SHALL WE TEACH VOCABULARY IN LEXICAL SETS, THEMATICALLY RELATED SETS OR UNRELATED SETS?

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(Yüksek Lisans Tezi)

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SHALL WE TEACH VOCABULARY IN LEXICAL SETS, THEMATICALLY RELATED SETS OR UNRELATED SETS?

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MA THESIS

English Language Teaching Programme

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YENİ KELİMELERİ ANLAMSAL BAĞINTILI KELİME GRUPLARI HALİNDE Mİ, BİR KONU ETRAFINDA DÖNEN KELİME GRUPLARI HALİNDE Mİ VE/VEYA BİRBİRİ İLE ANLAM BAKIMINDAN İLİNTİSİZ KELİME GRUPLARI HALİNDE Mİ ÖĞRETMELİYİZ?

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Danışman: Doç. Dr. F Hülya Özcan

Eskişehir

Anadolu Üniversitesi

Eğitim Bilimleri Enstitüsü

Ekim, 2009

To my precious father whom I have just started to understand….

YÜKSEK LİSANS TEZ ÖZÜ

YENİ KELİMELERİ ANLAMSAL BAĞINTILI SÖZCÜK GRUPLARI HALİNDE Mİ, BİR KONU ETRAFINDA DÖNEN SÖZCÜK GRUPLARI HALİNDE Mİ VE/VEYA BİRBİRİ İLE ANLAM BAKIMINDAN İLİNTİSİZ SÖZCÜK GRUPLARI HALİNDE Mİ ÖĞRETMELİYİZ?

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Bu çalışmada öğrencilere anlamsal bağıntılı sözcük gruplarının, bir tema etrafında dönen sözcük gruplarının ve anlamca birbirinden ilintisiz sözcük gruplarının algıya dayalı sözcük öğrenimi üzerindeki etkileri araştırılmıştır. Çalışma Anadolu Üniversitesi Hazırlık okulundaki başlangıç üstü seviyesindeki 23 öğrenci üzerinde uygulanmıştır. Çalışmayı yapabilmek için anlamsal bağıntılı, tema etrafında dönen ve anlamca birbirinden ilintisiz sözcük grupları oluşturulmuştur.

Bu çalışmada sözcük öğretimi üç hafta sürmüştür. İlk hafta öğrencilere üç tane anlamsal bağıntılı sözcük grubu öğretilmiştir. Her grup birbirini izleyen ayrı günlerde öğretilmiştir. Her bir grupta sekiz sözcük bulunmaktadır ve bu sözcükler 45 dakikalık bir ders süresinde öğretilmiştir. Böylece ilk hafta öğrencilere 24 tane anlamsal bağıntılı sözcük öğretilmiştir. İkinci hafta öğrencilere tema etrafında dönen sözcükler öğretilmiştir. Yine üç adet grup oluşturulmuş ve her bir grup ayrı günlerde öğretilmiştir. Gruplardaki sözcük sayısı ilk hafta öğretilen sözcük sayısı ile aynıdır. Üçüncü hafta ise anlam bakımından birbirinden ilintisiz sözcükler öğretilmiştir. Her birinde sekiz bilinmeyen sözcük olan üç adet anlam

bakımından birbirinden ilintisiz sözcük grubu oluşturulmuş ve aynı hafta içinde birbirini takip eden günlerde öğretilmiştir.

Sözcükler öğretilmeye başlanmadan önce, öğrencilerin öğretilecek sözcükleri bilip bilmediklerini ölçmek amacı ile ön test verilmiştir. Bu ön testin analizi sonrasında öğrencilerin bildiği sözcükler çalışmaya alınmamıştır. Her bir sözcük grubu bir ders saati içinde öğretilmiş ve bunun ardından öğrencilere o derste öğrendikleri sözcüklerle alakalı algıya dayalı olmak üzere etkinlik yaptırılmıştır. Dersin sonunda öğrencilere son test verilmiştir. Sözcükleri öğrenmelerinden üç hafta sonra son testin aynısı gecikmeli test olarak yeniden uygulanmıştır. Yapılan bu testler tanıma testidir. Tanıma testi algıya dayalı öğrenmeyi ölçtüğünden ve algıya dayalı öğrenme üretmeye dayalı öğrenmeden önce geldiği için bu test tipi tercih edilmiştir (Nation, 2001).

Araştırmadan elde edilen bulgular yeni sözcükleri farklı tipteki setler içinde öğrenmenin algıya dayalı sözcük öğreniminde istatistiksel olarak bir fark yarattığını ortaya çıkarmıştır. Verilen son teste göre anlamca birbirinden ilintisiz sözcük grubundaki sözcüklerin diğer gruplara göre öğrencilerde daha fazla algıya dayalı sözcük kazancına yol açtığı görülmüştür. Anlamsal bağıntılı sözcük grubu ise tema etrafında dönen sözcük grubuna göre daha fazla sözcük öğrenilmesine neden olmuştur. Tema etrafında dönen sözcük grupları ise diğer gruplara göre daha az algıya dayalı sözcük kazancına yol açmıştır. 3 hafta sonra verilen gecikmeli testler incelendiğinde ise anlam bakımından birbirinden ilintisiz sözcük grubu ile tema etrafında dönen sözcük grubu arasında anlamlı bir fark bulunmamıştır. Bu iki sözcük grubunun anlamsal bağıntılı sözcük grubundan daha fazla algıya dayalı sözcük kazancına yol açtığı ortaya çıkmıştır.

Bu araştırmada ayrıca tema etrafında dönen sözcük gruplarında sözcük türünün algıya dayalı sözcük kazancına etkisi de araştırılmıştır. Bu amaçla tema etrafında dönen sözcük gruplarından biri sadece fiillerden, ikincisi sadece isimlerden, sonuncusu ise hem fiil hem

isimlerden oluşturulmuştur. Uygulanan son test ve 3 gecikmeli test göstermiştir ki hem isim hem fiillerden oluşan sözcük grubu öğrencilerde daha fazla sözcük kazancına yol açarken sadece fiillerden oluşan sözcük grubu en az algıya dayalı sözcük kazancı ile sonlanmıştır.

Çalışmaya katılan öğrencilere çalışmanın sonunda bir anket uygulanmış ve ankette hangi sözcük grubunu daha fazla hatırladıklarını, hangi sözcük grubunu ise hatırlayamadıklarını düşündükleri sorulmuştur. Bu anketin sonucu öğrencilerin büyük bir kısmının anlam bakımından birbirinden ilintisiz sözcük grubunu diğer gruplara göre daha iyi hatırladıklarını ancak anlamsal bağıntılı sözcük grubunu en az hatırladıklarını düşündükleri ortaya çıkmıştır.

Sonuç olarak bu çalışmada farklı tipteki sözcük gruplarının ve tema etrafında dönen sözcük grubundaki sözcük türünün öğrenciler için algıya dayalı sözcük kazancında farklılık yarattığı sonucuna ulaşılmıştır.

ANAHTAR KELİMELER: Yabancı Dilde Sözcük Öğretimi, Anlamsal Bağıntılı Sözcükler, Tema Etrafında Dönen Sözcükler, Anlam Bakımından İlintisiz Sözcükler

M.A. THESIS ABSTRACT

SHALL WE TEACH VOCABULARY IN LEXICAL SETS, THEMATICALLY RELATED SETS OR UNRELATED SETS?

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This study was designed to investigate whether the presentation of new words in lexical, thematically related or unrelated sets makes difference in receptive vocabulary gain for the students. The study was conducted with 23 subjects who were in the same elementary level class at Anadolu University. To carry out the study lexical, thematically related and unrelated vocabulary sets were composed. Each set was taught in different weeks to the same students.

In the first week, three lexical sets were presented to students on subsequent days. In each set there were 8 words. As there were three lexical sets, the students were taught 24 words. In the second week, three thematically related sets of vocabulary were presented on following days. The total amount of the vocabulary taught was again 24. In the third week, three unrelated sets of vocabulary were taught. There were again 8 words in each set; therefore, the students were presented with 24 words in the third week.

Before teaching the vocabulary, a pre-test was given to students to select the words which were unfamiliar to the students. Then, each word set was taught in a lesson explicitly. The students were asked to practice the words either with a matching or fill in the blanks exercise. After that, the students were given an immediate post test. Three weeks later the

students received the same test as delayed post test. The post tests were recognition tests as they test receptive knowledge, and it is believed that receptive knowledge comes before productive knowledge (Nation, 2001).

The results revealed that presenting vocabulary in different types of sets made difference in receptive vocabulary gain of the students. The immediate post test results showed that unrelated sets led to more receptive vocabulary gain than the other two sets, and among these three different vocabulary sets, thematically related set caused the least receptive vocabulary gain. As for the delayed post test scores, the vocabularies in unrelated sets and thematically related sets were recognized equally by the students. Those sets led to more vocabulary gain than the lexical set regarding the long term retention.

In this study, the effect of part of speech in thematically related sets were also investigated. In the previous studies, the thematically related sets were composed of words from different parts of speech. However in this study, one of the thematically related set was composed of only nouns, the other one included only verbs and the last one had both nouns and verbs in it. The results of the immediate and delayed post test showed that the thematically related set with both nouns and verbs yielded the most receptive vocabulary gain for the students. The set with only verbs led to the least vocabulary gain.

At the end of the study, a questionnaire was given to the students to find out the students' perceptions about learning vocabulary through different types of sets. In the questionnaire, the students were asked which vocabulary set they recognized the most and the least. The answers of the students showed that most of them thought that they recognized the vocabulary in the unrelated sets more than the vocabulary in the other two sets and they felt that they remembered the vocabulary in the lexical sets the least.

The findings of this study confirmed that teaching vocabulary in different types of sets made a difference in receptive vocabulary gain of the students. The results showed that both

for the short and the long term retention, the unrelated set led to more receptive vocabulary gain than the lexical set. As for the thematically related set, although it was the set that led to least vocabulary gain for the short term retention, for the long term retention, there was no statistical difference between thematically related and unrelated set.

Another finding of this study suggested that the words' part of speech in thematically related sets affected their recognition. The subject recognized the words in the set with both verbs and the nouns more than they did the words in the set with just verbs and the set with only nouns. The set with the verbs, however, led to the least receptive vocabulary gain among these three thematically related sets.

KEYWORDS: Foreign Language Vocabulary Learning, Lexical Sets of Vocabulary, Thematically Related Sets of Vocabulary, Unrelated Sets of Vocabulary

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JÜRİ VE ENSTİTÜ ONAYI

Hatice Gülçin ÖZLÜ'nün "Yeni Kelimeleri Anlamsal Bağıntılı Kelime Grupları Halinde mi, Bir Konu Etrafında Dönen Kelime Grupları Halinde mi ve/veya Birbiri ile Anlam Bakımından İlintisiz Kelime Grupları Halinde mi Öğretmeliyiz?" başlıklı tezi 16.10.2009 tarihinde, aşağıda belirtilen jüri üyeleri tarafından Anadolu Üniversitesi Lisansüstü Eğitim-Öğretim ve Sınav Yönetmeliğinin ilgili maddeleri uyarınca Yabancı Diller Eğitimi Anabilim Dalı İngilizce Öğretmenliği programı yüksek lisans tezi olarak değerlendirilerek kabul edilmiştir.

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CHAPTER 1

INTRODUCTION

"Lord Polonius: What do you read, my lord?
Hamlet: Words, words, words."

Shakespeare (Hamlet, Act II, Scene II)

1.1. Introduction

Words are an important part of our life, but people do not often think about their power and value (Stahl and Nagy, 2006). Stahl and Nagy (2006) used a metaphor to show the importance of vocabulary and it is "... like the proverbial fish that is unaware of the water which it swims, we are seldom conscious of how much of our experience is in terms of language" (p.3). As the words have such a big value, and as we communicate through words, there has been an increasing interest on teaching vocabulary during the last decades (Thornbury, 2002, Carter and Nunan, 2001, Read, 2000). Gipe (1978-1979) writes in his article that "if a word is important to know, it is important enough to teach well" (p. 642). Allen (1983) claims that communication breakdowns occur if people do not use the right words. Hedge (2000) emphasizes the importance of vocabulary teaching and states that the errors in the vocabulary can be more misleading than the errors in the grammar. She explains this with an example:

> Sometimes the context of the utterance would lead listener to question their first interpretation, but a chance response such as 'Yes, my father has an affair in that village' (confusing the Swedish 'affàr' meaning shop with the English 'affair' which can mean 'extra-marital relationship') gives the listener the wrong impression. (p.111)

Harmer (1991) also states that teaching vocabulary is very important because if someone wants to say something, he must have some words to express himself and to give meaning. Not only productive language but also receptive language is affected by inadequate

vocabulary knowledge (Nation, 1990). Horwitz (1988) found that a substantial number of students either agreed or strongly agreed that the most important part of learning a foreign language is learning vocabulary. As a result of that, many learners spend a great deal of time on trying to memorize vocabulary (Read, 2000). It is even claimed that vocabulary is the main component of the language and determines how well the learners speak, write, and read in that language (Richards and Renandya, 2002). Although many of the course books include vocabulary sections, teachers as well should know the methodologies available for presenting and practising the words (Taylor, 1990).

1.2. Background of the Problem

As a result of the awareness of the significance of vocabulary learning and teaching, vocabulary teaching has been perceived as a special area in language teaching (Read, 2000), and a number of studies have been conducted on how to teach vocabulary, yet there are still some issues that the researchers did not reach a consensus. One of them is whether vocabulary should be taught in lexical sets, thematically related sets or unrelated sets.

Lexical sets which are also called 'semantic clusters' or 'semantic fields' or 'semantically related words' (Marzano and Marzano, 1988, cited in Tinkham, 1997; Erten and Tekin, 2008) are composed of co-hyponyms (McCarthy, 1990). McCarthy (1990) explains hyponymy as a relationship between the words which has 'hierarchical tree-type diagrams' (p.19). In the hyponymy relation, apple is a hyponym of fruit and peach, grapes, bananas are on the same level in the taxonomy with the apple and called co-hyponyms of apple. When these co-hyponyms are gathered in a group, that group is called 'lexical set' (McCarthy, 1990). Thus, the word group of 'banana, cherry, grape, apple' is called a lexical set.

The other set is thematically related set. Thematically related words are the ones that evolve around a theme with different parts of speech (Tinkham, 1997). Tinkham (1997) provides an example of thematically related set whose theme is 'frog', and the related words are "pond, hop, swim, green, slippery" (p.141). Similarly, Christmas themed words like "snow, icicles, fireplace, tree, carols, and lights" are explained as a thematically related set by Thornbury's (2002, p.10).

The other set is unrelated set, and as understood from the name, it is composed of words that have no connections with each other in terms of their meaning (Tinkham, 1997). A group of words such as "computer, run, muffin, lock" can be categorized as an unrelated set of vocabulary.

There are some researchers who believe that vocabulary should be taught in lexical sets. Hedge (2000) and Thornbury (2002) support teaching vocabulary in lexical sets claiming that there is an assumption that learners build networks of meaning, so the course books and the teachers organize vocabulary teaching in this way. McCarthy (1990) defends teaching vocabulary in lexical sets, too. He justifies his idea saying that as the learners store words according to the meaning of the words; teaching them in lexical sets may assist learning and retention. However, there are some other researchers who claim that teaching vocabulary in lexical sets lead learners to confusion (Nation, 1990; Higa, 1963). Interference theory states that vocabularies which have similar meanings should not be taught together (Nation, 1990). The idea that interference theory puts forward is that if two related items share similar features but also different in some ways, the similarities of the words will strengthen the association, and the differences will interfere with each other (Nation, 1990). The first study on interference related to vocabulary learning has been carried out by Higa (1963). He found out that the words which are strongly associated with each other are much more difficult to learn than the unrelated ones.

As for the thematically related set, it also has its supporters (Tinkham, 1997; Thornbury, 2002; McCarthy, 1990). A number of books such as Let's Talk (Jones, 2002) prepare their units around different themes. In Unit 9 Sleep and Dreams, it presents the sleeping theme with the words such as nightmare, nap, sleepwalker, insomnia, cure, etc together. Some researchers claim that thematically related words are easier to learn than lexical sets (Tinkham, 1997; Thornbury, 2002). Nevertheless, there are also some arguments against teaching vocabulary in thematically related sets. Hedge (2000) states that if the words are taught in thematically arranged word lists, the learners will still suffer from interference.

When the evidences about the interference theory comes into mind, it can be said that the words which have no relation to each other in terms of meaning will not possibly have interference effect on the learner's memory; therefore, they will be easier to learn. Tinkham (1997), Waring (1997), Erten and Tekin (2008) conducted studies comparing lexical sets versus unrelated sets, and the results supported the idea that the unrelated sets led to more vocabulary gain than lexical set. However, the previous study also suggested that unrelated sets yielded less vocabulary gain than thematically related sets.

The problem, introduced up to this point, is that there is no clear idea about whether the teachers and the course books should present vocabulary in lexical sets, thematically related sets or unrelated sets for more vocabulary gain.

1.3. Purpose of the study

As which vocabulary set results in more vocabulary gain is not agreed upon, this study attempts to explore whether the lexical set, thematically related set or unrelated set leads to more receptive vocabulary gain in terms of short term and long term retention for the students at Anadolu University prep school.

