

**REPUBLIC OF TURKEY
ÇUKUROVA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
ENGLISH LANGUAGE TEACHING DEPARTMENT**

**THE EFFECTS OF TEACHING WORD ROOTS ON THE LONG TERM
RETENTION OF ENGLISH VOCABULARY**

Kenan AKARSLAN

MASTER OF ARTS

ADANA / 2018

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Supervisor: Assoc. Prof. Dr. Hasan BEDİR

Member of Examining Committee: Assoc. Prof. Dr. Yonca ÖZKAN

Member of Examining Committee: Prof. Dr. Şehnaz ŞAHİNKARAKAŞ

MASTER OF ARTS

ADANA / 2018

To ukurova University Institute of Social Sciences,

We certify that this thesis is satisfactory for the award of the degree of Master of Arts in the Department of English Language Teaching.

Supervisor: Assoc. Prof. Dr. Hasan BEDİR

Member of Examining Committee: Assoc. Prof. Dr. Yonca ÖZKAN

Member of Examining Committee: Prof. Dr. Şehnaz ŞAHİNKARAKAŞ

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Kenan AKARSLAN

ÖZET

KELİME KÖKLERİ ÖĞRETİMİNİN İNGİLİZCE KELİMELERİN UZUN VADEDE AKILDA KALICILIĞI ÜZERİNE ETKİSİ

Kenan AKARSLAN

Yüksek Lisans Tezi, İngiliz Dili Eğitimi Ana Bilim Dalı

Danışman: Doç. Dr. Hasan BEDİR

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Arkaplan: Kelime öğrenme deneyimi dil öğrenmenin en zaman alıcı yönü gibi görünmektedir. Öğrenciler, her şeye rağmen çoğu halde unutacakları, listeler halinde bağımsız kelimeleri ve sınav kelime listelerini ezberlemek için muazzam enerji harcamaktadır. Kelimeleri ezberlemek ve akılda tutmak için öğrencilerin benimsediği farklı öğrenme stratejileri mevcuttur. Kelimeleri parçalarına ayırmak bunlardan bir tanesi olsa da kelime kökleri ile öğrenmenin faydaları üzerine az sayıda çalışma vardır (Akarslan, 2013, Bellomo, 2005, 2009; Karlıova, 2009). Az sayıdaki bu çalışmalar Latin ve Yunan kökleriyle kelime öğretme ve öğrenmenin etkililiğini vurgular. Ancak, bu çalışmalarda bu stratejinin uzun dönem kalıcılık üzerine etkisi görülememektedir.

Amaç: Bu çalışmanın amacı kelime köklerinin yeni öğrenilen kelimelerin uzun vadede akılda kalıcılığı ve öğrencilerin yaklaşımları üzerine etkisini incelemektir.

Yöntem: Araştırma boyunca nitel verilerle destekli betimsel çalışılmıştır. Bir grup üniversite hazırlık öğrencisi (S=16) seçilmiştir. Öncelikle, grup ileri seviye kelimeler listesinden bilmediklerini seçmişlerdir. Çalışmada öğretmek amacıyla tamamen bilinmeyen kelimelerden yeni bir kelime listesi oluşturulmuştur. Bu listedeki hiç bir kelimeyi bilmediklerinden emin olmak için çoktan seçmeli sorular yerine onlardan kelimelerin anlamlarını yazmaları da istenmiştir. Bu yeni kelimeler, gruba kelime köklerinin yanı sıra ingilizce tanımları, türkçe eşdeğerleri ve örnek cümleler aracılığıyla öğretilmiştir. Yöntemin kısa dönem etkisini görmek için son test uygulanmıştır. Uzun vadede akılda kalıcılık miktarında fark var mı görmek için bir ay sonra aynı içerikle ikinci bir son test uygulanmıştır. Çalışmanın nirengi noktalarını artırmak için eğitmen ve öğrencilerden günlük tutmaları istenmiştir. Onlara kelime

kökleri ile öğrenim sürecini değerlendirmeleri için ayrıca açık uçlu sorular da sorulmuştur. Bunun dışında, kelimeleri testlerde nasıl hatırladıkları veya hatırlayamadıkları yüzyüze görüşmede sorulmuştur.

