptive or productive knowledge through the vocabulary exercises. In order to classify the vocabulary exercises that accompany materials Paribakht and Wesche (1996, cited in Nation, 2001) used Gass's (1988, cited in Nation, 2001) five levels in learning from input. This classification relates vocabulary exercises to the conditions under which learning might occur. Gass's first level is called 'apperceived input' or noticing. Vocabulary exercises that use the noticing condition include listing words to notice at the beginning of the text and using highlighting in the text. The next level is 'comprehended input'. This is the first step towards receptive retrieval. Vocabulary activities at this level (recognition) involve matching words with first or second language synonyms, definitions or pictures. The third level is called 'intake'. Vocabulary exercises at this level include morphological analyses of words. The fourth level is 'integration'. This level involves activities like guessing from context, matching with collocates and synonyms, and finding the odd one out in a set. The fifth level is 'output'. This level involves recall of the target word form as in labelling activities, finding the form in the text to match with definitions, and answering questions requiring use of the target words. The exercises presented in the materials are compatible with the classification system of Paribakht and Wesche, and Gass. Thus, this might be accepted as a reason for why the students learned vocabulary both receptively and productively.

When the role of instruction is considered, the beginner teachers stated from the interviews that they taught some words directly in order to deal with difficult vocabulary and increase students' receptive vocabulary knowledge quickly to help them reach a suitable vocabulary threshold so that they could understand the reading passages and the exercises. During teaching, teachers in both groups gave great importance to the receptive use of vocabulary and paid attention to productive use of vocabulary in their courses as well. In addition, the teachers for the beginner group focused on words that they thought were important to the students' daily lives. This focus may explain the beginner students' gains in 1K vocabulary. However, the elementary students' teachers focused on highlighted words. This focus may explain the elementary students' gains at both levels (at the 1K and 2K levels). The instruction provided for the beginner group may have also played a role in their productive vocabulary acquisition. Gains in productive vocabulary are not surprising since the beginner group's teachers focused on productive vocabulary. In addition, it is possible that the beginner teachers' focus on the words they thought the students needed in their daily lives may explain the beginner students' greater gains at the 1K level. In addition, as a strategy, one of the beginner group's teachers encouraged students to keep vocabulary notebooks. Schmitt and Schmitt (1995) point out that when vocabulary notebooks are used as a strategy in classroom activities, students are exposed to the notebook words many times productively and this helps them remember, recognize, and use the vocabulary easily. Nation (1990) states that students who use several vocabulary learning strategies are the most successful. Thus, it may be inferred here that encouraging students to use strategies may have

helped them be successful, especially at improving their productive knowledge of vocabulary.

It is evident from the results that students actually learn from the materials they are exposed to, and they actually learn from instruction provided for them. There are two major studies which support the results in this study. Paribakht and Wesche (1997) found positive evidence in support of vocabulary instruction. They argue that contextualized learning through reading is effective but that contextualized reading plus instruction is superior. They found that both reading only and reading plus vocabulary instruction conditions over a period of three months resulted in significant gains in vocabulary knowledge. In the second study, Zimmerman (1994) found that students gained significant vocabulary knowledge in three hours a week of vocabulary instruction accompanied by a self-selected and course-related reading. The study was conducted over ten weeks with forty-five ESL students attending pre-university intensive English programs. These studies reveal that materials and instruction help students gain more vocabulary. They support the findings of the present study that materials and instruction play a certain role in the vocabulary acquisition of language learners.