1.4. Significance of the Study

Although there have been a number of studies done in the area of vocabulary teaching, Folse (2004) indicates that there has not been a great deal of research on the effectiveness of lexical sets. This field needs researches comparing the efficacy of these approaches with L2 students in real classes over a period of time (Folse, 2004). Some of the previous studies done in this area were carried out under the laboratory conditions using an artificial language. They were not conducted with the real words in a real classroom applying the vocabulary presentation techniques (Tinkham, 1997; Waring, 1997). The students were taken into the researchers' office one by one and were asked to memorize the artificial language words by repeating the L1 words and the corresponding artificial language word. Waring (1997) even admits in his article that the experimental design of these researches had problems and was tightly controlled for the bias of the researcher, not for the learner. If a research is more tightly controlled, the results of it might not apply to a real classroom (Waring, 1997). Thus, if the vocabulary is taught in a real classroom by applying vocabulary teaching techniques, the results may be different. Tinkham (1997) as well states that this field calls for further researches since the evaluation of his research was just for short term; however, the long term effects of learning vocabulary through these sets should be tried to be found out. In the light of these comments, Erten and Tekin (2008) conducted a research in the real classroom; however, they tried to find if there is a learning difference between lexical sets and unrelated sets. They did not include thematically related set in their study. Also, their subjects were primary school students. In addition to these differences, in this study, the words in each of the thematically related sets were chosen from different parts of speech to investigate the effect of part of speech on receptive vocabulary gain in thematically related sets. There were three themes. Love theme consisted of only verbs, crime theme consisted of only nouns, and

cooking theme consists of both verbs and nouns. However, in the research done before, the thematically related sets were composed of nouns, verb, adjectives altogether, so the current research aims to put more light on if the part of speech of the words in thematically related sets make a difference in students' receptive vocabulary gain.

1.5. Research Questions

As stated above, the aim of the study was to find out which set(s) led to more receptive vocabulary gain for the students. To reach this aim, the following questions are intended to be answered:

1. Does presenting English words in lexical sets, thematically related sets, or unrelated sets make a difference in receptive vocabulary gain considering the immediate post test results?

2. Does presenting English words in lexical sets, thematically related sets, or unrelated sets make a difference in receptive vocabulary gain considering the delayed post test results?

3. What are the students' perceptions on learning vocabulary through lexical, thematically related, and unrelated sets?

CHAPTER 2

REVIEW OF THE LITERATURE

2.1. Introduction

Vocabulary teaching had been emphasized before 1940s believing that vocabulary was the only key to a language. However, after 1940s till 1970s, it was the grammar that the methodologist gave importance to for several reasons (Allen, 1983). One reason was that during those years, the teachers were given information about the new discoveries in grammar. The researchers believed that one could use a language as long as they make meaningful sentences with it (Allen, 1983). The other reason was some methodologists thought that the meaning of the words could not be explained adequately, so it was better for them not to teach vocabulary (Allen, 1983). In addition to these, some had fears that the students would make too many mistakes in sentence construction if they learnt a lot of words before mastering the basic grammar rules (Allen, 1983). However as the years passed, it became clear by the help of numerous studies that communication breakdowns occur if the people do not use right words (Allen, 1983). As it is understood that teaching and learning vocabulary is an indispensable part of language teaching and learning, the number of the studies done in this area has started to soar. A substantial number of the researches show that vocabulary is one of the most significant factors in understanding a language. Therefore, it is needed to be well understood what leads to more vocabulary gain.

This chapter will present information on the theoretical background of the study such as knowing a word, how to present the vocabulary, which vocabulary to teach, what is meant by lexical set, thematically related set and unrelated set and how these sets affect vocabulary learning. Lastly, the researches about effects of teaching words through different types of word sets will be reviewed.

2.2. Theoretical Background of Learning/Teaching Vocabulary

2.2.1. Knowing a Word

According to Cambridge Dictionary, word means *a single unit of language which has meaning and can be spoken or written.* Cook (2001) claims that most people think the only way to know a word is learning long lists of words with their meaning. He points out that a lot of course books have alphabetical word lists that are needed to be learnt by the students. However, he says that learning a word is more than learning its meaning. According to Nation (2005) knowing a word means knowing its meaning, form and use as it can be seen in the table below.

Table 2.1. Discovering learning burden (Nation, 2005, 49)

Meaning	Form and meaning Concept and referents Associations	Is the word a loan word in the L1? Is there an L1 word with roughly the same meaning? Does the word fit into the same sets as an L1 word of similar meaning?
Form	Spoken Form Written Form Word Parts	Can the learners repeat the word accurately if they hear it? Can the learners write word correctly if they hear it? Can the learners identify known affixes in the word?
Use	Grammatical Functions Collocation Constraints on use	Does the word fit into predictable grammar patterns? Does the word have the same collocations as an L1 word of similar meaning? Does the word have the same restrictions on its use as an L1 word of similar meaning?

Nation (1990) states that the question of 'what does it mean to know a word?' has two answers. The purpose of the vocabulary learning changes the answer of the question. According to him, vocabulary can be learnt for receptive use or for both the receptive and productive use. Receptive knowledge of the vocabulary is defined as recognizing a word and remembering its meaning when it is encountered. (Nation, 1990; McCarty, 1990; Hedge, 2000). However, the productive knowledge contains the knowledge that is needed for receptive knowledge and additionally, using the word in written and spoken contexts at the appropriate time (Nation, 1990). Productive knowledge of a word briefly includes knowing the meaning, the spoken and written form, part of speech, the derivations, the collocations, the register and the associations of the word (Nation, 1990; Thornbury, 2002). Thornbury (2002) explains in his book that receptive knowledge comes before the productive knowledge; we first understand the words before using them. The transition of a vocabulary from the student's receptive knowledge to productive knowledge is a gradual process. The students need to hear or read the words repeatedly for over sometime in order to be able to use them (Gairns and Redman, 1986). As the concept of knowing a word changes according to the purpose, the learners and the teachers should determine their purpose well before starting to learn and teach vocabulary.

2.2.2. What makes learning a word difficult?

Although learning vocabulary has a great value for learning a language, it also has its own difficulties. The first difficulty is caused because of the learners' previous experiences with their mother tongue (Nation, 1990). The mother tongue can have positive or negative effects on learning vocabulary. If the vocabulary that is learnt has similar meaning or spoken, written, grammatical forms in the students' first language, then it will be easier to learn the words. However, if it is just the opposite, then, it will create some problems for the learner (Nation, 1990; Brown, 2000). Also, if the concept associated with the words that is being

learnt does not exist in the language, it will make the learning difficult. What is more, having learnt one meaning of the word, the learners can be unwilling to learn another meaning of that word (Thornbury, 2002; Laufer, 1997). In addition to these, the words have their own intrinsic difficulty. Rodgers (1969, cited in Nation, 1990) found out that the part of speech of the word affects the learning process. Nouns are found to be the ones which are learnt the most easily, adjectives are following nouns, but the verbs and adverbs are the most difficult to learn (Rodgers, 1969, cited in Nation, 1990; Thornbury, 2002; Read, 2000). Some researchers additionally claim that concrete items are more easily learnt than abstract items (Thornbury, 2002; Hedge 2000; Cook, 2001, Schmitt and McCarthty, 1997). Read (2000) suggests in his book that the words which have similar sound pattern should not be taught together to the learners at a low level because low level students store words according to their sounds. One of the findings of a research conducted by Olsen (1999) showed that similar vocabulary pairs (such as see-sea, want-won't, lose-loose) taught together may have caused learner errors because these words are stored in the mental lexicon in the same place; therefore, these words cause interference. Furthermore, it is told by some researchers that the words which have strong meaning associations with each other should not be taught together. (Thornbury, 2002; Hedge, 2000; Read, 2000).

To sum up, there are some factors which make learning some words difficult. While teaching and learning vocabulary, the teachers and the learners should be aware of these factors and try not to make the vocabulary learning process more demanding.

2.2.3. Which words to teach

Thornbury (2002) states that an educated native speaker knows probably around 20000 words. However, it is difficult for an EFL learner to acquire so many vocabularies.

Therefore, it is important to choose some words to teach the students. Nation (1990) tells that this word choosing process should depend on the learners' needs. He divides vocabulary in three groups which are 'high frequency words', 'low frequency words' and 'specialized vocabulary'. High frequency words are composed of the most used 2000 to 3000 words (Nation, 1990). The Webster dictionary has 128.000 words. 2800 of them are the high frequency words; 1000 to 2000 of them are technical vocabulary which is related to a study area, so 123.200 of the words in the dictionary are low-frequency words (Nation, 1990). Nation (1990) analyzed a text and he found out that about 87% of the words are high frequency words. As the high frequency words compose such a big proportion of the vocabulary use, the teachers and the learners should devote time and attention to them (Nation, 1990; McCarthy, 1990). As for the low frequency words, since there are numerous low frequency words, and they are not used so frequently, it is not worth teaching them explicitly (Nation, 1990).

Nonetheless, there are some opposing ideas to Nation's idea. Hazenberg and Hulstijn (1996) carried out a research to find out the minimal receptive second language vocabulary that non-native university students needed, and they came up with a result which supported that the university students should know at least the most used 10000 words receptively. Stahl and Nagy (2006) admit that high frequency words are not sufficient to use language efficiently, and they stated that the language learners should know at least the most used 5000 words. Hunt and Beglar (2002) also think that the words up to the most used 5000 words are essential for students to continue their studies, so they say that those vocabularies should be taught directly. Schmitt, Schmitt and Clapham (2001) write in their article that knowing the most frequent 2000 words will help the students to carry out basic daily conversation. The next 1000 words will add extra vocabulary to their lexicon, and also, they can start to read authentic texts by knowing 3000 words. However, when they have the knowledge of the most

used 5000 words, they can read the authentic texts better, but of course, there will still be unknown words (Schmitt, Schmitt and Clapham, 2001). Laufer (1989, cited in Hirsh and Nation, 1992) and Liu and Nation (1985) found out in their studies that in order to read and comprehend a text the reader should know the 95% of the words in the text. As it is indicated before, the high frequency words cover the 87% of the text; however, it is not enough to understand the text. Therefore, just teaching or knowing the high frequency words is not enough to gain adequate information about the text and guess the unknown vocabulary (Hirsh and Nation, 1992). As a conclusion, it can be said that the high frequency words should be exactly known by the students; however, low frequency words -up to the most used 5000 or 10000 words- should also be learnt to read authentic texts and to communicate in authentic contexts.

2.2.4. How to Present and Practice Vocabulary

There has been three approaches indicated for vocabulary teaching and learning (Hunt and Beglar, 2002). The first one is incidental learning. Incidental learning means that learning vocabulary occurs during reading or listening. The second one is independent strategy development. During vocabulary learning, the students should also be instructed about to guess words from the context, to store the words, and remember the meanings of the words when they meet them. The third approach is the explicit instruction. Explicit instruction means choosing target words, and teaching these words to the learners.

Explicit instruction is necessary for the lower level learners whose deficiency in word knowledge creates problems in their reading process (Hunt and Beglar, 2002; Takač, 2008); therefore, the teachers should allocate time for explicit vocabulary instruction. Nation (2005) tells that there are some principles that should be considered while teaching vocabulary. First

of all, the teacher should keep the explanation simple and clear. She should not explain the word with the words which are not known by the learner. Other than this, both oral and written presentation of the words should be used (Taylor, 1990). In addition, the students should feel the need to learn the words. They should know that these words are important for them (Nation, 2005). It is important to keep these in mind while teaching vocabulary.

Thornbury (2002) says that before starting to teach vocabulary, the teacher should decide how many words to present in a lesson and plan a lesson according to the steps of vocabulary teaching. Gairns and Redman (1986) suggest teaching eight to twelve words in a lesson and Thornbury (2002) adds that course books tend to present at most twelve words in a lesson. As for the steps of vocabulary teaching, although these steps are not fixed or stable, the researchers agree that teachers should follow some steps while teaching vocabulary (Nation, 2005; Thornbury, 2002; McCarthy, 1990; Harmer, 1991).

The first step of teaching vocabulary is either giving the form or the meaning of the word (Thornbury, 2002). If form is given first, the teacher can say the word such as ‘trousers’ a few times, have the students repeat it, and then, show a picture of it. Giving the form first works best when the words are given a context, thus the students can look at the context and try to guess the meaning themselves (Thornbury, 2002). When the teacher wants to give the meaning at first, she can point the picture to the class, and then say ‘trousers’ for a few times and make the students repeat the word. Giving the meaning first creates a curiosity for the form, so the learning can be more effective and recognizable (Thornbury, 2002). There are numerous ways of giving the meaning of a word. Some of them are using translation, real things, pictures, actions, gestures, definitions, synonyms, opposites, giving situations and example sentences (Nation, 2001; Thornbury, 2002; Gairns and Redman, 1986; McCarthy, 1990; Nation, 2005). Nation (2001) claims that although translation is criticised because it diverts students’ attention away from second language and there cannot be an exact

equivalence of words in different languages, it has advantages such as being quick, simple and easily comprehensible. The real objects can also do great job in teaching vocabulary by saving the teacher from finding a burdensome explanation. The pictures can replace the real objects when it is not possible to bring the object into the classroom (McCarthy, 1990). However, the pictures have disadvantages, too. Not all the words are easy to be visualized and when they are explained by the picture, the picture can be misleading (McCarthy, 1990). Therefore, the definitions, synonyms, opposites, giving situations and example sentences using the word are as well necessary; just using one of them alone is not enough to convey the meaning of a word (Gairns and Redman, 1986). Learning the meaning of a word is a gradual process, so the teachers need to give the meaning of the word as clearly as possible, and in order to do that, most of the teachers get use of range of techniques in their presentations (Thornbury, 2002).

After giving the meaning, the teacher should highlight the form of the vocabulary. For the spoken form, listening drill and oral drill can be used. While doing listening drill, the teacher gets students' attention to syllable structure and stress of the word. As for oral drills, the students can repeat the word as a chorus or individually or both. This repetition process is important because the words are stored according to their sound (Thornbury, 2002). Previously, most of the researchers believed that the spoken form of a word should be given before the written form since the spelling of the word may interfere with the pronunciation of the word (Thornbury, 2002). However, there are some arguments about it now saying that pronunciation most of the words in English conform to small number of rules, so the learners can follow these rules and try to pronounce the vocabulary (Thornbury, 2002). Briefly, the written form can be taught before or after the spoken form. What is important here is, both the spoken and the written form of the vocabulary should be highlighted after giving the meaning of the word.

Nation (2005) states in his article that after giving the form, the teacher should tell the grammatical pattern of the word whether it is a noun or a verb, countable or uncountable, transitive or intransitive, etc. When the grammatical pattern of the word is given, the teacher should check the understanding of students. This is called elicitation (Thornbury, 2002). Usually elicitation is done by giving the meaning of a word and asking the students which word's definition it is. Another way of elicitation is asking questions to the students using the new learnt vocabulary (Thornbury, 2002). Thornbury (2002) gives an example to this, and it is if the new learnt word is 'waterfall', the teacher can ask the students 'What is the biggest waterfall you have ever seen?'(p.88). The aim of the elicitation is:

- It actively involves the learner in the lesson.
- It maximizes speaking opportunities.
- It keeps the learners alert and attentive.
- It challenges better learners who might otherwise 'turn off'.
- It acts as a way of checking the learners' developing understanding.

(Thornbury, 2002, p.87-88)

In a nut shell, explicit vocabulary instruction is unavoidable and crucial for language learners, especially for lower level language learners (Hunt, Beglar, 2002; Takač, 2008). To do an explicit vocabulary instruction, the lessons should be planned beforehand according to vocabulary teaching steps. These necessary steps to present vocabulary to the students are briefly, giving the meaning, the form, the grammatical pattern of the words, and checking the understanding of the students.

When the presentation of the vocabulary is finished, some time should be allocated to practice the vocabulary. It is not enough to learn vocabulary with one encounter; therefore, practice functions as a repetition and enables learners to understand more about the word and helps the learners to send the words in their long-term memory (Nation, 2002; Thornbury, 2002).

Thornbury (2002) divides practice tasks into two main groups. The first group is called decision-making tasks. These tasks are receptive tasks. The students remember the words, match them, sort them, but they do not produce them. Under decision-making group, there are identifying, selecting, matching, sorting, and ranking and sequencing tasks.

Identifying tasks are the least cognitively demanding tasks and they require the learners to find the words in text. Some of the example activities that can be done as an identifying activity are:

> List all the clothe items that you hear
> Raise your hand when you hear the clothe items
> Put the items in the order that you hear
> (Thornbury, 2002, p.94)

Selecting tasks involve both recognizing words and making choices among them. Choosing the odd one out activity is an example of this type of task (Thornbury, 2002). Matching tasks are cognitively more demanding than selecting tasks, but they are cognitively less demanding than sorting tasks. Matching exercises first expect learners to recognize the word, and then, to pair the word with a corresponding picture, definition, etc (Thornbury, 2002). During sorting activities, the learners try to put the words under different categories. For example, if the students learnt adjectives, they can be asked to write the adjectives which have positive meanings on one column and the negative ones on the other (Thornbury, 2002). Ranking and sequencing activities are cognitively the most demanding activities among the previous tasks. They require learners to put the words into some kind of order (Thornbury, 2002). For example, if the learners learn the names of the vegetables, they can be asked to rank them from the ones that they like the most to the least.