Anahtar Kelimeler: Latin ve Yunan kelime kökleri öğretimi, kelimelerin hafızada tutulması, İngilizce kelime öğretimi.



ABSTRACT**THE EFFECTS OF TEACHING WORD ROOTS ON THE LONG TERM
RETENTION OF ENGLISH VOCABULARY****Kenan AKARSLAN****Master of Arts, English Language Teaching****Supervisor: Assoc. Prof. Dr. Hasan BEDİR****May 2018, 88 pages**

Background: Vocabulary learning experience seems to be the most time consuming aspect of language learning. Learners exert considerable energy on words trying to memorize isolate words and sets of exam words which are, in most cases, bound to be forgotten. There are various learning strategies adopted by learners of English to memorize and retain words. Dissecting words into word parts is among these although there are few studies dwelling on the benefits of teaching word roots (Bellomo, 2005, 2009; Karliova, 2009; Akarslan, 2013). Those few studies highlight the effectiveness of teaching and learning vocabulary through Latin and Greek roots. However, they lack any answers as to how much this strategy works in terms of retention in the long run.

Aim: The aim of this study is to show the impact of teaching word roots both on learners' attitudes and the long term retention of newly learnt lexical items.

Method: A quantitatively supported descriptive study was administered throughout the thesis. A group of university foundation year students (N=16) were selected in the study. The group, first, selected words they did not know from a list of advanced vocabulary items. The completely unknown words were then shortlisted to be taught in the study. In order to ensure that the students do not know the shortlisted words, they were also required to write down the meaning of these words instead of choosing from alternatives. These new lexical items were introduced to the group with word roots, as well as the English definitions, Turkish equivalents and example sentences. A post-test was administered to observe the short term effects of this method. A post-post test was applied after one month to see if there was any difference

in the amount of retention of these words in the long run as well as the learners' attitudes towards the method. For triangulation, the instructor and students were asked to keep diaries. They were provided with open-ended questions to evaluate the learning process of words through word roots. They were also interviewed to see why and how they could or could not retain the words.

Key Words: Teaching Latin and Greek Word roots, retention of words, teaching english vocabulary



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LIST OF ABBREVIATIONS

- ALM:** Audio-Lingual Method
CLT: Communicative Language Teaching
CLL: Community Language Learning
GTM: Grammar Translation Method
ILH: Involvement Load Hypothesis
L1: Mother tongue or First Language
L2: Target Language or Second Language
LLS: Language Learning Strategies
MTELP: Michigan Test of English Language Proficiency
TPR: Total Physical Response
VLS: Vocabulary Learning Strategies

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CHAPTER I

INTRODUCTION

1.0. Introduction

This part of the thesis focuses on the significance of the study that concentrates on vocabulary teaching through word roots after putting forward some basic points which set the foundation for the research questions together with the writer's assumptions.

1.1. Background to the study

Learning vocabulary is accepted to be the fundamental part of 'mastering a language, and text comprehension or production' that relies more on the amount of vocabulary known (Teng, 2015). According to Fan (2003), vocabulary knowledge is the most crucial part of learning a language. As can be deduced from these remarks, learning vocabulary has often had its significant place within the learning environment due to its fundamental part in languages. Different methods have, therefore, included and affected the teaching of words with differing width of focus.

Teaching vocabulary has been affected by different approaches to teaching. In Grammar Translation Method era, for instance, vocabulary teaching was based primarily on rote learning or repetition with the ultimate aim of translating literary texts. According to Patel & Jain (2008), "Students are expected to attain high standards in translation". Knowing the L1 (native language) equivalent of a word was the starting point of translation. However, knowing a word is more than knowing the L1 translation of it. According to Nation (2013), vocabulary has two dimensions: the breadth and depth of vocabulary knowledge. The number of words known by a learner or size of vocabulary, in other words, is related to the breadth while, as stated in Quian (2002), knowing the pronunciation, meaning, spelling, register, morphology, syntactic and collocational knowledge is related to the depth of knowing a word.