Research question 3: Relationship between level of proficiency and rate of vocabulary acquisition

The study also produced some results that cannot be explained very well by either materials or instruction. First, as was shown in Chapter IV, there is no explanation arising from the materials for the elementary group's greater gains receptively at the 2K level than the beginner group. Second, while the beginner group gained more 1K vocabulary than 2K vocabulary, the elementary group gained

about the same number of words receptively at each level. Third, like the beginner group, the elementary group acquired more words productively than receptively overall; unlike the beginner group, the elementary group learned more receptively than productively at the 1K level, and more productively than receptively at the 2K level. Fourth, while the beginner group gained more at P1K than at P2K, the elementary group gained more at P2K than P1K. The elementary group achieved these higher rates of vocabulary acquisition in fewer hours of instruction. The elementary group studied more materials in a shorter time period. Since these results cannot be explained by either materials or instruction, it is believed that proficiency may have played a part. In this respect, this study has confirmed what has been seen in previous similar studies. Swanborn and de Glopper (2002) found that students at low proficiency levels were unable to acquire sufficient vocabulary through reading. Pulido's (2003) study demonstrated that students who are more proficient in reading were able to gain greater vocabulary. Tekmen and Daloğlu's (2006) study showed that the advanced group acquired more vocabulary through reading than the intermediate and upper-intermediate groups. In short, the students at higher proficiency levels were able to learn more vocabulary than the students at lower proficiency levels. These studies above have a common point in that they all look at vocabulary acquisition from incidental learning. That is, high proficiency level students are able to benefit more from reading. However, this study contributes a new perspective to the literature, that students at higher proficiency levels are also able to benefit more from the materials and instruction to which they are exposed.

Limitations

This study has some limitations. As there was limited time for carrying out this research, the period of time between the administration of the pre-test and post-test may not have been long enough to show significant vocabulary acquisition. It would have been better if the research had covered an academic year. In addition to that, the pre-test was administered in late December and participants went on a one month semester holiday soon after the administration of the pre-test. It is almost certain that the students did not continue studying English at home. Since this holiday covered the research period, it may have affected the participants' responsibility of studying English regularly. In other words, it is likely that the students were not studying vocabulary consistently over the entire research period.

Another limitation was that the research was carried out with only two proficiency levels, beginner and elementary. The results would be more generalizable if the study had been conducted with upper levels of proficiency, as well.

Lastly, the other limitations of the study have to do with the interviews and the extrapolations. The extrapolations would be more reliable and the results might be more consistent with previous studies if students had been tested on more words at each level. As for the interviews, it would have been better to interview some of the students from the beginner and elementary groups in order to learn their ideas about their vocabulary learning during the research period. With the help of these interviews, the researcher would have been able to find out about the vocabulary learning strategies students used and they would also have helped the researcher to comment on the effects of individual differences on vocabulary acquisition.

Implications

This study has shown that materials and instruction actually contribute to students' acquisition of vocabulary. When receptive knowledge is focused on through materials or instruction, students tend to learn receptive knowledge. If productive knowledge is focused on, students are likely to learn productive knowledge. Therefore, in preparatory programs at universities, teachers or curriculum designers should pay attention to the aim of the program. While selecting the materials for the program and using teaching methods in classes, selected materials and teaching methods should be compatible with the aim of the program. For example, students who want to be academicians should improve their reading skills and vocabulary knowledge. In this respect, if students are expected to improve their receptive vocabulary knowledge, materials and instruction should be selected according to this basis. On the other hand, some of the programs at the universities teach professional English (e.g. the vocational school of tourism and hotel services). Thus, the emphasis should be on productive vocabulary knowledge. The materials and teaching methods used should help students use the language.

The study has also shown that students' proficiency levels may affect their vocabulary acquisition. Even though the elementary group had fewer hours of instruction, they covered more materials than the beginner group and they acquired more vocabulary. In other words, even with more hours of instruction, the beginner group was not able to cover as much material as the elementary group. The beginner students were given four more hours per week in order to help them catch up with the elementary group by the end of the year. However, the results showed that the beginner group was unable to catch up with the elementary group except at the P1K

level. Thus, it appears unrealistic to expect beginners to reach the same level by the end of the year since four more hours per week for the beginner group did not help them to catch up with the elementary group. Thus, an additional ten hours per week and different instruction should be provided for the beginner group. The additional instruction time should be ten hours because students at this level should spend more time on activities which help them repeat vocabulary items many times and so increase the retention of vocabulary. Webb (2007) examined the effects of repetition on vocabulary knowledge. The results showed that greater gains in knowledge were found for at least one aspect of knowledge each time a word was repeated. If learners encounter unknown words ten times in context, sizeable learning gains may occur. However, in order to develop full knowledge of a word more than ten repetitions may be needed. Different instruction should also be provided for beginners. For instance, teachers who are teaching lower level students should focus on direct teaching of the most frequent words of English, rather than simply focusing on the words highlighted in the materials, since these most frequent words are so important to all other aspects of their language learning.