The second group of practice task is called production tasks (Thornbury, 2002). The students are required to use the words in appropriate contexts. The production tasks are divided into two subgroups, and one of them is completion task. In completion tasks, the

learners are given a situation, and they are asked to fill in the blanks with a suitable word (Thornbury, 2002). The other production task involves creation tasks. In this type of tasks, the learners are expected to make up contexts for the vocabulary. Creation activities are usually applied in speaking and writing activities (Thornbury, 2002). Here are some examples of creation tasks:

> Choose six words from the list and write a sentence using each one.
> Use these words and write a true sentence about yourself or someone you know.
> (Thornbury, 2002, p.101)

Briefly, there are two kinds of tasks for practising vocabulary. The first one is decision making tasks, and they are receptive tasks as they do not require learners to use words in context. The other task is production task, and as understood from the name, it asks learners to produce sentences using the vocabulary they have learnt. The tasks to practice vocabulary are crucial as they require learners to analyze and process language more deeply and help them to send the vocabulary in their long term memory (Gairns and Redman, 1986; Nation, 2002). By the help of these tasks, the learners put the new learnt words into their mental lexicon (Thornbury, 2002).

2.2.5. Different Sets of Vocabulary

Since the vocabulary teaching gained importance, some researches are started to be done to see the best return for learning (Coady and Huckin, 1997). However, there are some issues that the researchers do not have an agreement upon (Nation and Newton, 1997). One of the issues that has been debated is which vocabulary set provides more vocabulary gain for the learners. Tinkham (1997) states that as most of the students struggle for learning new words which are presented to them, a different manner of vocabulary selection may actually help students' learning process. There have been three vocabulary sets proposed so far

(Tinkham, 1997). These are lexical sets, thematically related sets and unrelated sets. These sets will be explained in depth below.

2.2.5.1. Lexical Sets

One aspect of word meaning includes the sense relations of that word to the other words, and that is, learning an English word is also having knowledge of collocations, synonyms, antonyms, hyponyms of that word (Hedge, 2000). Lexical sets are composed of co-hyponyms. McCarthy (1990) explains hyponymy as a word relationship which has hierarchical tree-type diagrams. In the hyponymy relation, apple is a hyponym of fruit and the other hyponyms of fruit can be banana, cherry, grape, etc. In this relation, 'fruit' is the superordinate term. Apple, peach, grapes are on the same level in the taxonomy and called co-hyponyms. Briefly, 'ways of doing x', 'one of a series' and 'part of x' relations are explained as hyponyms by McCarthy (1990). Thornbury (2002), however, says that 'part of x' relationship is also called meronymy. The list of co-hyponyms and meronymy is called lexical set (McCarthy, 1990). However, some researchers call these sets as 'semantic clusters' or 'semantic fields' (Marzano and Marzano, 1988, cited in Tinkham, 1997; Gairns and Redman, 1986).

Many English books and vocabulary practice books tend to present new vocabulary in lexical sets such as New Headway Elementary (Soars and Soars, 2000), Target Vocabulary (Jones, 1994), Advanced Vocabulary and Idiom (Thomas, 1991). In Interactions Access (Thrush, Blass, Baldwin, 2002) most of the body parts are given in the same unit on the same page.

Hedge (2000) supports teaching vocabulary in lexical sets telling that there is an assumption that learners build networks of meaning, so the course books and teachers organize vocabulary teaching in this way. Thornbury (2002) states that the books present vocabulary practice in segrated vocabulary sections. In segrated vocabulary activities, words

are often presented in lexical sets; therefore, he as well says that the course books are in favour of teaching words in lexical sets. He argues that the meaning of the words can be made more understandable by contrasting them with the words in the same set. McCarthy (1990) defends teaching vocabulary in lexical sets, too. He justifies his idea saying that as the learners store words according to the meaning of the words, teaching them in lexical sets may assist learning and retention. Folse (2004) is also an advocator of this issue and believes that vocabulary should be taught in lexical sets. The first reason for this is that it is easy to write materials from lexical sets. Lexical sets serve a clear context for practice (Gairns and Redman, 1986). Another reason is as the learners are usually told to rehearse the vocabulary in lexical sets, teaching them in those sets helps learners to learn the meanings and the words. Carter (2001) also states that teachers tend to teach words explicitly by using lexical sets. Intuitively, teaching vocabulary in lexical sets appears to be a good idea says Nation (2000) because the learners can perceive the distinctions and relations between them and have a number of words related to that area.

As well as there are the defenders of teaching vocabulary in lexical sets, there are some other researchers who are against teaching lexical sets together (Nation, 1994; Nation, 2000; Higa, 1963; Read, 2000). Although Nation (2000) states that teaching vocabulary in lexical sets seems a good way, he also reflects another opinion about this issue in his article and says that teaching lexical sets may lead the learners to confusion according to interference theory. Interference theory supports the idea that vocabulary which has similar meanings should not be taught together (Nation, 1990). The idea that interference theory puts forward is that if two related items share similar features but also different in some ways, the similarities of the words will strengthen their association, and the differences will interfere with each other. Therefore, the effort to keep items separate from each other adds extra burden on the memory of the learner and the learner starts to confuse the meanings of the words. (Nation,

1990). The first study on interference related to vocabulary learning has been carried out by Higa (1963). He found out that the words that are strongly associated with each other are much more difficult to learn than the unrelated ones. Thornbury (2002), although defends the idea of teaching lexical sets together, later in his book, admits the evidence collected by the studies which shows that closely related words may cause interference. Therefore, he suggests on the further pages that the word cards that the learners prepare to learn words should not contain words from the same lexical set to avoid the interference effect. Nation (2001) as well claims that while teaching a word, the teacher should not teach the other words which are from the same lexical set. The similarity will make learning difficult and will lead to confusion. Read (2000) is another researcher who thinks that teaching words in lexical sets will make vocabulary learning more challenging.

The content of lexical sets, the ideas for teaching and against vocabulary in lexical sets are presented above. By examining these ideas, it is difficult to decide whether to teach vocabulary in lexical sets or not.

2.2.5.2. Thematically Related Sets

The other set is thematically related set. Thematically related words are the ones which evolve around a theme with different parts of speech (Tinkham, 1997). Tinkham (1997) provides an example thematically related set whose theme is ‘frog’ and the words are pond, hop, swim, green, slippery. Thornbury (2002) also gives an example set in his book. Christmas themed words like “snow, icicles, fireplace, tree, carols, lights” are called a thematically related set (p.10).

Cook (2001) says that course books’ vocabulary sections present vocabulary in topic groups. There are series of books such as Let’s Talk (Jones, 2002) which prepare their units

around different themes. In Unit 9 Sleep and Dreams, the theme is sleeping problems and it presents the words 'nightmare, nap, sleepwalker, insomnia, cure' together.

Some researchers claim that thematically related words lead to more vocabulary gain than lexical sets (Tinkham, 1997; Thornbury, 2002). That is maybe because topics relate more easily to people's experience than lexical sets so that topic related words may enable the learners understand and perceive the words better (McCarthy, 1990). Also, Tinkham (1997) claims that students form a schema in their mind with the thematically related words and as Brewer and Nakamura (1984, cited in Tinkham, 1997) state schema related material is learnt more easily than schema unrelated material.

Nevertheless, there are also some arguments against teaching vocabulary in thematically related sets. McCarthy (1990) claimed that not only the lexical sets are stored under the same heading in the mind, but there are word nets in our mind which connect every related word to each other. Keeping this in mind, Hedge (2000) expresses that if the words are taught in thematically arranged word lists, the learners will still suffer from interference because thematically related words as well have association with each other. She even states that this not only damages learning process, but also, can be harmful because if the learners start to confuse the words, they need to unlearn what they have learnt, and unlearning is more difficult than learning.

2.2.5.3. Unrelated Sets

The other set, as it is understood from the name, unrelated set and it is composed of the words that have no connections with each other in terms of their meaning (Tinkham, 1997).

When the evidences about the interference theory comes into mind, it can be said that the words which have no relation to each other in terms of meaning will not possibly have

interference effect on the learner's memory; therefore, they will be easier to learn. Furthermore, according to distinctiveness hypothesis, the more distinct the information that is being learnt, the more the learning of that information increases (Hunt and Mitchell, 1982; cited in Tinkham, 1997). In Erten and Tekin's (2008) and Waring's (1997) studies unrelated set yielded more vocabulary gain than lexical sets. In line with this, Read (2000) says that learning unrelated sets are far easier than learning lexical sets.

However, in Tinkham's research (1997) although the unrelated set was learnt better than the lexical set, the same is not valid for the results of the thematically related set and unrelated set. Thematically related set resulted in more vocabulary gain than unrelated set.

Different ideas are presented above about the different vocabulary sets. It is hard to choose one of the set and stick to it. To understand which one leads to more vocabulary gain, the previous studies done in this field are reported below.

2.3. Previous Studies

One of the significant studies done to determine whether lexical sets, thematically related sets or unrelated sets result in better vocabulary learning was carried out by Tinkham in 1997. In the study, he had 4 sets of vocabulary. In each set, there were 6 words. Thus, there were 24 word total. The first set was semantic clusters or lexical set. The lexical set was all composed of nouns. The second set was unrelated set which was composed of words that did not gather under a same supeordinate concept and included only nouns. The third set was thematic clusters. Thematic clusters or thematically related words were composed of nouns, adjectives and verbs. The last set was unassociated set. In the unassociated set, the words did not belong to same theme and had different parts of speech. Firstly, he investigated if the subjects would learn the lexical set with more difficulty than they learn the unrelated set. To

do this, he paired each word with a pseudo word that he invented for two reasons. The first reason was to control the difficulty of the words. For example, he paid attention to the length of the words, the syllables, the vowels in the word. Another reason is that if he had chosen a real language, he should have tested whether the students had known the words before. It is difficult to control all these in a real language, so he used this way. He had 24 subjects who were all university students. Each subject was required to hear the artificial word and say corresponding English word in one test, and in the other test they were asked to do the opposite which means that they heard the English word and said the corresponding artificial word. The results suggested that the words in lexical sets were learnt more difficultly than the words in unrelated set. In the second experiment, he wanted to find out whether thematically related words were learnt more easily than the words in unassociated sets. He applied the same procedure with these sets and the result showed that thematically related words were learnt more easily than the words in unassociated set. The study supports the idea that words in lexical sets are more difficult to learn than the words in other sets. At the end of the study, the students were also asked which set was the easiest to learn. Most of the subjects identified thematically related set was the easiest, and lexical set was the most difficult to learn.

Another experiment was conducted by Waring (1997). Actually, it was a replication of Tinkham's research. However, Waring just used two sets which were lexical set and unrelated set. He had 20 subjects whose native language was Japanese. They all had a university level education, and their ages ranged from 18 to mid-sixties. In the study, L1 (Japanese) words were assigned to artificial L2 words. The procedure was the same with Tinkham's. A trials criterion test was administered to see which set was learnt completely before the other set. At the end of the research, it is found out that presenting new words which share a common superordinate in a set cause interference. In other words, presenting words in lexical set made

the learners confused, so they had difficulty. In addition, the results indicated that learning related words took significantly more time than learning the unrelated words did.

Erten and Tekin (2008) made a research in this area, too. Their aim was to investigate if learning words in lexical sets and unrelated sets had effect on learning vocabulary. They also tried to find if there was a difference between the lengths of the test completion under two conditions. They conducted their research in the classroom with 55 4th grade primary school students. They had two lexical sets and two unrelated sets. Each set consisted of 20 words and 2 hours of lesson is devoted to each set. They used flashcards to teach the material. At the end of each lesson, students received an immediate post test which was matching the pictures with the corresponding English word. The presentation of the sets was distributed to two weeks. The students completed a delayed post test in the third week. Both the immediate post test and delayed post test scores showed that the students had difficulty in learning the words that were presented in lexical set. Besides that, the study also showed that it took longer for the students to finish lexical set tests.

Gowdasiaei and Hashemi (2005) investigated if learning difference occurs when the students from different levels were presented with words in lexical sets and unrelated sets. To carry out his research, he chose 60 students. 30 of them were upper level students, and the other half was lower level students at a university. He divided the upper and the lower level students into two groups. 15 students in the upper level were presented with the words in lexical sets, the other 15 students in upper level group received words in unrelated groups. He did the same for the lower level students, too. The lower and the upper level students who were learning lexical set were taught the same 100 words in four 45 minute lesson. The other 15 lower and 15 upper level students who were supposed to learn words in unrelated sets were presented the same 100 words in four 45-minute lesson. At the end of the study, it was observed that both of the groups in the upper level learnt more vocabulary than the students in

lower levels. In addition, the lower level students learning the words in lexical sets gained more vocabulary than the lower level students who were learning unrelated words. The same result was valid for the upper levels, too. The students learning lexical sets in the upper level learnt more vocabulary than the students learning unrelated sets in the upper level. The result of this research is just the opposite of the other researches done in this field. This is the only research in which the lexical set yielded more vocabulary gain than unrelated set.

Damian, Vigliocco, Levelt (2001) investigated if subjects named same category items slower than the items from various semantic categories. To do this, they showed pictures to the subjects and wanted them to say the name of the item. The results of the study also supported the idea of interference. When the subjects were presented pictures from the same lexical set in speed picture naming, error rates increased. It is another aspect of interference effect. It does not only affect learning vocabulary, but it also effects retrieval of them. While speaking if a person is asked to say items from the same lexical set one after another, he has difficulty. The findings showed that the interfering effect of semantic context reflects competition in the retrieval of lexical entries in speaking.

As claimed at the beginning of the chapter, the effects of presentation of different sets of vocabulary needs further investigation. In the light of the literature reviewed up to this point, the effectiveness of these three sets (lexical set, thematically related set and unrelated set) regarding the short term and long term retention will be investigated in this study.

In the following chapter (Chapter 3: Methodology) the design of the present research will be explained in detail.

CHAPTER 3

METHODOLOGY

3.1. Subjects

The research was conducted at Anadolu University at School of Foreign Languages in the second term of academic year 2008-2009. It was carried out with one elementary level class students during reading lessons. The researcher, herself, was the teacher of the reading class. The level of the students was determined by Anadolu University, School of Foreign Languages. The number of the students who participated in the study was 23. There were 14 female and 9 male students. However, one of the male subjects who took the immediate tests did not participate in the delayed post-tests. Therefore, there were 22 students who took the delayed post-tests. All the subjects were native speakers of Turkish and ranged in age from 18 to 24. They did not have English speaking parents, nor had they lived outside Turkey. They received most of the English input through formal instruction at school. At school, they had 28 hours of English lessons a week. They had grammar (8 hours), writing (6 hours), speaking (6 hours), and reading (8 hours) classes. The purpose of this programme was to enable the students comprehend and produce the English language competently.

3.2. Research Design

This research aimed to find out whether learning vocabulary through three different types of vocabulary sets (lexical set, thematically related set and unrelated set) made a difference in students receptive vocabulary gain. To reach the aim of the study, the subjects were taught some new words. The words taught during the study were pre-tested, and the pre-test results showed that they did not know any of the words used in the study before the

researcher taught them to the subjects. The vocabularies were categorized under three different types of sets and taught in three weeks. 1 week was allocated for each set. Under each vocabulary set, there were 3 word sets. These word sets under the same type of set were taught on different days in the same week. For the lexical set, there were vegetable vocabulary, tool vocabulary and job vocabulary. For the thematically related group, there were love theme, crime and punishment theme and cooking theme. As for the last set, unrelated set, there were three different word sets which were not related to each other in terms of meaning. After the presentation of the vocabulary, the subjects took an immediate post-test of the words that they learnt in that lesson. 3 weeks after the presentation, the subjects took the same test again as the delayed post-test. A detailed outline of the research can be found in the table 3.1.

Table 3.1. Outline of the Research

	Monday	Tuesday	Wednesday
WEEK 1 Lexical Set	Vegetables (Immediate Post test is given.)	Tools (Immediate Post test is given.)	Jobs (Immediate Post test is given.)
WEEK 2 Thematically Related Set	Love Theme (Immediate Post test is given.)	Crime and Punishment Theme (Immediate Post test is given.)	Cooking Theme (Immediate Post test is given.)
WEEK 3 Unrelated Set	Unrelated Set 1 (Immediate Post test is given.)	Unrelated Set 2 (Immediate Post test is given.)	Unrelated Set 3 (Immediate Post test is given.)

WEEK 4	Delayed Post –Test for Lexical Set
WEEK 5	Delayed Post-Test for Thematically Related Set
WEEK 6	Delayed Post-Test for Unrelated Set

3.3. Target Vocabulary

For this research, 72 words were selected to be taught to the subjects. There were three different types of vocabulary sets which were lexical sets, thematically related sets and unrelated sets. Under lexical set, there were three lexical word sets. Each lexical word set consisted of 8 words and gathered around a different superordinate concept. The superordinate concept for the first set was vegetables, the second one was tools and the last one was jobs. For the thematically related sets, there were again three thematically related word sets evolving around three different themes. The themes were love, crime and punishment, cooking themes. Each set had 8 words in it. For the unrelated sets, there were three unrelated word sets, and in each word set, there were no words which had meaning connection with each other. Each unrelated word set consisted of 8 words, too.

As the lexical sets are composed of co-hyponyms, the words under lexical set should be the same part of speech. In this study, each word set under lexical set included just nouns. In each word set, there were eight nouns. The words in the lexical set are shown in the Table 3.2.