A more recent naturalistic approach adopted implicit teaching of words in an indirect way that takes as example the process of learning a language in a natural way. In other words, children acquire their mother language through listening, speaking and then reading and writing. This process is a long time and children are not supposed to

speak the language within a limited period. Children learn at their own pace. They may also make many mistakes which are considered as lovely and cute by parents. Such a naturalistic method as this that adopts the principles of childrens learning process seems plausible at first sight, however, it is criticized in that it is a slow and inefficient process for vocabulary learning.

Most of the methods that have included the teaching of words have been discussed in chronological order in following chapters. Either via old or new methods, vocabulary learning experience seems to be the most time consuming aspect of language learning. Learners exert considerable energy on words trying to memorize especially isolate words like sets of exam words which are, in most cases, bound to be forgotten. Oxford and Scarcella (1994), suport that memorizing ‘de-contextualized’ words may support their test scores but the words will be forgotten quickly. Therefore, it is important for many language learners to learn, memorize or retain words for their future studies or jobs. Reasons may vary but one thing is for sure that people still seek for ways of effective retention of words.

1.2. Significance of the Study

The main concern of this study is to observe impacts of teaching word roots on learners of English and the level of retention of new words which were shortlisted to be taught after one month of instruction. This method alone is not expected to meet all the needs of learners but put another brick on the wall for them. In his foreword for Horace Gerald Danner’s book (p. ix) “A Thesaurus of English Word Roots”, Timothy Brian Noone states the importance of word roots as follows (Danner, 2014):

“I cannot overstate how important having an insight into the inner meaning of words is, for you now have a technique for decoding words even when you do not have access to a dictionary... Dr. Danner's book allows you not only to build up your passive English vocabulary, resulting in word recognition knowledge, but also gives you the rudiments for developing your active English vocabulary, making it possible to infer the meaning of words with which you are not yet acquainted. Your knowledge can now expand and will do so exponentially as your awareness of the roots in English words and your corresponding ability to decode unfamiliar words grow apace. This is the beginning of a fine mental linguistic library...”

Parallel to Noone's views, there is a probability, in this study, to observe the impact of word roots in a context comprising of Turkish adult EFL learners learning English to prepare themselves for their university studies. EFL learners might gain a deeper insight into word parts, meanings without having to refer to a dictionary first. They might also guess, define with their own sentences and activate words with such an insight. Their perspective on teaching word roots might be observed via this study.

1.3. Statement of the Problem

A word may consist of multiple linguistic units such as roots, prefixes and suffixes. Prefixes are added before words while suffixes to the end of them to change the meaning or parts of speech. Prefixes and suffixes are added to stems or roots. Roots cannot be dissected further. Dissecting words into word parts can be integrated into categories of vocabulary learning strategies. There are few studies dwelling on the efficiency of teaching word roots, though. Those few studies highlight the effectiveness of teaching and learning vocabulary through Latin and Greek roots (Bellomo, 2005, 2009; Karhova, 2009; Akarslan, 2013). However, these studies lack answers as to how efficiently this strategy works in terms of retention of new words in the long run.

1.4. Aim of the Study

The aim of this study is to show the effectiveness of teaching word roots on the long term retention of newly learnt lexical items and secondarily to see any impacts of word roots teaching on learners. In other words, the goal is to observe changes, if any, in learners' attitudes towards the word root teaching method.

1.5. Research Questions of the Study

This thesis will set out to find answers to the following questions:

1. Does teaching EFL vocabulary through root strategies have a significant impact on learners' long term vocabulary retention?
2. Does teaching EFL vocabulary through root strategies have a significant impact on learners' attitude on vocabulary learning?

1.6. Assumptions in the Study

First of all, it was predicted that the concepts ‘Latin, Greek, Word Roots’ would sound threatening to learners of English as they, most probably, had never before faced any types of root instructions in their language learning life. Among students, only one of the students (S.15) said: “If we don’t know Latin roots or symbols, this technique has no benefits.” Only one student expressed his/her worries about these concepts. According to Fang (2006), if learners are not familiar with language of a text or science texts as they are particularly challenging because of technical terms, it may lower the comprehension level of students (Fang, 2006). While providing a learner with words with Latin and Greek roots which may supply a tool to guess the meaning of a word and thus helping him or her to understand a text better, it should be considered that learners may be discouraged by a technique that has its basis on roots other than English word roots.