Suggestions for further study

Taking the limitations into consideration, a similar research study should be conducted in a longer time frame and with more participant students from different levels and with more participant teachers. In addition to taking the test, upper level students would be asked to write paragraphs in order to measure their free active vocabulary. Since the extrapolations for the productive tests were drawn from small samples, as a suggestion for further study, another study would be more reliable if students were tested on more words at each level.

Conclusion

This study investigated the rate of vocabulary acquisition at the two proficiency levels (beginner and elementary), the role of materials and instruction in vocabulary acquisition, and the relationship between level of proficiency and the rate of vocabulary acquisition. The results showed that the beginner and elementary groups developed their vocabulary almost at the same rate at the R1K level. However, surprisingly, the beginner group progressed faster than the elementary group at the P1K level. For the R2K and P2K levels, the elementary group showed faster progress than the beginner group. It was found that the materials and types of instruction used may have played some role in the vocabulary acquisition of the two groups but there were some results that could not be explained by the materials and types of instruction used. Some of the differences between the two groups might be explained by the differences in their proficiency levels. Students at higher proficiency levels are expected to know more vocabulary and be more comfortable using the four skills than students at lower proficiency levels. They might have developed some new strategies. Keeping in mind that the elementary students knew more vocabulary than beginner students at the beginning of the academic year, they might have been able to acquire more vocabulary than the beginner group, using their more developed skills, background and vocabulary knowledge, and learning strategies.

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APPENDIX A: 1,000 WORD LEVEL RECEPTIVE TEST

Write T if a sentence is true. Write N if it is not true. Write X if you do not understand the sentence. The first one has been answered for you.

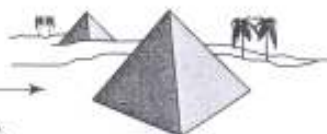
We cut time into minutes, hours and days.

T

This one is little.



You can find these everywhere.



Some children call their mother Mama.

Show me the way to do it means 'show me how to do it'.

This country is part of the world.

This can keep people away from your house.



When something falls, it goes up.

Most children go to school at night.

It is easy for children to remain still.

One person can carry this.



A scene is a part of a play.

People often think of their home, when they are away from it.

There is a mountain in every city.

Each month has the same number of days.

A chief is the youngest person in a group.

Black is a colour.

You can use a pen to make marks on paper.

A family always has at least two people.

You can go by road from London to New York.

Silver costs a lot of money.



This is a hill.



This young person is a girl.

We can be sure that one day we will die.

A society is made of people living together.

An example can help you understand.

Some books have pictures in them.

When some people attack other people, they try to hurt them.

When something is ancient, it is very big.

Big ships can sail up a stream.

It is good to keep a promise.

People often dream when they are sleeping.

This is a date - 10 o'clock.

When something is impossible, it is easy to do it.

Milk is blue.

A square has five sides.

Boats are made to travel on land.

Cars cannot pass each other on a wide road.

When you look at something closely, you can see the details.



This part is a handle.

APPENDIX B: 2,000 WORD LEVEL RECEPTIVE TEST

Match the three definitions with three of the words given.

1. 1) copy
2) event
3) motor _____ end or highest point
4) pity _____ this moves a car
5) profit _____ thing made to be like another
6) tip

2. 1) accident
2) debt
3) fortune _____ loud deep sound
4) pride _____ something you must pay
5) roar _____ having a high opinion of yourself
6) thread

3. 1) birth
2) dust
3) operation _____ game
4) row _____ winning
5) sport _____ being born
6) victory

4. 1) clerk
2) frame
3) noise _____ a drink
4) respect _____ office worker
5) theatre _____ unwanted sound
6) wine