Table 3.2. Words in the Lexical Set

Lexical Sets	
Vegetable Vocabulary	Squash, radish, leek, celery, parsley, cucumber, chard, pea
Tool Vocabulary	Needle, hammer, screw, spanner, axe, nail, drill, shovel
Job Vocabulary	Referee, deputy, tutor, potter, advocate, sergeant, priest, warden

As for the thematically related set, three word sets were different from each other in terms of the words' parts of speech. The first word set evolved around love theme and just verbs were chosen for it. The second theme was crime and punishment and just nouns were selected for it. The last word set had cooking theme, and four verbs and four nouns were selected for the cooking theme. The reason of composing the word sets with the words from different parts of speech was that teaching thematically related sets composed of words having same part of speech might affect learning process of the students. In the research done before (Tinkham, 1997), the thematically related sets included words from different parts of speech, and those sets were claimed to be the most efficient sets on learning. However, maybe the thematically related set which was composed of only nouns could be recognized more than the set which consisted of words from different parts of speech. Therefore, the effect of part of speech in thematically related set was also looked into in this study, and because of that, word sets were composed of words from different parts of speech.

By this way, which thematically related word set (the set with only nouns, the set with only verbs and/or the set with both nouns and verbs) led to more receptive vocabulary gain for the students would be found out at the end of the study.

The words selected for thematically related set are shown in the table 3.3.

Table 3.3. Words selected for Thematically Related Set

Thematically Related Set	
Love Theme (only verbs)	dump, pursue, stare, embrace, propose, admire , divorce, praise
Crime and Punishment Theme (only nouns)	punch, robbery, court, fraud, assault, cell, penalty, verdict
Cooking Theme (both with nouns and verbs)	Grain (n), tray(n), pan(n), bench(n), squeeze(v), strain(v), boil(v), peel(v)

The last set was unrelated set, and it, as well, had three word sets under it. Each word set had eight words which were not related with each other. In each set, there were 4 nouns and 4 verbs. Both verbs and nouns were selected for unrelated set because verbs and the nouns are the most common parts of speech found in natural texts and conversations (Kucera and Francis, 1967 cited in Webb, 2007). Therefore, it is better for the students to learn words from both parts of speech. The words used for unrelated set was given in the table 3.4.

Table 3.4. Words Selected For Unrelated Set

Unrelated Set	
Unrelated Set 1	Currency(n), troop(n), beak(n), approach(v), desire(v), charity(n), expand(v), whisper(v)
Unrelated Set 2	Crown(n), sack(n), pace(n), coal(n), wonder(v), reduce(v), insult(v), grab(v)
Unrelated Set 3	Command(v), dare(v), reject(v), cease(v), wage(n), bush(n), sleeve(n), fur(n)

As these words were taught to students studying at preparatory school, the vocabulary was chosen for their benefit. That is, the vocabulary that they would need was taught to them. As mentioned in the earlier chapter, some researchers claimed that only high frequency words should be taught (Nation, 1990; McCarthy, 1990); however, some others suggested that to carry out an academic study at a university, the students should know at 5000 to 10000 vocabulary, at least receptively (Hazenberg and Hulstijn,1996; Stahl and Nagy, 2006). Considering that these students would study in their departments in the following year, and their courses would be in English, they needed to know numerous words. Because of this, the words were chosen from the most frequent 10000 words. To find these words, British National Corpus (2003, http://www.wordcount.org) was used. Only the vegetable vocabulary was not chosen among the mostly used 10000 words. The reason of teaching students the vegetable vocabulary was that the students had some units in their courses about food. They wanted to talk about the food they liked and they did not like, etc., but because of their lack of vocabulary about vegetables, they had difficulty. Seeing this problem, the researcher decided to teach them vegetable vocabulary; however, some of the vegetables taught to students were not in the most frequent 10000 list.

While choosing vocabulary, there were some criteria kept in mind. Firstly, the words which have similar meanings and spoken, written, grammatical forms in Turkish are easier to learn. Thus, these words were avoided. Secondly, learning a word becomes difficult if the concept associated with the words which is being learnt does not exist in the language. Therefore, students were familiar with all the words taught during the study in their native language. Other than these, the words were chosen from the words which can be taught with the pictures since in the presentation stage of the vocabulary teaching, pictures were used for each word, even for the verbs. In addition, as the students kept studying at the preparatory school during the research was being carried out; the researcher analyzed students' course

books and did not take the words which were used in their books. Otherwise, the students would see the vocabulary both in their course book and during the research, and this would increase the possibility of the student to remember the meaning of the word. Keeping all these in mind, the words shown in the tables above were selected for this research.

3.4. Lesson Plans

The aim of the current study was to determine if teaching vocabulary through different types of vocabulary sets made a difference in receptive vocabulary gain of the students. Therefore, in this study the participants were presented three different types of vocabulary sets following the steps of vocabulary teaching.

In the present study, vocabulary was taught to the students by the researcher herself. Explicit vocabulary instruction was preferred because it was argued that explicit vocabulary teaching had positive effects on learning L2 or FL words (Judd, 1978; cited in Takač, 2008).

Following Thornburry (2002), the presentation of the vocabulary started with giving the meaning (through pictures, definitions and examples), pronunciation and spelling of the word. The blackboard was used while presenting the words. The pictures were hung; the definitions and example sentences were written on it. The students first saw the picture, heard the definition and the pronunciation of the word. The teacher wanted them to repeat the word and asked them if they could guess the spelling of the word. Then she wrote the word on the board. She used it in a sentence. After these, she asked the students what part of speech was the word, what the past form of it could be –if it was a verb-, if it was countable or not. The teacher asked some questions to the students to elicit the vocabulary. For example: for the verb ‘embrace’, she asked ‘when do you embrace someone?’

Then she distributed an activity about the target vocabulary to the students. The activity was a matching exercise. The students were required either to fill in the blanks in the

sentences or match the pictures with one of the target words. When this activity was over, the participants received an immediate post test of the target vocabulary at the end of the lesson (see appendix 1 to 9 for the lesson plans).

3.5. Instruments

3.5.1. Pre-Test

The aim of the pre-test was to determine the words that the subjects did not know (Read, 2000). Read (2000) claims that these are the most commonly used ways to select the vocabulary that they do not know:

- Multiple choice items of various kinds.
- Matching words with synonyms or definitions.
- Supplying an L1 equivalent for each L2 target word.
- The checklist (yes-no) test, in which test takers simply indicate whether they know the word or not.
  (p. 87)

In this research, before starting to teach the vocabulary, the subjects were tested whether they had known the vocabulary that was going to be taught. They were given a list of words and explained that if they had known the words, they would have had to write definitions or synonyms or L1 translations of the words to show that they had encountered the words before. This way was used instead of the others because the subjects had tendency to learn the words mostly using L1 equivalent or L2 synonym, so it would have been easier for the students to explain the words in these ways if they had known them. After the subjects finished their work on the lists, the researcher collected them and eliminated the words which were known by the students. Therefore, none of the words taught in this research was known by the students beforehand (see appendix 10, 13, 16 for the pre-tests).

3.5.2. Post-Test (Immediate and Delayed Tests)

At the end of each lesson, the students took an immediate post-test about the vocabulary that they learnt in that lesson. The reason for giving an immediate post test was to measure the immediate recognition and recall of the words learnt. However, as the immediate post tests are limited in the sense that they cannot assess notion of retention over time, delayed post tests were applied (Read, 2000). Delayed post tests were also the same tests with the immediate post tests, but they were given three weeks after the presentation of the vocabulary. The delayed post tests were given three week later because of the forgetting curve that Ebbinghaus (1885; cited in Wagner, 2009) revealed in his study. The Ebbinghaus forgetting curve shows a relationship between forgetting and time. In addition, it displays that forgetting does not continue to decline until all of the information is lost. At a certain point, the amount of forgetting levels off. It means that after some time, the information stored is stable in the mind.

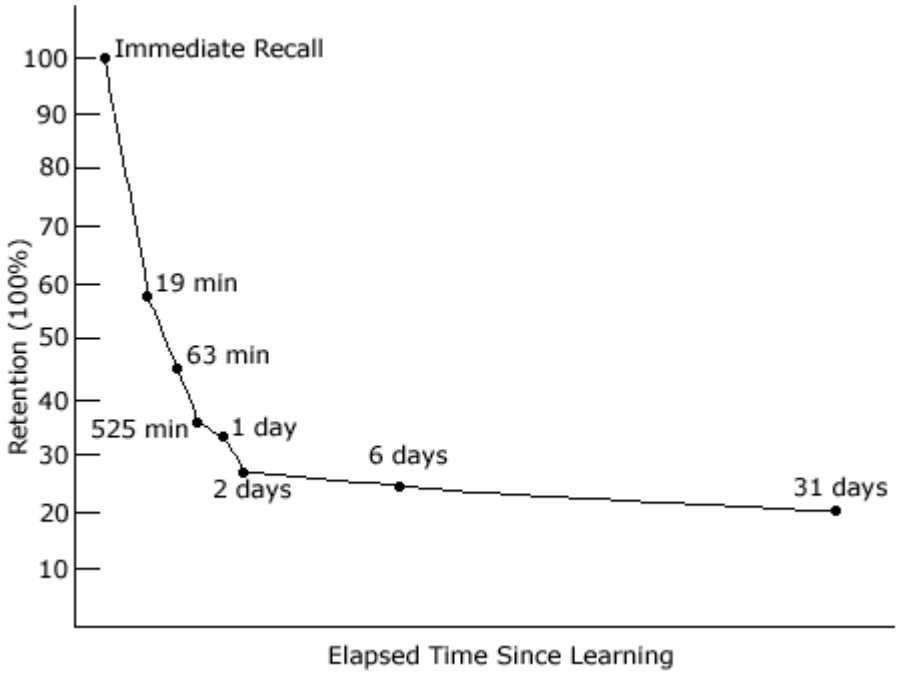

Figure 3.1. The Ebbinghaus Forgetting Curve

(http://www.ultimatelanguagesecrets.com/resources/ebbinghaus.gif retrieved on 20.05.2009)

The forgetting curve (figure 3.1) reveals that most of the information that is kept in the mind three weeks after it has been learnt will most probably be stored in the long term memory.

In the immediate post test, the recall of 8 words were tested, but for the delayed post test the subjects were tested for 24 words which belong to the same set. To illustrate, in the first week the students got the test about vegetables on Monday, tools on Tuesday and jobs on Wednesday, but 3 weeks later, these three groups were tested together. The order of the questions was changed in order to prevent rote learning.

The post tests were recognition tests. Recognition tests were used because of two reasons. The first reason was that it tests receptive knowledge and it is believed that receptive knowledge comes before productive knowledge (Nation, 2001). Productive knowledge contains knowing word's meaning, pronunciation, spelling, grammatical form, collocation, etc. The students need to know how the word fits into that sentence. For example verb 'faint' takes a subject, but it never takes an object (Cook, 2001). In order to know all these aspects of a word, intensive practice of the words in speech and writing is required (Nation, 1990); nonetheless, when the words are used in receptive tasks, the students do not have to produce anything; they are just wanted to recognize the meaning of the word. As the words were taught in one 45-minute lesson, teaching all the features of the words and making students practice them in writing and speaking activities was impossible, recognition test was used. Another reason for using recognition test was that the words in the groups were from different parts of speech, so there would have been much burden on the students' mind while using the verbs productively, and it would not be fair since nouns are learnt easier than verbs (Read, 2000). Therefore, the subjects were only asked to remember the meaning of the words and the students' receptive knowledge of the words was tested only.

In the post tests, the students were asked to match the words with the easy definitions of those words. Definition matching was used because for the low level learners, it is enough for the learners to show that they understand L2 words by matching them with easy definitions or L2 synonyms (Read, 2000). While writing definitions for the post tests, Oxford Learners Dictionary and Cambridge Advanced Learners Dictionary were used. However, some of the words' explanations were so hard that they had to be simplified. The researcher simplified the definitions if necessary and got opinions from three English teachers. When the post tests were ready, these English teachers proofread them. Some final changes were done in the light of their opinion (see appendix 11,12,14,15,17,18 for the post tests).

3.5.3. Questionnaire

After all the delayed post-test were given to the subjects, the subjects were handed out a questionnaire. In the questionnaire, there were two questions that the students were required to answer. They were asked to write which set(s) they thought they remember the most and the least and also were asked to explain –if they can- why they thought so. They could write their opinions in Turkish as they might have had difficulty in expressing themselves if the researcher had insisted that they should write them in English. As the students might not remember which words they had learnt in those three weeks, the teacher wrote on the board that they learnt vegetable, tool, and the job vocabulary in the first week, and it was called Set 1; love, crime and punishment and cooking related words in the second week, and it was called Set 2; word group 1, word group 2, and word group 3 in the third week, and it was Set 3. The students filled in this questionnaire and gave it back to the teacher. By asking this question, it was aimed to find out students' perceptions about learning vocabulary through different types of vocabulary sets.

3.6. Data Collection Procedures

The application of each set started with the pre-test. The students took the pre-test a day before the teacher presented the words to them. The words which the student had already known were excluded.

Teaching the vocabulary of each word set and applying the immediate post tests were done during a regular 45 minute reading lesson by the researcher herself. Before the study was conducted, the students were informed that this vocabulary teaching lessons were done for a research. They were told that they were not responsible for these vocabularies in their exams or quizzes and were asked not to study these words after the lesson because otherwise it would be impossible to know whether the nature of the set or the repetition of the words helped the students recognize the words.

Then, the words were presented to them. They were asked to do an exercise about the newly learnt vocabulary. These took approximately 35- 40 minutes (see appendix 1-9 for the lesson plans).

After that, the researcher distributed the immediate post tests for the last five minutes, and the students took the test (see appendix 11, 14, 17 for immediate post test). Three weeks later, the students took the same test as delayed post test (see appendix 12, 15, 17 for delayed post tests).

3.7. Data Analysis

Non-parametric statistical design was used to analyze the data in this research. The techniques applied to find the answer of each research question is given below:

Research Question 1: Does presenting English words in lexical sets, thematically related sets, and unrelated sets make a difference in receptive vocabulary gain considering the immediate post test results?

Research Question 2: Does presenting English words in lexical sets, thematically related sets, and unrelated sets make a difference in receptive vocabulary gain considering the delayed post test results?

To find the answers of these two research questions, the grades that the students got from the immediate and delayed post test were examined. The mean, mode, and the median of them were calculated. In addition, Friedman Test was applied on both the immediate and delayed post-test results of the sets to find out if any of the sets led to more vocabulary gain than the others.

Also, Wilcoxon Test was applied on both of the post tests results of the students to determine if there was a significant difference between the students' scores on the immediate and the delayed post tests.

Research Question 3: What are the students' perceptions on learning vocabulary through lexical, thematically related, and unrelated sets?

To find out an answer to this question, the students were asked to write which set they thought they remembered the most and the least. The number of the students who thought that they remembered the lexical, thematically related or unrelated set the most and the least was calculated and their justifications were written if they had given any.

To reach the answers, first of all, Kolmogorov-Smirnov test was applied to see if the statistical data presented normal distribution. The results of the test showed that the sample in

means of the dependent variable did not show an appropriate distribution according to the normal distribution curve. If the subjects are not distributed accordingly to the normal distribution curve, it is recommended to apply non-parametric statistical techniques (Otrar, 2009). Because of this, in this research while analyzing the data, non-parametric statistical techniques were used.

CHAPTER 4

RESULTS AND DISCUSSION

The overall purpose of the study is to find out which set or sets of vocabulary teaching led to more receptive vocabulary gain for the students with regard to short-term and long-term retention. We sought answers to the following research questions:

1. Does presenting English words in lexical sets, thematically related sets and unrelated sets make a difference in receptive vocabulary gain considering the immediate post test results?

2. Does presenting English words in lexical sets, thematically related sets and unrelated sets make a difference in receptive vocabulary gain considering the immediate post test results?

3. What are the students' perceptions on learning vocabulary through lexical, thematically related and unrelated sets?

4.1. Analysis of the Immediate and Delayed Post Test Scores of Lexical, Thematically Related and Unrelated Sets

4.1.1. Immediate Post Test Analysis

It is important to note that before the study was conducted, the students were pre-tested and it was made sure that the students started the learning process from scratch. In other words, they did not have any knowledge of the words before the study. That is why, we start

analyzing the data with the immediate post test scores. While analyzing the data, first of all, the highest and the lowest scores of the students were looked into, and the mean, mode, and the median were calculated to understand the students' scores better. (Table 4.1)

Table 4.1. The Immediate Post Test Scores of the Students

Student's Number	**The total score of the lexical set immediate post test**	**The total score of the thematically related set immediate post test**	**The total score of the unrelated set immediate post test**
1	20	17	24
2	22	18	19
3	22	20	24
4	21	20	24
5	19	15	20
6	19	17	18
7	15	22	22
8	17	13	24
9	21	19	24
10	24	22	24
11	22	18	22
12	24	18	22
13	18	22	22
14	22	22	24
15	20	17	20
16	20	16	24
17	17	22	24
18	22	20	24
19	19	24	24
20	21	13	24
21	24	18	22
22	21	18	24
23	22	22	24
	Mode: 22 Median: 21 Mean: 20,5	**Mode:22 Median: 18 Mean: 18,8**	**Mode: 24 Median: 24 Mean: 22,7**

To begin with, it must be known that the students were taught 24 words in each set. Their each correct answer was calculated as 1 point, and if they did wrong, they did not get any points. Thus, the highest score which could be obtained from the test for each set was 24.