Another prediction was that learners could be prejudiced against the root teaching method and might be eager to cling on to already known types of word/language learning goals and strategies. As predicted, many students recorded their different preferences in learning styles both in their diaries and open ended questions provided in post tests. S.13 recorded that it would be easier to learn a word in a song or something that she likes or interested in. S.9 and S.11 noted that what they aimed was to speak fluently but learn a word. A few other learners such as S.2, 3 and 7 emphasized that they preferred learning words through actions and practice. Three students S.2, 3, and 9 said they preferred memorizing word lists. Another point was that student 12 and 14 found the method *completely* useless. One of them recorded that “Trying to find the meaning of a word by looking at the roots is really nonsense.” It is obvious that learners have different preferences and attitudes which is normal. Therefore, it should be regarded that different types of learners and learning styles be included within programmes. Learners cannot be forced to accept one fixed method favoured by a teacher or researcher.

CHAPTER II

LITERATURE REVIEW

2.0. Introduction

This part of the study focuses on related literary background and some basic concepts such as learning or meaningful learning, memory, and learning strategies. These concepts set the foundations to understand the study more clearly. The main focus of the study is vocabulary in language learning as it is supported that vocabulary knowledge has an important role in language learning (Nation, 2010; Maximo, 2000; Read, 2000; Gu, 2003). As Schmitt (2000) supports “lexical knowledge is central to communicative competence and to the acquisition of a second language”. Nation (2001) also emphasizes the important role of vocabulary in language learning: “language use as complementary: knowledge of vocabulary enables language use and, conversely, language use leads to an increase in vocabulary knowledge.”

2.1. Vocabulary in Language Learning

Before moving on to the point about learning and teaching vocabulary, it should be emphasized that vocabulary learning/teaching is within the sub-category of language learning in general. Different methods and approaches to language teaching and learning have emphasized the instruction of vocabulary in a different way and weight. In this study, I. S. Paul Nation’s approach is adopted mostly as a basis to seek answers to research questions.

According to Nation (2013), “Vocabulary learning is only one sub-goal of a range of goals that are important in the language classroom.” Not only language items such as pronunciation, vocabulary, and grammatical constructions but also ‘Ideas’, ‘Skills’, ‘Text (discourse)’ are among these goals. Nation (2013) highlights the importance of all types of learning such as ‘learning from input, learning from output, form-focused learning/instruction and fluency development’ within a ‘well-balanced language course.’ In other words, all linguistic skills should be utilized within a balanced programme.

2.2. Vocabulary in English Language Teaching (ELT)

English has a significant role in the world today. It might be highlighted that it is an indispensable part of communication in general and education in a narrower sense. Knowledge of English has become a need for people to find jobs, communicate or travel while some want only to find out about other cultures. The more people have the need of interaction with other partners around the world, the more English becomes an international means for communication.

There are many reasons why people learn a foreign language other than the ones mentioned above. Earning more money, getting a promotion, understanding original texts or simply understanding popular songs or films are some that may be added to the list.

Jeremy Harmer focused on some reasons to learn a language as follows:

- It is compulsory for many students as English Language is on the school curriculum
- The chance of promotion in professional life is enhanced
- People move to other countries to earn a life and have to adapt to the target language community
- There are also specific reasons to learn a language such as the need to be able to communicate with foreign customers or business partners (English for Occupational Purposes - EOP), the need to write reports or essays and to function in seminars (English for Academic Purposes - EAP) or the need to be able to read articles and textbooks about special subjects in English (English for Science and Technology - EST)
- There are many other possible reasons for learning a language like tourism, fun from the learning activity itself, friends.... (Harmer, 1993:1-2)

Vocabulary learning is a significant part of learning process. “It is fundamentally important to stop and think about what words are, how they mean, how they relate to other words and how they function in different ways in society” (McCarthy, O’Keeffe & Walsh, 2010). McCarthy et al. (2010) also herald that words are in our daily lives and

that they are the starting point of teaching even at the very elementary level. English at this point is especially important as it has become the language of all the world.