5. 1) dozen
2) empire
3) gift _____ chance
4) opportunity _____ twelve
5) relief _____ money paid to the government
6) tax

6. 1) admire
2) complain
3) fix _____ make wider or longer
4) hire _____ bring in for the first time
5) introduce _____ have a high opinion of someone
6) stretch

7. 1) arrange
2) develop
3) lean _____ grow
4) owe _____ put in order
5) prefer _____ like more than something else
6) seize
8. 1) blame
2) elect
3) jump _____ make
4) manufacture _____ choose by voting
5) melt _____ become like water
6) threaten
9. 1) brave
2) electric
3) firm _____ commonly done
4) hungry _____ wanting food
5) local _____ having no fear
6) usual
10. 1) bitter
2) independent
3) lovely _____ beautiful
4) merry _____ small
5) popular _____ liked by many people
6) slight

APPENDIX C: 2,000 WORD LEVEL PRODUCTIVE TEST

Write an appropriate word in the blanks given.

1. I am glad we had this opp _____ to talk.
2. There are a doz _____ eggs in the basket.
3. Every working person must pay income t _____.
4. The pirates buried the trea _____ on a desert island.
5. Her beauty and cha _____ had a powerful effect on man.
6. La _____ of rain led to a shortage of water in the city.
7. He takes cr _____ and sugar in his coffee.
8. The rich man died and left all his we _____ to his son.
9. Pup _____ must hand in their papers by the end of the week.
10. This sweater is too tight. It needs to be stret _____.
11. Ann intro _____ her boy friend to her mother.
12. Teenagers often adm _____ and worship pop singers.
13. If you blow up that balloon any more it will bur _____.
14. In order to be accepted into the university, he had to impr _____ his grades.
15. The telegram was deli _____ two hours after it had been sent.
16. The differences were so sl _____ that they went unnoticed.
17. The dress you're wearing is lov _____.
18. He wasn't very popu _____ when he was a teenager, but he has many friends now.

APPENDIX D: 1,000 WORD LEVEL PRODUCTIVE TEST

Write an appropriate word in the blanks given.

1. Dilek ca _____ Semra in her room.
2. I am su _____ that I will see Çiğdem in class.
3. If you fa _____, you must stand up.
4. You will fi _____ the book on the table.
5. The gi _____ is sitting next to her mother.
6. There are many different countries in the wo _____.
7. Do you have t _____ to help me?
8. Do you know the w _____ to go to the school?
9. Hakan and Mustafa are of _____ late for school.
10. I don't like to walk outside at ni _____.
11. The exa _____ help the students to understand.
12. There are many cars on the ro _____.
13. That pe _____ is my friend fro school.
14. There were too many people talking, so it was imp _____ to hear.
15. You can ke _____ that book if you like it.
16. Berkay is too li _____ to play with that big boy.
17. There are four weeks in a mo _____.
18. The street is wi _____ enough for two cars.
19. Dilber's dog sometimes att _____ people.
20. Fikret and Murat watched the bo _____ from the shore.
21. This book has too many pen ma _____ on it.
22. What co _____ should I paint the walls?

23. Drinking mi _____ is good for children.
24. I usually dre _____ about the future.
25. The houses up on the hi _____ are very beautiful.
26. Sena has got pic _____ of famous people all over her bedroom wall.
27. Fatih pro _____ to write to me every week.
28. I want a sq _____ table, not a round one.
29. Büşra has a sil _____ ring.
30. In anc _____ times, people thought the sun was a god.
31. We must know many det _____ to complete the form.

APPENDIX E: INTERVIEW QUESTIONS

Teacher's Questions

1. How did you deal with vocabulary from the beginning of the first semester until the administration of the post-test on the seventh of April?
2. Did you focus on receptive or productive knowledge of words, or both? How did you focus on receptive knowledge? How did you focus on productive knowledge?
3. Did you focus only on the vocabulary words highlighted by the textbook? Were there any other words you focused on? If so, how did you decide which words to focus on?
4. Did you teach or encourage any vocabulary learning strategies such as guessing words from context, using a dictionary, or keeping vocabulary notebooks?