Observing the data above, it can be said that the highest score of the lexical sets was 24 and the lowest was 15. For the thematically related sets, the lowest score was 13 and the highest one was 24. As for the last set, unrelated sets, the highest and the lowest scores were 24 and 18, respectively. The highest score was the same in all the sets but the lowest score changed for each set.

Then, we looked at the most frequently occurring score, and for that purpose, we calculated the mode of the immediate test scores. Mode, the score which was observed more frequently than the others, of the lexical and thematically related set was 22, however for the unrelated set, it was 24. It means that more students could do the immediate post test of unrelated set without any mistakes.

The median is "the value of a set of scores which has the same number of observations above and below it when the observations are ranked from highest to lowest" (Nunan, 1992, p. 231).The median of the unrelated set was again higher than the other sets. It was 24. For the thematically related set, the median was 18 and the median of the lexical set was 21. The rank that is observed in the medians was again valid for the mean scores. The unrelated set had the highest mean score, 22,7. The lexical set was following the unrelated set with the mean score of 20,5 and among these sets the thematically related set had the lowest mean score, 18,8.

In order to see whether presenting English words in lexical, thematically related and unrelated sets make a difference in students' vocabulary gain with regard to the short-term retention, Friedman test was applied to the scores of immediate post test. The results are presented in Table 4.2. below.

Table 4.2. The Results of Friedman Test for the Immediate Post-Test Scores of Lexical, Thematically Related and Unrelated Sets

WORD SETS	N	Mean	Sd	Mean Rank	X^2	df	P
Lexical Set	23	20,5217	2,33296	2,02	25,167	2	,000
Thematically Related Set	23	18,8261	2,97951	1,28			
Unrelated Set	23	22,7391	1,86395	2,70			

The results of the Friedman Test revealed that there was a significant statistical difference among the lexical, thematically related and unrelated sets (x^2=25,167; df=2; p=0,000).

To see if there was any statistical difference between each pair of sets, another Friedman Test was applied on the sets as pairs. The test results revealed that the statistical difference for each pair of sets was significant. The statistical data showed that students' receptive vocabulary gain for the unrelated set was more than that of lexical set and their gain for the lexical set was more than that of the thematically related set. Table 4.3. below presents the results.

Table 4.3. Friedman Test Results for The Immediate Post Test Scores of Lexical, Thematically Related and Unrelated Sets

Vocabulary Sets	N	Mean	Sd	Mean Rank	X^2	df	P
Lexical Set	23	20,5217	2,33296	1,78	8,048	1	0,005
Thematically Related Set	23	18,8261	2,97951	1,22			
Thematically Related Set	23	18,8261	2,97951	1,07	20,000	1	0,000
Unrelated Set	23	22,7391	1,86395	1,93			
Lexical Set	23	20,5217	2,33296	1,24	7,200	1	0,007
Unrelated Set	23	22,7391	1,86395	1,76			

Simply, the students did not have the same amount of receptive vocabulary gain from each set for the short term retention. The mean scores displayed that the unrelated set led to more receptive vocabulary gain for the students; however, thematically related set resulted in less gain regarding the short-term retention among the other sets. So, the order is unrelated set>lexical set>thematically related set.

4.1.2. Delayed Post Test Scores Analysis

The same analysis was applied for the delayed post test. The mean, median, mode of the students' scores for the delayed post test is given in the table below:

Table 4.4. The Delayed Post Test Scores of the Students

Students' Number	**The total score of the Lexical Set Delayed Post Test**	**The total score of the Thematically Related Set Delayed Post Test**	**The total score of the Unrelated Set Delayed Post Test**
1	9	24	14
2	6	14	7
3	8	11	13
4	16	16	22
5	4	1	3
6	5	2	8
7	4	6	7
8	11	15	16
9	20	24	24
10	4	17	18
11	7	8	11
12	12	19	19
13	15	15	15
14	11	9	8
15	5	12	11
16	11	8	11
17	17	20	18
18	7	18	18
19	7	12	14
20	11	21	11
21	10	8	20
22	7	17	15
	Mode: 11 **Median: 9** **Mean: 9,4**	**Mode: 8** **Median: 15** **Mean: 13,5**	**Mode: 11** **Median: 14** **Mean: 13,7**

As seen in the table above, the scores of the students for each set decreased regarding their scores in the immediate post test.

For the lexical set, the mode was 11 for the delayed post test, the median was 9 and the mean was 9,4. The highest grade obtained by the students was 20, and the lowest grade was 4 in the delayed post test.

For the thematically related set, the delayed post test scores showed that the mode was 8, the median was 15, and the mean was 13,5. The highest score obtained from the test was 24, and the lowest grade was 1 in the delayed post test.

As for the unrelated set, the mode, median, mean for the delayed post test were 11, 14, 13,7 respectively. The highest grade was 24 and the lowest score was 3 in the delayed post test.

To see if there is a statistically significant difference among the sets, another Friedman Test was applied to the students' scores on the delayed post test. The results are shown in the table below:

4.5. The Results of Friedman Test for the Delayed Post-Test Scores of Lexical, Thematically Related and Unrelated Sets

VOCABULARY SETS	N	Mean	Sd	Mean Rank	X^2	df	p
Lexical Set	22	9,4091	4,50036	1,43	13,103	2	,001
Thematically Related Set	22	13,5000	6,44205	2,14			
Unrelated Set	22	13,7727	5,37128	2,43			

The statistical analysis showed that there was a significant difference among these sets (x^2=13,103; df=2; p=0,001). The difference indicated that the students' receptive vocabulary gain was not the same for each set regarding the long term retention.

After analyzing the vocabulary sets altogether, the sets were analyzed in pairs to detect if there were any differences between the pairs of sets.

Table 4.6. Friedman Test Results for The Delayed Post Test Scores of Lexical, Thematically Related and Unrelated Sets

Vocabulary Sets	N	Mean	Sd	Mean Rank	X^2	df	P
Lexical Set	22	9,4091	4,50036	1,27	5,000	1	0,025
Thematically Related Set	22	13,5000	6,44205	1,73			
Thematically Related Set	22	13,5000	6,44205	1,41	0,889	1	0,346
Unrelated Set	22	13,7727	5,37128	1,59			
Lexical Set	22	9,4091	4,50036	1,16	11,842	1	0,001
Unrelated Set	22	13,7727	5,37128	1,84			

The results of the delayed post test highlighted statistical significance between lexical set and thematically related set (x^2=5,000; df=1; p=0,025) and examining the mean scores, it was observed that thematically related set led to more vocabulary gain in terms of long term retention than lexical set. There was as well another significant difference between lexical set and the unrelated set (x^2=11,842; df=1; p=0,001). Unrelated set had higher mean score than the lexical set. Nevertheless, there was no significance observed between thematically related set and unrelated set regarding the long term retention (x^2 =0,889; df=1; p=0, 346).

Briefly, for the long term retention, the students gained the same amount of receptive vocabulary from the unrelated and the thematically related sets. In addition to this, the unrelated and thematically related sets led to more receptive vocabulary gain than lexical set.

Although on the immediate post test, the lexical set was resulted in more receptive vocabulary gain than thematically related set, in the long run, the thematically related set was recognized more by the students.

4.1.3. Comparison of the Immediate and Delayed Post Test Results

In this part, the immediate and delayed post test scores of each sets were compared to see if there was a statistical significant difference between these two tests. Wilcoxon test was applied to have the statistical analysis of the data. The result of the Wilcoxon Test for the lexical set was given below.

Table 4.7. The Results of Wilcoxon Test for the Immediate and Delayed Post-Test Scores of Lexical Set

Score	Ranks	N	Mean Rank	Sum of Ranks	Z	P
Lexical Set Immediate-Delayed Post Tests	Negative Ranks	22	11,50	253,00	-4,111	,000
	Pozitive Ranks	0	,00	,00		
	Ties	0				
	Total	22				

The results showed that there was a difference between the immediate and delayed post tests for the lexical set (z= -4,111; p=0,000). It was also observed that the students' receptive vocabulary gain was more on the immediate post test; however, there was a decrease in their grades in the delayed post test.

Then we compared the immediate and the delayed post test results of thematically related set. The results were displayed below.

4. 8. The Results of Wilcoxon Test for the Immediate and Delayed Post-Test Scores of Thematically Related Set

Score	Ranks	N	Mean Rank	Sum of Ranks	Z	P
Thematically Related Set Immediate-Delayed Post Tests	Negative Ranks	18	11,72	211,00	-3,323	,001
	Pozitive Ranks	3	6,67	20,00		
	Ties	1				
	Total	22				

The Wilcoxon Test revealed that there was a statistical difference between the immediate and students' delayed post test scores for the thematically related set (z= -3,323; p=0.001). Again the students' scores decreased in the delayed post test compared to their scores on the immediate post test.

The scores that the students got in the immediate and delayed post tests of unrelated set were as well analyzed with Wilcoxon Test. Table 4.9. below showed the results.

Table 4.9. The Results of Wilcoxon Test for the Immediate and Delayed Post-Test Scores of Unrelated Set

Score	Ranks	N	Mean Rank	Sum of Ranks	Z	P
Unrelated Set Immediate-Delayed Post Tests	Negative Ranks	21	11,00	231,00	-4,018	,000
	Pozitive Ranks	0	,00	,00		
	Ties	1				
	Total	22				

There was again a significant statistical difference between the students' scores of immediate and delayed post tests of the unrelated set (z=-4,018; p=0,000). In addition, as it was the case for all the sets, the grades of the students were lower in the delayed post test.

Briefly, a statistically significant difference was found in each set when the immediate and delayed post test scores were compared. For all the sets, the students' grades were higher in the immediate post test.

4.2. The Effect of Part of Speech in the Thematically Related Sets

In this section, whether different parts of speech made any difference on the students' receptive vocabulary gain regarding the short-term and long-term retention for the thematically related sets was investigated.

In the previous studies, the thematically related sets were only made of words from different parts of speech. In this study, we have considered that parts of speech of the words may have an effect on the learning and the retention of the words, so the effect of part of speech of the words composing the thematically related set was wondered. Therefore, it was questioned if words from different parts of speech made any difference on the students' receptive vocabulary gain in the thematically related set. To reach the aim, initially, three thematically related sets were composed. Each set had 8 words in it. The first set's theme was love and just verbs were chosen for it. The other set's theme was crime and punishment, and only nouns were used in that set. The last thematically related set had cooking theme which included both nouns and verbs. In order to detect any statistically significant difference in the students' receptive vocabulary gain among these thematically related sets, Friedman Test was applied to the immediate post test scores of the students. The results were shown below. (Table 4.10.)

Table 4.10. The Results of Friedman Test Applied to The Immediate Post Test Scores of The Thematically Related Set

Thematically Related Sets	N	Mean	Sd	Mean Rank	X^2	df	p
Set with Verbs (Love Theme)	23	4,9130	2,21386	1,52	12,347	2	0,002
Set with Nouns (Crime and Punishment Theme)	23	6,6522	1,30065	2,02			
Set with Both Noun and Verbs (Cooking Theme)	23	7,0870	1,37883	2,46			

The analysis of the data revealed that there was a significant difference among the sets (x^2=12,347; df=2; p=0,002). Thus, it can be inferred that students' receptive vocabulary gain for each of the thematically related sets was not at the same level.

After this analysis, it was investigated whether there were any differences regarding each pair of the thematically related sets. The results were displayed below.

Table 4.11. Friedman Test Results for the Immediate Post Test Results of Thematically Related Sets

Thematically Related Sets	N	Mean	Sd	Mean Rank	X^2	df	p
Set with the Verbs	23	4,9130	2,21386	1,28	4,545	1	0,033
Set with the Nouns	23	6,6522	1,30065	1,72			
Set with the Verbs	23	4,9130	2,21386	1,24	8,000	1	0,005
Set with Both the Verbs and Nouns	23	7,0870	1,37883	1,76			
Set with the Nouns	23	6,6522	1,30065	1,30	6,231	1	0,013
Set with Both the Verbs and Nouns	23	7,0870	1,37883	1,70			

The table above demonstrated that there was significant difference for each pair of thematically related sets. For the short term retention, students' receptive vocabulary gain for the thematically related set with both nouns and verbs was more than that of set with only verbs or the set with only nouns. The set including only the nouns was recognized more by the students than the set with just the verbs in the short term. Thus, the set including only verbs was the least recognized thematically related set.

To research the long term effect of the part of speech among the thematically related sets, the same analyses were conducted on the delayed post tests. Firstly, Friedman test was applied to all the sets together.

4.12. The Results of Friedman Test Applied to The Delayed Post Test Scores of The Thematically Related Set

Thematically Related Sets	N	Mean	Sd	Mean Rank	x^2	df	p
Set with only the Verbs	22	3,0909	2,44772	1,36	17,863	2	0,000
Set with only the Nouns	22	4,8182	2,42284	2,14			
Set with both the Nouns and the Verbs	22	5,5909	2,53845	2,50			

Friedman Test results presented a statistical significant difference for the delayed post test among the sets (x^2=17,863; df=2; p=0,000). Although the students' scores decreased in the delayed post test, the rank of the sets was same as the rank that they had on the immediate post test. The set with both the nouns and the verbs had the highest mean score among the other sets (mean=5,5909). The set with only nouns was following it with the second highest

mean score (mean=4,8182), and the set with only verbs resulted in the lowest mean score (mean=3,0909).

After we found out that there was significance among these thematically related sets, it was looked into if there was any difference between the sets as pairs. Table 4.13. displayed the results.

Table 4.13. Friedman Test Results for the Delayed Post Test Results of Thematically Related Sets

Thematically Related Sets	N	Mean	Sd	Mean Rank	X^2	df	P
Set with verbs	22	3,0909	2,44772	1,16	11,842	1	0,001
Set with Nouns	22	4,8182	2,42284	1,84			
Set with Verbs	22	3,0909	2,44772	1,20	8,895	1	0,003
Set with Both verbs and Nouns	22	5,5909	2,53845	1,80			
Set with Nouns	22	4,8182	2,42284	1,30	5,400	1	0,020
Set with both Verbs and Nouns	22	5,5909	2,53845	1,70			

The analysis made it clear that there was statistically significant difference between each pair of sets in the thematically related sets regarding the long term retention. The delayed post test results were consistent with the results of the immediate post test. The set with both nouns and verbs led to more receptive vocabulary gain than the other sets and the set with just verbs yielded the least recognition.

To be brief, the immediate and delayed post test results revealed that the set with the nouns and the verbs led to more receptive vocabulary gain than the other two sets. The set

with the verbs was recognized the least by the students. However, the set just with the nouns ranked in the middle of these three sets.

4.3. Students' Perspectives on Learning Lexical, Thematically Related and Unrelated Sets

After the study was conducted, a questionnaire was given to students to determine their thoughts on learning vocabulary in different types of sets. They were asked to write which set(s) they thought they recognized the most and the least. They were led to express themselves in Turkish. As they did not know the terminology, they were told that they should think the words taught in the first week were Set 1 -which was lexical set-; the words in the second week were Set 2 -thematically related set-. As for the last set, unrelated set, it was referred as Set 3 by the students. The students were as well required to write the reason(s) of their thoughts if possible. They were informed that they could use Turkish to express their thought better.

The answers of the students were analyzed and the analyses showed that 4 of the subjects wrote that they recognized the words in the Set 1 -lexical set- the most. They wrote that:

"I remember the vegetable, job and tool vocabulary because we need them in our daily life"

"I was very interested in the lesson in the first week; therefore, I remember the vocabulary in Set 1 more"

"The vocabulary taught in Set 1 was more enjoyable for me so I learnt them"

7 of the students answered that they remembered the words in Set 2 -thematically related set- the most. They justified their opinion by saying that:

"The words in Set 2 were similar and that similarity makes me remember those words somehow"

"The love theme was very interesting for me, and also, I need the cooking theme words in the lessons. Therefore, I focused on those words and remember them"

Finally, 12 of the students replied that the words in the Set 3 -unrelated set- were the most recognizable words for them. They clarified their opinion by saying that:

"I learnt the words in the third week (unrelated set) better because they did not make me confused, but the words taught in the other weeks did."

"The words in the third week were the easiest because they were not similar."

"As the words in the third week were not in a group, it was easier for me to learn them."

As for the least recognized words, 19 of the students agreed that they did not recognize the words in Set 1 -lexical set-. 4 of them said that they had difficulty in recognizing the words in Set 2 -thematically related set-. There was no negative comment on the unrelated set. Most of the students' justification of their perception was that as the words in lexical and thematically related words were related to each other, they were confused.

In conclusion, most of the students admitted that they could remember the words in the unrelated set more, yet most of them had difficulty while learning the words in the lexical set and a few thought that they had difficulty in learning thematically related set.

4.4. Discussion

This study investigated the effect of teaching vocabulary in different types of sets to the students regarding the short-term and the long-term retention. Whether there was a significant difference between the lexical set, thematically related set and unrelated set was tried to be found. In addition to this, as the thematically related sets were composed of words from different parts of speech, the effect of part of speech on students' receptive vocabulary gain was researched for thematically related sets. Lastly, the students' perceptions about the sets were inquired; they were asked to identify the sets they recognized the most and the least.

The first research question examined whether the presentation of vocabulary in different types of sets made any learning difference in terms of short term retention. The immediate post test results revealed significant differences among the lexical, thematically related and the unrelated set. The unrelated set had the highest mean, median and mode. Lexical and thematically related set, respectively, was following it.