2.2.1. Vocabulary in Methods and Approaches

There are many different goals of and in learning a language and accordingly exist different ways of teaching language that are used in different courses. Different needs bring out different tools to be adopted while learning English used for different purposes. Different tools for learning might work differently for different learners. Some might be useful for beginners while some for advanced learners

Different methods and approaches, accordingly, have focused on teaching and learning vocabulary with differing points of view. Richards & Rodgers (2014) have shown how different methods and approaches included vocabulary instruction. To begin with, in Grammar Translation Method (GTM), teaching and learning words are utilized for reading and intellectual purposes. Mother tongue (L1) and Target Language (L2) translations of words are provided together through 'dictionary study, and memorization'. Words and their equivalents were the subservients of intellectual development and translation of a reading text.

After GTM, F. Gouin's (1831-1896) approach, which resulted from his observations about how children learned a language, affected the teaching environment. Gouin observed that children used their languages to perform a set of basic actions in their environment. The 'situations and themes' determined their use of language in a more meaningful way than translation in GTM. Therefore, Gouin's approach required simple and sequential utterances which included gestures and actions while teaching. His approach became the starting point for approaches and methods such as Situational Language Teaching and Total Physical Response. According to Richards & Rodgers (2014), unlike GTM, speaking was emphasized over reading. Pronunciation became a prominent part of vocabulary teaching which was presented in a meaningful way. The foundation of The International Phonetic Association and designation of the International Phonetic Alphabet (the IPA) corresponds with the emergence of Gouin's Series Method. Situational words serving to speech and their correct pronunciation were, therefore, carefully selected according to levels and taught through four skills of listening, speaking, reading, and writing. To clarify in a different way, it could be concluded that new vocabulary items should be heard, then uttered by the listener.

Following these steps, learners can see the written form and write new sentences using these words. The scholars who have contributed have termed the methods based on this approach as ‘Natural Methods’ which led to the emergence of the Direct Method.

In a language classroom which adopts the Direct Method, learners are presented with only the target language together with ‘actions and demonstrations’. The main aim is to let learners make ‘direct’ associations with the word/sentence and their meaning. That is the reason why it is called the Direct Method. It is also possible to say that learners interact or speak directly in target language, and “speaking began with systematic attention to pronunciation. Known words could be used to teach new vocabulary using mime, demonstration, and pictures” (Richards & Rodgers, 2014). Words were taught in a natural order in a ‘meaningful way’ and any mispronunciations are corrected immediately. A teacher may correct the pronunciation by emphasizing the wrong part and giving an opportunity to the learner to correct himself. “Concrete vocabulary was taught through demonstration, objects, and pictures; abstract vocabulary was taught by association of ideas” through meaningful sentences (Richards & Rodgers, 2014). This suggests that learners are not provided with the translations of words, but with as much realia as possible to associate meanings with words.

The Oral Approach and Situational Language Teaching, on the other hand, differed from the Direct Method with its emphasis on reading, ‘grammar, and sentence patterns as well as oral practice’. This implies that vocabulary was taught to serve reading, grammar and sentence patterns. These all serve oral production.

It was, then, the turn of the Audio-Lingual Method which emerged with a more practical aim: “To supply the U.S. government with personnel who were fluent in German, French, Italian, Chinese, Japanese, Malay, and other languages, and who could work as interpreters. Thus the Army Specialized Training Program (ASTP) was established in 1942. The objective of the army programs was for students to attain conversational proficiency in a variety of foreign languages” (Richards & Rodgers, 2014). Lots of repetitions or drills of grammatical patterns were the core of speed learning. Pronunciation of words was systematically taught but after ‘aural training’ as the name ‘Audio-Lingual’ suggests and was followed by speaking, reading and writing respectively. With ‘the idea that practice makes perfect’, this method prioritized the spoken form which means that phonemes, phonetic differences between languages were taught first. Richard and Rodgers (2014), quotes Rivers (1964: 19-22) that “The

meanings that the words of a language have for the native speaker can be learned only in a linguistic and cultural context and not in isolation. Teaching a language, thus, involves teaching aspects of the cultural system of the people who speak the language". It can be inferred that words are taught in phrases, drilled continuously and native-like pronunciations together with cultural aspects are emphasized in vocabulary teaching.

Communicative Language Teaching (CLT) took to the stage of popular methods after 1960s. It was mainly a reaction against the Audio-Lingual Method (ALM). The reaction can be observed in its distinctive features from the ALM. For instance, ALM focused on form and structure, while CLT on meaning. In terms of vocabulary teaching, CLT favors the contextualization of words as the main aim is to learn to communicate. Unlike ALM, CLT accepts comprehensible level of correct pronunciation. Also, translation of words is utilized when necessary in a CLT class. Words are not strictly taught in an order from simple to difficult or concrete to abstract, but presented anywhere at any time if stipulated by the content, notions, functions or meaning that are provided through realia and authentic materials. New words or phrases for communicative purposes are taught by utilizing already known expressions and structures. "You will wish to give several additional examples of the communicative use of the expression or structure with familiar vocabulary in unambiguous utterances or minidiologs (using pictures, simple real objects, or dramatization) to clarify the meaning of the expression or structure" (Richard and Rodgers, 2014). It can be understood from these remarks that Communicative Language Teaching focuses on functions of a language. All skills are equally focused on in this method and functional vocabulary is taught with authentic materials within a context. Games, picture stories, and role plays may all serve to vocabulary teaching in a communicative way as the name suggests.

James Asher's Total Physical Response (TPR) puts forward an approach which bases itself on a child's developmental process. Observing the linguistic development of a child's first language, he tries to understand and apply the principles in his approach. While learning their mother tongue, children first listen, then speak. They are encouraged by their parents during their struggle (he terms the concept of this type of support as 'scaffolding') which reduces stress. 'Brain-lateralization' is another important term in his approach. According to Richard and Rodgers (2014), Asher thinks that language learning is the main function of the right hemisphere. Following Jean

Piaget, he concentrates on the connection between a child's motor movement and language acquisition. He concludes that as motor movements are 'a right-hemisphere activity', and so is language acquisition. Considering some of his basic principles, it can be concluded that words are taught from easy to difficult or concrete to abstract and through physical movements and demonstrations. Asher emphasizes the importance of the ease of assimilation of new lexical items which depends both on the number of words taught at a time and 'the ease of differentiation'. "In an hour, it is possible for students to assimilate 12 to 36 new lexical items depending upon the size of the group and the stage of training" (Asher, 1977). To sum up, TPR teaches a limited number of words in each lesson considering the level and age of learners and by starting from words including bodily movements to address the right hemisphere.

In Caleb Gattegno's Silent Way, the responsibility is more on the learner as the teacher is *silent* in the class. In this method, *cuisenaire rods* and coloured sound and word charts are used to help learners utter sounds and words. The method expects the learners to discover the pronunciation and meaning of words. As the learner is involved actively in the learning or discovery of meaning process, it is believed that the retention of words will be more permanent. Gattegno highlights the importance of teaching functional words which may go under the categories of food, travel or family.

Charles Curran's Community Language Learning (CLL) is the next method to be reminded of from the point of vocabulary teaching. As he was a counsellor, his method is also called the counselling method. In other words, learners were like *clients* and while teachers *counsellors*. Students or clients receive help from the teacher or counsellor in psychologically comfortable atmosphere and try to realize themselves. Comfortable atmosphere includes the use of L1 in a classroom. Moreover, messages in a language classroom might be presented in students' mother tongue to make the realization process easier. After hearing the target language form of the content they convey the same or similar messages to each other which reflects the 'community' aspect of the language. The 'community' members also share their language experiences, discuss what they learn or feel and learn from each other as well. The syllabus is not predefined. Learners may come up with an idea and discuss it together in a lesson. The lexical or grammatical needs are met in that specific lesson. Vocabulary teaching and learning is therefore impromptu. Students learn from each other or from the teacher as a counsellor who tries to present the word without making his clients

disturbed emotionally. In other words, even the meaning of a word is counselled together. Additionally, words are learnt through translations. Another technique is to ‘analyze’ the content of the material produced in a particular lesson by learners and focus on the use of lexical items. Techniques and activities all serve to a ‘secure’ environment where learners are always expected to ‘reflect’ on their learning.