This result was partially consistent with the previous studies conducted before. Actually, none of the studies carried out before compared all these three sets. They compared these sets in pairs such as lexical set versus unrelated set or unrelated set versus thematically related set. For instance, Erten and Tekin (2008) compared the efficiency of lexical and unrelated sets for the short and the long term retention. They found out a significant difference between these sets regarding both the immediate and delayed post tests. The students got higher scores from the unrelated set test. Similar result was observed in Waring's (1997) and Tinkham's (1997) researches. In the present study, as well, the unrelated set was recognized more than the lexical set. This similarity could be due to the fact that as the words in the lexical set shared similar features, the words' similarities strengthened their association, and the students had difficulty to keep them as separate words in their mind (Nation, 1990). Furthermore, students' recognizing the unrelated set more supported the claim that the

unrelated sets are learnt better because of the distinctiveness hypothesis (Hunt and Mitchell, 1982, cited in Tinkham, 1997). According to this hypothesis, the distinction of the learnt information from each other increases the learning.

On the other hand, in the study conducted by Gowdasiaei and Hashemi (2005) the lexical set yielded better recognition than the unrelated set. In that research, Gowdasiaei and Hashemi (2005) distributed 100 words in lexical sets in a 45 minute lesson and wanted students to learn the meanings of the words. They applied the same procedure for the words in unrelated sets, too. The results showed that the short term recognition of the lexical set was higher. Nevertheless, in this research just the opposite result was obtained. This might happen because of the difference in the presentation technique of the words in these two studies. In that study, the students were asked to memorize 100 words in 45 minutes; however, in the present study vocabulary teaching steps were applied as it was suggested by Thornbury (2002) and Harmer (1991).

In addition, the current study's result contradicted Tinkham's (1997) study's result in part. In Tinkham's study, the subjects were required to learn the thematically related words and unrelated words, and the results demonstrated that the students could memorize the thematically related words with less repetition than they did the unrelated set. On the contrary, in the present study, the unrelated set led to more receptive vocabulary gain regarding the short-term retention, and for the long term retention, the unrelated and the thematically related sets were recognized at the same level by the students. This contradiction between two studies' results may have been caused firstly because of the presentation of the words to the students. Tinkham (1997) worked with the subjects one by one. He repeated word pairs to the subjects. The word pairs were composed of one English word and one artificial word which corresponded to that English word. After his repetition, the subjects heard the English word and were asked to tell the corresponding artificial word or vice versa. Nevertheless, in this

study the students were taught the target words following the steps of vocabulary teaching (Thornbury, 2002). The pictures were used; meaning of the word was given; sentences were written using the word. Then, the students were asked to do a fill in the blanks activity. The students were not alone with the teacher but there was a whole class. These vocabulary presentation steps might help learners to recognize the unrelated words.

Another cause of this conflict might arise from the nature of the thematically related sets in this study. There were 3 thematically related sets and one of them was composed of only verbs. It is claimed that the verbs are learnt more difficultly than the nouns (Read, 2000; Thornbury, 2002). Therefore, the students had difficulty in recognizing the words in the set which included just verbs, and this might have had a negative effect on the total score of the thematically related sets tests. Thus, this might cause the learners to recognize the vocabulary in the unrelated sets more.

The second research question was investigating whether learning different sets of vocabulary made a significant difference on the students' receptive vocabulary gain regarding delayed post tests. The results revealed that there was a statistically significant difference among these three sets. When the sets were analyzed as pairs, it was found out that both the unrelated set and the thematically related sets were recognized more than the lexical set by the students. However, no significant difference was observed between the thematically related and unrelated set. The students had the same amount of receptive vocabulary gain from both sets with regard to the long term recognition. The reason of this might be that as McCarthy claimed (1990), topics relate more easily to people's experience so that topic related words may enable the learners understand and perceive the words better. Besides, since thematically related words compose schema in students' minds and this schema facilitates remembering words (Brewer and Nakamura, 1984, cited in Tinkham, 1997), the thematically related words were recognized as much as unrelated words. Also, it is stated that if the words are taught as

isolated elements, they have no cognitive hold in the memory, so they are forgotten quickly (Hedge, 2000). Due to these reasons, the words in the unrelated set might have been forgotten more than the words in the thematically related set, and although the unrelated set led to more vocabulary gain in the short term, in the long run, there was no significant difference in students' receptive vocabulary gain regarding these two different types of vocabulary sets.

An important point to note here is that in this study, one of the thematically related sets was composed of verbs, and it lowered the total grades obtained by the students from the thematically related sets. Maybe, if there had been no such set, the students in this study might have as well recognized the words in thematically related set more than they did the words in the unrelated set.

Another different result obtained from the delayed post test was that on the immediate post test, the students' recognition was the lowest for the thematically related set, yet for the delayed post test, the students had the lowest recognition on the lexical set. This could again be result of interference effect of the lexical sets. The delayed post test was given three week after the immediate post test. During these three weeks, the similarities between the words in the lexical sets might strengthen their association; therefore, the learners could confuse the meanings of the words (Nation, 1990). The reason of why the students did not confuse the words that much on the immediate post tests might be that they were used to learn lexical sets in a lesson. Most of the books they used in the lesson such as Interactions Access (Thrush, Blass, Baldwin, 2002), Active Skills for Reading 1 (Anderson, 2003) presented the vocabulary in lexical sets. Thus, they could handle the lexical sets when it was first taught to them. However, by the time, while they were trying to keep the vocabulary separate from each other, it added extra burden on the memory of the learner, and they started to confuse the meanings of the words. (Nation, 1990).

Another analysis was done to see if there was a difference between the results of the immediate and delayed post tests and a statistically significant difference was found between them. The students' scores on the immediate post tests were higher than their scores on delayed post tests. As Ebbinghaus (1885, cited in Wagner, 2009) claims that the information is forgotten by time, the students forget the words, so they recognized the words less on the delayed post tests.

As an other question, we wondered if part of speech had an effect in thematically related sets, and because of this, these sets were prepared as one set having only nouns, one set having only verbs, and one set having both nouns and verbs. They were all thematically related sets, but the parts of speech of the words in these sets were different. When the immediate and delayed post tests were analyzed, the same results were obtained. It was observed in both tests that there was a significant difference among these sets. Although it was claimed by the researchers that nouns are easier to learn than verbs (Read, 2000; Thornbury, 2002), the set with both nouns and verbs yielded more receptive vocabulary gain for the students. The reason which caused this result may be that verbs and the nouns are the most common parts of speech found in natural texts and conversations (Kucera and Francis, 1967, cited in Webb, 2007); therefore, the students were used to learn verbs and nouns together. The set with only verbs resulted in the lowest short and long term retention. The difficulty of learning verbs might bring about this result.

At the end of the study, the students' perceptions about these sets were inquired. According to most of them, they thought they could recognize the unrelated sets more, and they had the biggest difficulty in recognizing lexical set. Actually, their perceptions were partially correct. The results of the delayed post test revealed that the unrelated set was one of the most recognized sets and the lexical set was the least.

However thematically related set was recognized as well as unrelated set, and they could not perceive this. They thought that they remembered the unrelated set the most. The reason of this again might be the thematically related set which included only verbs. As the students could remember only few of those words, they might feel that they did not recognize the other thematically related words as well. Another reason could be that since the students learnt the unrelated sets later than the other sets, they felt that they remembered them the most.

CHAPTER 5

CONCLUSION

5.1. Summary of the Study

This study aimed to find out the effects of teaching vocabulary in lexical, thematically related and unrelated sets on students' receptive vocabulary gain. In doing this, whether using lexical set, thematically related sets or unrelated sets facilitate receptive vocabulary gains of the students in terms of short term and long term retention was investigated. Moreover, the effect of part of speech on the receptive vocabulary gain in thematically related sets was wondered and investigated. As a last research question, the students' perspectives of learning vocabulary in different types of sets were inquired.

The research was conducted on 23 elementary level students at Anadolu University Prep School. In order to reach the aim, lexical, thematically related and unrelated sets of vocabulary were prepared. Each set had three subsets of vocabulary. In each subset, there were 8 words. Briefly, there were three lexical sets, three thematically related sets and three unrelated sets of vocabulary and the students were presented with 24 words in lexical sets; 24 words in thematically related sets, and 24 words in unrelated sets.

For the study, 3 weeks were allocated for presenting the vocabulary. In the first week, lexical sets of vocabulary were taught. Before the presentation of the words took place, the students received a pre-test to determine if they had already known the vocabulary. In the light of this pre-test, the words which were known by the students were excluded from the study. Then, the presentation of the words started. Each set of lexical sets was taught in a 45 minute lesson on following days. The students were presented with the new words. They were shown pictures, given the definitions of the words, asked some clarification questions, and they saw the words in sentences. After that, they were required to do a practice activity using

the new words. When the activity was finished, an immediate post test was distributed to them and the subjects took the test. After the first week, thematically related sets of vocabulary were taught in the second week, and in the third week, unrelated sets of vocabulary were presented to the students. The formats of the lessons were the same as the lesson explained above.

In the study, the students received pre-tests, immediate post tests and delayed post tests. The delayed post tests were given three weeks after the teaching took place. The post tests were recognition tests because they test receptive knowledge. Throughout the study, the students were taught the vocabulary receptively. They were not required to do any production tasks; therefore, it would not be fair if the students were asked to do production in the tests.

The immediate post tests showed that the unrelated sets resulted in more receptive vocabulary gain than the other two sets. However, the thematically related set yielded the least vocabulary gain among these three sets and the lexical set ranked in the middle for the short term retention. When the delayed post test scores were analyzed, it was found out that there was no statistically significant difference between the unrelated and thematically related sets in terms of students' receptive vocabulary gain, and these two sets led to more vocabulary gain than the lexical set for the long term retention.

To investigate the effect of part of speech in thematically related sets on students' receptive vocabulary gains, each set of thematically related sets was composed of words from different parts of speech. One set included only nouns, the other set had only verbs in it and the last set was composed of both nouns and verbs. The scores of the students on the immediate and delayed post test were analyzed, and it was found out that the set with both verbs and nouns led to more receptive vocabulary gain; nevertheless, the set with the verbs resulted in the least vocabulary gain for the students.

The students' opinions were also inquired about learning vocabulary in different types of sets. They were asked which set(s) they remember the most and the least. Their answers revealed that most of the students thought that they remembered the words in the unrelated sets the most because those words did not make them confused. In addition, majority of the students felt that they had difficulty in remembering the words in lexical sets as they were very similar to each other.

5.2. Conclusions and the Implications of the Study

This part is going to present the concluding remarks and pedagogical implications obtained by the results of this research.

Although vocabulary teaching has been neglected (Zimmerman, 1997), the students felt the need to learn new words (Coady, 1997). It is the teachers' job to present the vocabulary in the best way in order to make the students be capable of explaining their opinions, feelings, problems using appropriate words. The present study aimed to investigate what kind of vocabulary set should be presented together to cause more receptive vocabulary gain.

The results indicated that unrelated sets of vocabulary were better recognized in the immediate post test. This result can be explained by the distinctiveness hypothesis claimed by Hunt and Mitchell (1982, cited in Tinkham, 1997). The hypothesis puts forward that if the items that are being learnt do not share the similar features, it will assist the learning process. In other words, presenting vocabulary in unrelated sets facilitated learning new words. In the unrelated sets, the words had no meaning connection between them, so the students recognized this set more. Lexical sets were the second more recognized sets in the study. One reason of that may be that as the books that the students used in their courses such as Interactions Access (Thrush, Blass, Baldwin, 2002), Active Skills for Reading 1 (Anderson,

2003) presented vocabulary in lexical sets, the students were used to learning the vocabulary in lexical sets in their lessons. Therefore, for the short-term, the students recognized the words in the lexical sets more than the words in the thematically related sets. Another reason might be that since the thematically related set which was composed of only verbs could not be recognized well by the students, that set lowered the total score of the thematically related set regarding the immediate post test results. Thus, the thematically related set yielded the least vocabulary gain for the short term retention.

When the delayed post test scores were analyzed, it was found out that the lexical sets resulted in the least receptive vocabulary gain among these three sets. Although it was recognized more than the thematically related set in the immediate post tests, it could not reveal the same result for the long term retention. This result made it clear that the students in this study suffered from interference. As Higa (1963) pointed out, if two items have similar features but also different in some ways, their similarity will strengthen the association and their differences interfere with each other. As in the case of lexical sets, regarding the long term retention, the students got confused because the words were gathered under the same superordinate concept, and the students had difficulty in storing them in their long term memory. Besides this result, the delayed post test scores demonstrated that for the long term retention, there was no statistically significant difference between the thematically related and the unrelated sets. They were recognized equally the same. It was seen that that scores of the students decreased for all the sets in the delayed post test, but this result showed that the thematically related set was the least forgotten group, so it was one of the most recognized sets. The reason of this might be that thematically related sets create a schema in students' minds, and it helps them to remember the words (Brewer and Nakamura; 1984, cited in Tinkham, 1997).

As a result, the course book writers and teachers should know that presenting words in lexical sets make learners confused. Although the students seemed that they had learnt the vocabulary in lexical sets, it was hard for them to store those words in their long term memory. However, unrelated and thematically related sets led to more vocabulary gain. While preparing the course books or deciding which words to teach in a lesson, the teachers and the course book writers should be aware of the results of the studies done in this area. As Richards (2006) suggests, principles used while preparing a course book should be grounded on the research findings.

Secondly, the results revealed that part of speech in the thematically related sets had an effect on students' receptive vocabulary gains. As Read (2000) and Thornbury (2002) state, the verbs are more difficult to learn than the nouns. Therefore, both for the long term and short term retention, the set with the verbs resulted in the least vocabulary gain among the other two thematically related sets. Thus, it was seen in this research that if the words which are somehow related to each other are verbs, they should not be taught together. Since the verbs are not only more difficult to learn but also associated with each other, it will be more challenging for the students to recognize them. Furthermore, the students recognized the thematically related set which included both verbs and nouns more than the other thematically related sets. As Kucera and Francis (1967, cited in Webb, 2007) claims verbs and nouns are the most common parts of speech found in natural texts and conversations, and the students were used to learning them together, the set with both nouns and verbs yielded the most receptive vocabulary gain. Therefore, teachers should be careful while teaching vocabulary in thematically related sets. They should pay attention that the set does not include only verbs or the words from the same part of speech.

Lastly, the students' perceptions showed that they could analyze their learning mostly correctly in the study. Most of them thought that they could remember the words in unrelated

set more, and the post test results confirmed this. Also, they stated that the words in lexical sets were the least recognizable words for them, and that was correct, too. What they could not guess was that in the long term, they also remembered the words in the thematically related sets. That could be due to the set which included only verbs because most of the students could only remember a few words from that thematically related set so this might have led them to think that they did not remember the thematically related words well. As an implication, the language teachers should as well bear the students' opinions in their mind before preparing their lesson plans.

5.3. Suggestions for Further Studies

This study was carried out with the participation of a relatively small number of students. The further studies can be conducted with more participants.

The subjects in this study were university students. Another research can be carried out with younger students.

In the present study, only the receptive tasks and recognition tests were applied. In the other studies, the students may be given productive tasks and their production of the words from different sets can be measured.

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APPENDICES

Appendix 1

Lesson Plan for Lexical Set

Vegetable Vocabulary (squash, radish, leeks, celery, parsley, cucumber, chard, peas)

PRESENTATION: (20-25 minutes)

Meaning: Picture showing

Pronunciation and Spelling: The teacher will tell the pronunciation of the word, make the students repeat. After that, the teacher will ask students to guess how it can be spelled as they hear the pronunciation. Then, the teacher will write the spelling of the word on the board.

Grammatical Pattern: The teacher will use them in a sentence. The sentences for the words will be:

1. **Squash** is a big orange vegetable. Turkish people make desert of it.
2. **Radish** is a small round white or red vegetable and people use it in salad.
3. **Leeks** are long white vegetables with green leaves and people cook and eat it.
4. **Celery** is a round white vegetable and most people do not like it**.**
5. **Parsley** is green vegetable and usually used in salads or decorate their food with it.
6. The taste and appearance of **chard** is like spinach.
7. **Peas** are little round green vegetables and people cook it.
8. **Cucumber** is a long green vegetable. People usually eat it in salads or in cacık.

After giving the sentences and writing them on the board one by one, the teacher will ask the students what part of speech is the word, if it is countable or not.

Eliciting the vocabulary: The teacher will ask who likes celery, cucumber, etc., ask them which ones are used for salad, for a main dish, is eaten without cooking.

PRACTICE: (10-15 minutes)

(10-15 minutes) Matching: The students will match the pictures with the vegetables on the worksheet given below.

Match the pictures with the words given below.

cucumber	**parsley**	**chard**	**leeks**	**peas**	**squash**	**radish**	**celery**

1._____2._____ 3._____4._____

5._____ 6._____ 7_____ 8._____

Appendix 2

Lesson Plan for Lexical Set

Tool Vocabulary (needle, hammer, screw, spanner, shovel, axe, nail, drill)

PRESENTATION: (20-25 minutes)

Meaning: Picture showing

Pronunciation and Spelling: The teacher will tell the pronunciation of the word, make the students repeat. After that, the teacher will ask students to guess how it can be spelled as they hear the pronunciation. Then, the teacher will write the spelling of the word on the board.

Grammatical Pattern: The teacher will use them in a sentence. The sentences for the words will be:

1. People use **axe** to cut wood.
2. A plumber uses **spanner** to fix the tap.
3. **Screw** is a small metal tool and joins two things together such as pieces of wood.
4. People use **shovels** to carry substances such as sand, snow, dirt.
5. People use **hammer** to hit things. **Hammer** has a thin wooden long body and at the end there is a piece of metal.
6. **Nail** is a thin small metal tool and we usually hang pictures on **nails** on the wall.
7. **Drills** make holes on the walls.
8. People use **needle** when they sew something.

After giving the sentences and writing them on the board one by one, the teacher will ask the students what part of speech is the word, if it is countable or not.

Eliciting the vocabulary: The teacher will ask the students to tell her if they used these tools before. She will ask the students who say 'yes' where and for what reason they used them.

PRACTICE: (10-15 minutes)

(10-15 minutes): Matching: The students will try to fill in the blanks with an appropriate word on the worksheet given below.

Fill in the blanks with a suitable word given below.

needle, hammer, screw, spanner, shovel, axe, nail, drill

1. Mum, do you know where the _____ is? I want to hit the nail on the wall.
2. When I was fixing the wardrobe, one of the _____ fell down and I could not find it.
3. I think you can put a/n _____ on that side of the wall and hang the picture on it.
4. I could not sleep in the morning because my neighbours were using _____ and its noise made me crazy.
5. A: Everywhere on the balcony is full of snow.

   B: Oh, then give me the _____ so I will throw the snow out of the balcony.
6. When the plumber came, he used a/n _____ to fix the tap.
7. The farmer was cutting the wood with a/n _____.
8. I sewed my skirt with a _____ yesterday morning.

Appendix 3

Lesson Plan for Lexical Set

JobVocabulary (referee, warden, deputy, tutor, potter, advocate, sergeant, priest)

PRESENTATION: (20-25 minutes)

Meaning: Picture showing, giving an example sentence -given below- which defines the job.

Pronunciation and Spelling: The teacher will tell the pronunciation of the word, make the students repeat. After that, the teacher will ask students to guess how it can be spelled as they hear the pronunciation. Then, the teacher will write the spelling of the word on the board.

Grammatical Pattern: The teacher will use them in a sentence. The sentences for the words will be:

1. A **warden** is responsible of a prison.
2. A **deputy** is the second most important person in an organization such as business or government department.
3. A **potter** makes dishes, plates, and other objects from the clay.
4. An **advocate** is a lawyer.
5. A **priest** is a person who does religious duties in Church.
6. **Referees** control the game rules in football, basketball games, etc.
7. A **tutor** is a private teacher.
8. A **sergeant** is a soldier in the middle rank.

After giving the sentences and writing them on the board one by one, the teacher will ask the students what part of speech is the word, if it is countable or not.

Eliciting the vocabulary: The teacher will ask the students where a sergeant, a tutor, potter, etc. work, and what they do.

PRACTICE: (10-15 minutes)

(10-15 minutes): Matching: The teacher will distribute a worksheet. There will be sentences with the blanks. The students will try to fill in those blanks with the words they learnt. The activity is given below.

Fill in the blanks with the words given below.

referee, warden, deputy, potter, advocate, sergeant, priest, tutor

1. My father works is army. He is a/n _____
2. I was not good at maths so I got lesson from a/n _____ for a semester.
3. The thief did not have money so he could not hire a/n _____.
4. The _____ talked about love of God on Sunday in the church.
5. The _____ of prep school at Anadolu University is Aysel Bahçe.
6. In Cappadocia, I saw a/n _____ making some plates from clay.
7. The _____ showed a red card to the footballer last night.
8. My uncle works as a _____at a prison.

Appendix 4

Lesson Plan For Thematically Related Set

Love Theme: (Just With Verbs)

(dump, divorce, pursue, stare, embrace, propose, praise, admire)

PRESENTATION: (20-25 minutes)

Meaning: Definition giving, body language, showing pictures

To dump: to end a romantic relationship

To embrace: to hold someone with both arms to show love

To praise: to say someone that you like their behaviour.

To admire: to like and respect someone or something very much

To propose: to offer something

To divorce: to end a marriage officially

To pursue: to try very hard to persuade someone to have a relationship with you

To stare: to look at someone for a long time.

Pronunciation and Spelling: The teacher will tell the pronunciation of the word, make the students repeat. After that, the teacher will ask students to guess how it can be spelled as they hear the pronunciation. Then, the teacher will write the spelling of the word on the board.

Grammatical Pattern: The teacher will use them in a sentence. The sentences for the words will be:

1. He **pursued** her for a long time; he bought presents, flowers to her but she did not accept him.
2. When my boyfriend came at the airport from Italy, I **embraced** and kissed him.

3. When the child answered the question, the teacher **praised** him and said that he was very hardworking.
4. She cried a lot when her boyfriend **dumped** her for another girl.
5. The boy **stared** at the girl in the lesson but she did not even look at him.
6. When her boyfriend **proposed** marriage to her, she quickly said 'yes'
7. We were very surprised because the happy couple **divorced**.
8. Lots of children **admire** superman. They like him so much that they want to be like him.

After giving the sentences and writing them on the board one by one, the teacher will ask the students what part of speech is the word, if it is an irregular or regular verb.

*Eliciting the vocabulary**:*** The teacher will ask questions to the students in order to check their understanding.

1. To pursue: Did you ever pursue someone? What happened?
2. To dump: Did someone dump you before? How did you feel?
3. To embrace: When do you embrace someone?
4. To propose: How do you think you will propose marriage? (for boys)
   How should your boyfriend propose marriage to you? (for girls)
5. To stare: How do you feel if someone stares at you?
6. To divorce: Do you think the couples who have a lot of fights should divorce?
7. To admire: Who do you admire the most?
8. To praise: Who praises you mostly?

PRACTICE: (10-15 minutes)

(10-15 minutes): Matching: The students will try to fill in the blanks with an appropriate word on the worksheet which is given below.

Fill in the blanks with an appropriate word given below.

dumped	**divorced**	**embraced**	**praise**	**admired**	**proposed**	**pursued**	**stared**

1. When I was little, my parents _____ and I was very sad because of that.
2. John _____ Kate for a long time but she did not want to go out with him.
3. When she was a child, she _____ Tarkan.
4. When his girlfriend _____ him, he went out and drank lots of beer because he was very sad.
5. The man liked a girl in the cafe and _____ at that girl but he could not go and talk to her.
6. When I get good grades, my parents _____ me.
7. In the movie, the man _____ marriage to woman in a very romantic atmosphere.
8. At the bus station, when the girl was going to another city, they _____ each other and cried.

Appendix 5

Lesson Plan For Thematically Related Set

Crime and Punishment Theme (just with nouns)

(punch, robbery, fraud, assault, cell, penalty, verdict, court)

PRESENTATION: (20 to 25 minutes)

Meaning: Definition giving, picture showing

For punch: a forceful hit with your hand.

For robbery: stealing from someone or something

For fraud: person who gains money by telling lies.

For assault: attack

For cell: a small room in a prison

For penalty: punishment for something that you do against law

For verdict: the final decision made by the judge

For court: a large room where lawyer, judge and people are in. The judge listens to lawyers and decides if the person is guilty or not.

Pronunciation and Spelling: The teacher will tell the pronunciation of the word, make the students repeat. After that, the teacher will ask students to guess how it can be spelled as they hear the pronunciation. Then, the teacher will write the spelling of the word on the board.

Grammatical Pattern: The teacher will use them in a sentence. The sentences for the words will be:

1. He gave him a **punch** on the nose in the fight.
2. During the bank **robbery**, everyone in the bank was very scared.
3. The **fraud** took a lot of money from the couple.
4. I saw an **assault** on a child and I called the police officers immediately.
5. He had to live in a **cell** for ten years.

6. Turkish law does not let death **penalty**.
7. The **verdict** was ‘not guilty’
8. Protestors were waiting outside the **court** to hear the verdict.

After giving the sentences and writing them on the board one by one, the teacher will ask the students what part of speech is the word, if it is countable or uncountable.

Eliciting the vocabulary: The teacher will ask questions to the students to check students’ understanding.

For ‘punch’: Did someone give you a punch? When?

For ‘robbery’: What do you do if you see a robbery?

For ‘fraud’: Do you know anyone who gave money to a fraud? Could they get their money back?

For ‘assault’: Did you ever see an assault?

For ‘cell’: Did you ever see a cell?

For ‘penalty’: What should be the penalty for stealing?

For ‘verdict’: What is a verdict?

For ‘court’: Where is the court in Eskişehir?

PRACTICE: (10-15 minutes)

(10-15 minutes): Matching: The students will try to fill in the blanks with an appropriate word on the worksheet which is given below.

Fill in the blanks with the words given below.

Punch robbery fraud assault cell penalty verdict court

1. My nose is broken because he gave me _____ on the nose.
2. The TV news showed the big bank _____.
3. Sue gave 10000 $ to the man to buy a car but the man is lost with the money so he is a _____.
4. When the judge read the _____, everybody understood that she was not guilty.
5. The prisoner will go to the _____ on Monday.
6. The _____ for stealing something is just a few years in prison in Turkey.
7. When he was in prison, he was always walking in his _____.
8. Some husbands in Turkey hit their wives but _____on women should stop.

Appendix 6

Lesson Plan for Thematically Related Set

Cooking Theme (both with nouns and verbs)

(strain-v-, bench-n-, grain-n-, boil-v-, squeeze-v-, pan-n-, tray-n-, peel-v-)

PRESENTATION: (20-25 minutes)

Meaning: Picture showing, using body language, giving descriptions

Squeeze: To press something to get juice from it.

Boil: To cook something in water.

Strain: To separate food from the water.

Peel: To take out the skin of vegetable or fruit

Pan: Metal round container

Grain: It is the general name for the products like corn, pasta, rice.

Tray: We carry glasses, plates on it.

Bench: It is in the kitchen. We put the dishes, the food on it.

Pronunciation and Spelling: The teacher will tell the pronunciation of the word, make the students repeat. After that, the teacher will ask students to guess how it can be spelled as they hear the pronunciation. Then, the teacher will write the spelling of the word on the board.

Grammatical Pattern: The teacher will use them in a sentence. The sentences for the words will be:

Straining means separating water from the food.

We put the dirty plates on the **bench** in the kitchen.

Rice, pasta, cornflakes are all **grain** products.

You can **squeeze** orange and drink its juice.

Boiling means cooking food in some water.

We use **trays** to carry food, plates, and drinks on it.

We **peel** the banana before we eat it because we can not eat the yellow skin of it.

Pan is a metal round container and it has a long handle. Students usually use pans to cook eggs in the breakfast.

After giving the sentences and writing them on the board one by one, the teacher will ask the students what part of speech is the word, if it is countable or uncountable, what the past form of the verbs can be.

Eliciting the vocabulary: The teacher will ask questions to the students to check students' understanding.

For 'pan': What do you cook in a pan?

For 'strain': What do we usually strain?

For 'boil': What do we usually boil?

For 'bench': What are there on the bench of your home?

For 'grains': What can we make with the grains?

For 'tray': What can we carry on a tray?

For 'squeeze': What can we squeeze?

For 'peel': Which fruit do we peel before we eat?

PRACTICE: (10-15 minutes)

(10-15 minutes): Matching: The students will try to fill in the blanks with an appropriate word on the worksheet which is given below.

Fill in the blanks with the words given below.

pan strain boil bench grains tray squeeze peel

1. When I catch a cold, my parents always _____ orange for me to drink.
2. As I ate lots of _____, I gained weight.
3. Do not forget to _____ pasta when it is cooked.
4. The kitchen was in a mess so I started to clean it from the _____.
5. If you want to prepare mashed potatoes, you should _____ in some water first.
6. Where is the _____? I want to make some sauce for the pasta, but I cannot find it.
7. Before eating an orange, you should _____ it.
8. I need the _____ to carry all these glasses to the living room.

Appendix 7

Lesson Plan for Unrelated Set

Set 1: (currency-n- troop-n- beak-n- charity-n- approach-v- desire-v- expand –v-, whisper-v-)

PRESENTATION: (20-25 minutes)

Meaning: Picture showing, using body language, giving descriptions

Currency: money that is used in a particular country

Troop: a group of soldiers

Beak: bird's mouth

Charity: giving money or other materials to the poor

To expand: to become larger, bigger

To approach: to come near

To desire: to want something very much

To whisper: to speak very quietly

Pronunciation and Spelling: The teacher will tell the pronunciation of the word, make the students repeat. After that, the teacher will ask students to guess how it can be spelled as they hear the pronunciation. Then, the teacher will write the spelling of the word on the board.

Grammatical Pattern: The teacher will use them in a sentence. The sentences for the words will be:

The **currency** in Turkey is lira.

Atatürk told the **troops** to fight against the enemy.

Birds use their **beaks** to pick up food

The rich people gave a lot of money to the **charity** to help poor girls.

It is rude to **whisper** in public.

She has everything that she can **desire**.

When the dog **approached** me, I started to run.

The people could not see the picture, so we had to **expand** it and now everybody sees it.

After giving the sentences and writing them on the board one by one, the teacher will ask the students what part of speech is the word, if it is countable or uncountable, what the past form of the verbs can be.

Eliciting the vocabulary: The teacher will ask questions to the students to check students' understanding.

For 'currency': What is the currency of Europe, Britain, USA?

For 'troop': Is there a troop in Eskişehir? Where is it?

For 'beak': What colour is the birds' beak?

For 'charity': Did you ever give money to a charity? What kind of charities are there in Turkey?

For 'expand': What can expand?

For 'approach': Are you scared if an animal approaches you?

For 'desire': What do you desire the most?

For 'whisper': Did you ever play whispering game? Was it fun?

PRACTICE: (10-15 minutes)

(10-15 minutes): Matching: The students will try to fill in the blanks with an appropriate word on the worksheet which is given below.

Fill in the blanks with the words given below.

Currency troop beak charity expand approached desired whispered

1. The children collected all their toys and gave them to a _____ for the other poor children
2. McDonalds _____its fast food restaurants everyday because a lot of people eat there.
3. She _____ to visit all around the world.
4. Look at that birds' _____, isn't it cute?
5. When the war finished, the _____ became very happy.
6. When her teacher _____ her, she put her phone in her bag and started to do the activity.
7. The little child _____ something into his mother's ear.
8. After the European Union was founded, the _____ of Europe became the same everywhere.

Appendix 8

Lesson Plan for Unrelated Set

Set 2: (crown-n-, sack-n-, pace-n-, coal-n- wonder-v-, reduce-v-, insult-v-, grab-v-)

PRESENTATION: (20-25 minutes)

Meaning: Picture showing, using body language, giving descriptions

Crown: its shape is circle; it can be made of gold and jewellery and king and queen put it on their head.

Sack: a very large bag and it is made of strong cloth

Pace: A single step

Coal: a hard black substance and people burn it in winter.

To wonder: to want to know about something a lot.

To insult: to say very bad words to someone

To grab: take something or someone suddenly

To reduce: to make something smaller in size, amount, degree, importance

Pronunciation and Spelling: The teacher will tell the pronunciation of the word, make the students repeat. After that, the teacher will ask students to guess how it can be spelled as they hear the pronunciation. Then, the teacher will write the spelling of the word on the board.

Grammatical Pattern: The teacher will use them in a sentence. The sentences for the words will be:

When I went to the museum, I saw the **crown** of the king.

Farmers store potatoes in the **sacks**.

The prices of winter clothes **reduce** in February.

The runner fell down just two **paces** before the finish line.

The poor family did not have the money to buy **coal** so they were very cold in winter.

I **wonder** what he is doing now.

The thief **grabbed** the bag and started to un.

When his friend **insulted** him, he started to hit his friend angrily.

After giving the sentences and writing them on the board one by one, the teacher will ask the students what part of speech is the word, if it is countable or uncountable, what the past form of the verbs can be.

Eliciting the vocabulary: The teacher will ask questions to the students to check students' understanding.

For 'crown': Did you ever see a crown? Where?

For 'reduce': Which clothes' prices do the companies reduce nowadays?

For 'sack': Did you ever use a sack? For what?

For 'pace': How many paces do you have to take to go to canteen from the class?

For 'coal': In Turkey, which city is famous for its coal?

For 'wonder': Is there anything that you wonder about the earth?

For 'grab': Did a thief grab your purse, bag, etc... before?

For 'insult': What would you do if someone insulted you?

PRACTICE: (10-15 minutes)

(10-15 minutes): Matching: The students will try to fill in the blanks with an appropriate word on the worksheet which is given below.

Fill in the blanks with the words given below.

crown sack paces coal wonder reduced insulted grabbed

1. You should call your parents if you stay out late. If you don't do that, they will _____where you are.
2. When the student _____ the teacher, she told him to go out of the classroom.
3. Soma is famous for its _____.
4. If you walk five _____ forwards, you can see the building.
5. Since there is an economical crisis in the world, the companies _____ the number of their employees.
6. Look at that _____. It is made of gold.
7. Children believe that Santa Kraus carry the presents in his _____.
8. When I heard that my friend id in hospital, I _____ my bag and went there immediately.

Appendix 9

Lesson Plan for Unrelated Set

Set 3 (command-v-, dare-v-, reject-v-, cease-v-, wage-n-, bush-n-, sleeve-n-, fur-n-)

PRESENTATION: (20-25 minutes)

Meaning: Picture showing, using body language, giving descriptions

To cease: to stop, to end

To dare: to be brave enough to do something, to have courage

To reject: opposite of accept, to refuse

To command: to say someone that he or she must do something

Wage: money that an employee gets from week to week.

Bush: it is a plant like a short tree with lots of branches

Sleeve: the arm covering part of a shirt

Fur: thick hair that covers the bodies of some animals

Pronunciation and Spelling: The teacher will tell the pronunciation of the word, make the students repeat. After that, the teacher will ask students to guess how it can be spelled as they hear the pronunciation. Then, the teacher will write the spelling of the word on the board.

Grammatical Pattern: The teacher will use them in a sentence. The sentences for the words will be:

The leader **commanded** his soldiers to run.

Can you **dare** to jump from the second floor?

He asked her to go out but she **rejected** him.

At one o'clock the rain **ceased** and the sun appeared.

When he got his **wage**, he went shopping and bought some vegetables.

The girl hid behind the **bush**, her friends could not find her.

He liked that shirt a lot but the **sleeves** were a little short so he did not buy it.

She touched the rabbit's soft **fur**.

After giving the sentences and writing them on the board one by one, the teacher will ask the students what part of speech is the word, if it is countable or uncountable, what the past form of the verbs can be.

Eliciting the vocabulary: The teacher will ask questions to the students to check students' understanding.

For 'dare': Are you brave? What do you dare to do?

For 'reject': Did someone ever reject you?

For 'command': What did Atatürk command his soldiers?

For 'cease': Do you think the wars in the world will cease? Why?

For 'wage': Did you ever get wage? What did you do with it?

What would you do if you earned wage?

For 'bush': Where can we see bushes in Eskişehir?

For 'sleeve': What would you do if your sleeve is torn?

For 'fur': Which animals' fur is soft?

PRACTICE: (10-15 minutes)

(10-15 minutes): Matching: The students will try to fill in the blanks with an appropriate word on the worksheet. The activity is given below.

Fill in the blanks with the words given below.

sleeve dare reject fur cease wage commanded bush

1. They are feeding a cat in the house. Because of that, there is a lot of _____ on the floor.
2. In summer I _____ to do bungee jumping.
3. As the student copied his homework from the net, the teacher _____ her paper and did not get it.
4. I do not think that this rain will _____.
5. I liked the shirt but these _____ are too long for me.
6. He worked for months but he never got his _____ so he had to take money from his parents.
7. While we were walking in the forest, the deer jumped in front of us behind the _____.
8. The officer _____his man to fire their guns.

Appendix 10

Pre-Test of Words Lexical Set

If you know the meaning of ANY of the words below, write the synonym or Turkish translation of it next to the word.

	lawyer	reporter
sergeant	priest	axe
president	parsley	screw
radish	spanner	drill
scissors	chard	celery
hammer	tweezers	warden
leeks	architect	cucumber
deputy	nail	potter
cabbage	journalist	tutor
eggplant	referee	shovel
squash	peas	
advocate		

Appendix 11

Immediate Post-Tests for Lexical Sets

Post-test for Vegetable Vocabulary

Match the definitions with the words given below. **Name:**

cucumber, **radish, leek, celery, squash, parsley**, **chard**, **pea**

1. Small round red or white vegetable. It is usually used in salads. _____
2. Small round green vegetable. People cook and eat it. _____
3. It has green leaves. It tastes like spinach. _____
4. It is a long green vegetable. It is used in salads or in cacık. _____
5. It is big round green or orange vegetable. Turkish people make desert of it._____
6. It is round and white vegetable. Most people do not like it. People can eat it with or without cooking. _____
7. It is small and green. People use it in salads or use it to decorate food._____
8. It is long white vegetable with green leaves. People mostly cook and eat it._____

Post –Test for Tool Vocabulary

Match the definitions with the words given below. **Name:**

needle, axe, screw, spanner, shovel, nail, hammer, drill

1. You use it when you sew something. _____
2. You use it when you hit something. _____
3. You use it when you carry dirt, sand, snow, etc. _____
4. You use it when you want to hold two hard things together such as pieces of wood._____
5. Plumbers use it when they are fixing the tap. _____
6. You use it to hang pictures on a wall. _____
7. It makes holes on a wall. _____
8. You cut the wood with it. _____

Post-Test for Job Vocabulary

Match the definitions with the words given below. **Name:**

referee, warden, deputy, potter, advocate, sergeant, priest, tutor

1. A person who controls game rules during the match. _____
2. A person who is responsible of a prison. _____
3. A person who is a lawyer. _____
4. A person who makes plates, dishes from the clay. _____
5. A person who does his religious duties in Church. _____
6. A person who is the second most important person in an organization. _____
7. A person who is a private teacher. _____
8. A person who is a soldier. _____

Appendix 12

Delayed Post-Test for Lexical Sets

Match the definitions with the words given below. **Name:**

sergeant, radish, hammer, leek, deputy, squash, advocate, priest, parsley, spanner, chard, nail, referee, pea, needle, axe, screw, drill, celery, warden, cucumber, potter, tutor, shovel

1. You use it when you carry dirt, sand, snow, etc. _____
2. A person who makes plates, dishes from the clay. _____
3. It has green leaves. It tastes like spinach. _____
4. You use it to hang pictures on a wall. _____
5. A person who is a lawyer. _____
6. You use it when you hit something. _____
7. A person who is responsible of a prison. _____
8. A person who does his religious duties in Church. _____
9. It is a long green vegetable. People use it in salad or in cacık _____
10. A person who is the second most important person in an organization. _____
11. A person who is a private teacher. _____
12. It is round and white vegetable. Most people do not like it. People can eat it with or without cooking. _____
13. It is long white vegetable with green leaves. People mostly cook and eat it._____
14. Small round green vegetable. People cook and eat it. _____
15. You use it when you sew something. _____
16. You use it when you want to hold two hard things together such as pieces of wood.___
17. A person who is a soldier. _____
18. Plumbers use it when they are fixing the tap. _____
19. It makes holes on a wall. _____
20. Small round red or white vegetable. It is usually used in salads. _____
21. A person who controls game rules during the match. _____
22. It is big round green or orange vegetable. Turkish people make desert of it._____
23. You cut the wood with it. _____
24. It is small and green. People use it in salads or use it to decorate food._____

Appendix 13

The Pre-Test of Thematically Related set

If you know the meaning of ANY of the word below, write the synonym or Turkish translation of it.

dump	mug	penalty
divorce	punch	verdict
embrace	robbery	court
praise	fraud	pan
admire	thief	strain
propose	scales	boil
pursue	inquiry	bench
stare	gaze	peel
stir	charm	grains
drain	assault	tray
pot	cell	squeeze

Appendix 14
Immediate Post-Tests for Thematically Related Sets

Post-Test for Love Theme

Match the definitions with the words given below. **Name:**

dump	**divorce**	**embrace**	**praise**	**admire**	**propose**	**pursue**	**stare**

1. to end a romantic relationship _____
2. to look at someone for a long time. _____
3. to like and respect someone or something very much _____
4. to offer something such as marriage _____
5. to say someone that you like their behaviour. _____
6. to hold someone with both arms to show love _____
7. to try very hard to persuade someone to have a relationship with you _____
8. to end a marriage officially _____

Post-Test for Crime and Punishment Theme

Match the definitions with the words given below. **Name:**

Punch	**robbery**	**fraud**	**assault**	**cell**	**penalty**	**verdict**	**court**

1. attack _____
2. a forceful hit with your hand _____
3. punishment for something that you do against law _____
4. stealing from someone or something _____
5. a small room in a prison _____
6. a large room where lawyer, judge and people are in _____
7. person who gains money by telling lies _____
8. the final decision made by the judge _____

Post-Test for Cooking Theme

Match the words below with the descriptions. **Name:**

pan strain boil bench peel grains tray squeeze

1. to press something to get juice from it. _____
2. It is a kitchen tool and we carry glasses, dishes plates on it. _____
3. It is metal round container with long handle
   and we can cook eggs, sauce, etc... in it. _____
4. to cook something in water. _____
5. to separate food from the water. _____
6. It is in the kitchen and we put the dirty dishes, food, etc on it,
   and we prepare food on it. _____
7. It is the general name for pasta, rice, corn. _____
8. To take out the skin of vegetable or fruit _____

Appendix 15

Delayed Post-Test for Thematically Related Set

Match the words with the definitions given below. **Name:**

bench dump divorce court squeeze assault praise peel admire punch propose pursue stare robbery fraud cell penalty verdict pan strain boil embrace grains tray

1. to end a romantic relationship _____
2. to look at someone for a long time. _____
3. to like and respect someone or something very much _____
4. a large room where lawyer, judge and people are in _____
5. to press something to get juice from it. _____
6. to hold someone with both arms to show love _____
7. to cook something in water. _____
8. to try very hard to persuade someone to have a relationship with you _____
9. It is the general name for pasta, rice, corn. _____
10. attack _____
11. To take out the skin of vegetable or fruit _____
12. to end a marriage officially _____
13. punishment for something that you do against law _____
14. stealing from someone or something _____
15. to separate food from the water. _____
16. a forceful hit with your hand _____
17. person who gains money by telling lies _____
18. to offer something _____
19. the final decision made by the judge _____
20. It is a kitchen tool and we carry glasses, dishes plates on it. _____
21. small room in a prison _____
22. to say someone that you like their behaviour. _____
23. It is metal round container with long handle
    and we can cook eggs, sauce, etc... in it. _____
24. It is in the kitchen and we put the dirty dishes, food, etc on it,
    and we prepare food on it. _____

Appendix 16

If you know the meaning of ANY of the word below, write the synonym or Turkish translation of it.

arrow	beak	troop
soul	facility	cease
dare	distribute	reduce
lane	bush	knit
currency	grab	wage
bend	charity	reject
disturb	coal	fur
wonder	approach	pace
sleeve	expand	command
desire	steer	insult
drag	flood	sack
whisper	nest	crown

Appendix 17

Immediate Post-Tests for Unrelated Set:

Set 1

Match the words below with the descriptions. **Name:**

approach currency desire beak whisper charity expand troop

1. Become larger and bigger _____
2. giving money or other materials to the poor _____
3. to want something very much _____
4. to speak very quietly _____
5. money that is used in a particular country _____
6. to come near _____
7. a group of soldiers _____
8. birds' mouth _____

Set 2

Match the words below with the descriptions. **Name:**

crown sack pace coal wonder reduce insult grab

1. A single step _____
2. a hard black substance and people burn it in winter. _____
3. to want to know about something a lot. _____
4. Its shape is circle; it can be made of gold and jewellery and king and queen put it on their head. _____
5. to say very bad words to someone _____
6. a very large bag and it is made of strong cloth _____
7. to take or pick something suddenly _____
8. to make something smaller in size, amount, degree, importance _____

Set 3

Match the words with their definitions below **Name:**

cease dare command wage bush reject sleeve fur

1. the arm covering part of a shirt _____
2. to stop, to end _____
3. money that an employee gets from week to week. _____
4. thick hair that covers the bodies of some animals _____
5. to be brave enough to do something, to have courage _____
6. it is a plant like a short tree with lots of branches _____
7. opposite of accept, to refuse _____
8. to say someone that he or she must do something _____

Appendix 18

Delayed Post-Test for Unrelated Set

Match the words below with the descriptions. ***NAME:***

dare currency wonder sleeve desire whisper beak bush grab charity coal approach expand troop cease reduce wage reject fur pace command insult sack crown

1. the arm covering part of a shirt _____
2. a very large bag and it is made of strong cloth _____
3. to say very bad words to someone _____
4. to come near _____
5. to stop, to end _____
6. opposite of accept, to refuse _____
7. birds' mouth _____
8. to take or pick something suddenly _____
9. it is a plant like a short tree with lots of branches _____
10. to make something smaller in size, amount, degree, importance _____
11. to want something very much _____
12. a hard black substance and people burn it in winter. _____
13. thick hair that covers the bodies of some animals _____
14. to want to know about something a lot. _____
15. giving money or other materials to the poor _____
16. money that is used in a particular country _____
17. Its shape is circle; it can be made of gold and jewellery and king and queen put it on their head. _____
18. to say someone that he or she must do something _____
19. Become larger and bigger _____
20. to speak very quietly _____
21. money that an employee gets from week to week. _____
22. A single step _____
23. a group of soldiers _____
24. to be brave enough to do something, to have courage _____

Appendix 19

PICTURES USED IN THE PRESENTATION OF LEXICAL SET
Vegetable vocabulary:

PARSLEY

CELERY

RADISH

PEA

CHARD

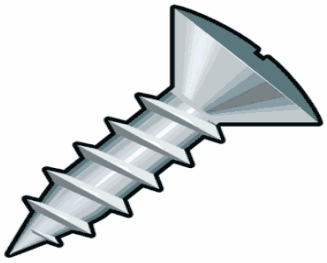
SQUASH

LEEK

CUCUMBER

Tool Vocabulary:

HAMMER



SCREW

NAIL

SPANNER

AXE

DRILL

NEEDLE

SHOVEL

Job Vocabulary:

REFEREE

POTTER

WARDEN

ADVOCATE

DEPUTY

SERGEANT

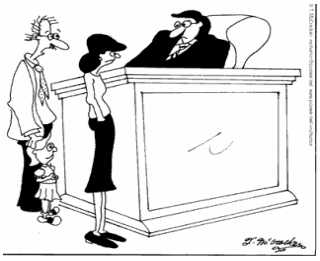
TUTOR

PRIEST

Appendix 20

PICTURES USED IN THE PRESENTATION OF THEMATICALLY RELATED SET
Love Theme

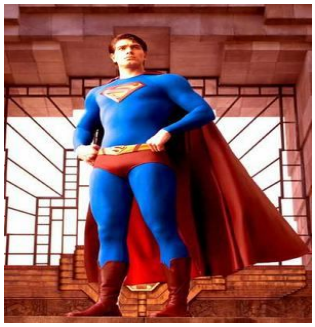
DUMP



DIVORCE

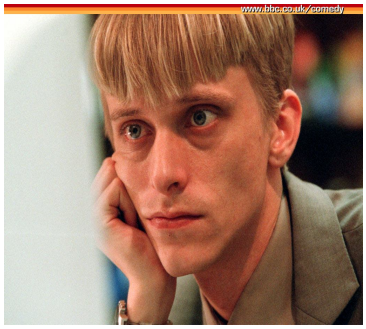
EMBRACE

PRAISE



ADMIRE

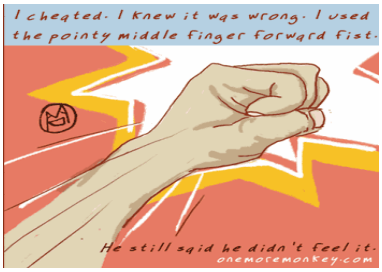
PROPOSE



STARE

PURSUE

Crime and Punishment Theme:

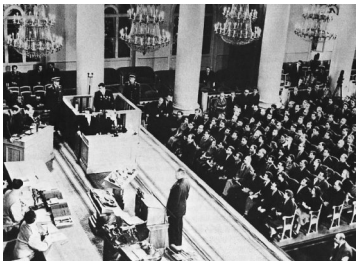


PUNCH

FRAUD

ROBBERY

ASSAULT



COURT

PENALTY

CELL

VERDICT

Cooking Theme:

BOIL

PEEL

BENCH

PAN

GRAINS

STRAIN

SQUEEZE

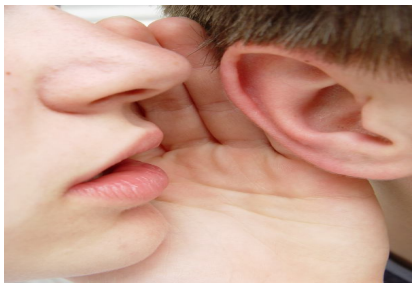
TRAY

Appendix 21
THE PICTURES USED IN THE PRESENTATION OF UNRELATED SET
Unrelated Set 1:

TROOP

APPROACH

CHARITY



WHISPER

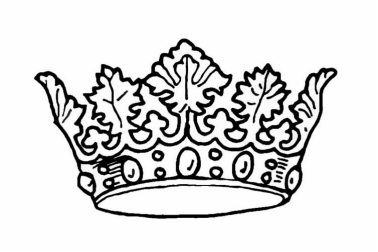
BEAK

DESIRE

CURRENCY

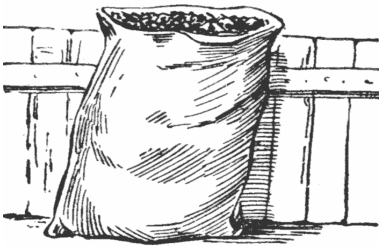
EXPAND

Unrelated Set 2:



CROWN

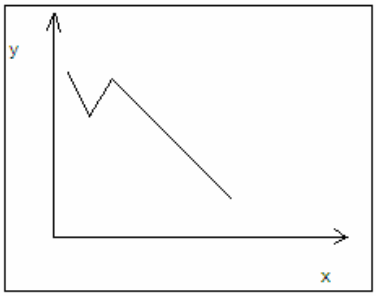
COAL



SACK

WONDER

PACE



REDUCE

GRAB

INSULT

Unrelated Set 3:

DARE

BUSH

REJECT

SLEEVE

CEASE

FUR

WAGE

COMMAND