Georgi Lozanov’s Suggestopedia or Desuggestopedia is among the methods that focus on teaching words considerably. Learners, having become ‘suggestible’ in a comfortable context either through music or the authority coming from the teacher are expected to learn words ‘peripherally’ which means they are not only instructed new words directly but also are expected to learn from their environment where they can see many visual aids such as posters. Therefore, texts and words are taught along with their direct translations. These factors lead them to a psychologically comfortable context which increases their level of receptiveness. ‘Infantilization’ which involves a parent-child like relation in a classroom environment help students learn, too. Students get child-like and learn words through songs, role plays with new identities, and exercises requiring physical action such as reading aloud a text in an angry, happy or sad way. Varied rhythm and intonation of words in active and passive situations also boost their learning. According to Richards & Rodgers (2014) ,

“A Suggestopedia course lasts thirty days and consists of ten units of study. Classes are held four hours a day, six days a week. The central focus of each unit is a dialogue consisting of 1,200 words or so, with an accompanying vocabulary list and grammatical commentary. The dialogues are graded by lexis and grammar.”

This means words are graded and limited according to the levels of learners. Teaching words will be easier through tuning up the mental condition of learners and activating them both mentally and physically.

There are many methods and approaches such as Content-Based Approach which focuses on both language and content instruction or words related contextually to the content; Task-based and Participatory Approaches where learners acquire words through real life tasks or tasks and content they choose. However, among all other methods and approaches, Michale Lewis’s Lexical Approach might be the most

prominent one in terms of putting before us the teaching of words or in his words ‘lexis’ as top priority. Lewis (2008) summarises his approach as follows:

“The Lexical Approach can be summarised in a few words: language consists not of traditional grammar and vocabulary but often of multi-word prefabricated chunks. Teachers using the Lexical Approach will, instead of analysing language whenever possible, be more inclined to direct learners’ attention to chunks which are as large as possible.”

The core of the understanding of this approach is that languages do not merely consist of isolated words but groups of words collocating with each other, used together to form phrases and idioms. A learner may know these words ‘blue, out of, the’ separately but ‘out of the blue’ has a different meaning. These three words act as one word with a new meaning. A dictionary which contains only the definition of a word is not enough to introduce the word. A word may gain different meanings in different contexts and in a different word order. A more ideal dictionary should include the use of words in different phrases or sentences with different meanings apart from one main definition. Even sentences comprise of arbitrary chunks. Lewis rejects the ‘grammar and vocabulary’ dichotomy or ‘combination’ as the grammar of a language or its structure takes its starting point from lexical chunks whether or not it consists of one word or multi-words. In other words, ‘language is lexis’. Apart from collocations, ‘Fixed expressions’ such as social greetings ‘good morning, happy new year’ are another aspect of the Lexical Approach (Lewis, 2008). Fixed expressions take up a big amount of place in a language. New combinations are rarer. These expressions might be taught in classes. With more modern studies on the frequency of words thanks to today’s improved technology, learners might be provided with more meaningful and useful phrases derived from authentic spoken or written materials. Therefore, according to Lewis (2008), the aim must be to teach learners as many phrases or chunks as possible.

Apart from these methods and approaches which are not expected to work in teaching vocabulary alone, the Eclectic Approach should also be understood. Eclectic means selecting different styles or set of ideas for different contexts of teaching. The selection is based on students’ age, needs, goals; on the needs of institutions; and on the general educational policy of the region or country.

Ecclectic approach gives teachers of a language the freedom to discover and trial different approaches or styles. They have the opportunity to adapt and apply the content of teaching situations. This flexibility creates a comfortable teaching environment for a teacher to experiment with techniques.

On the other hand, this approach gives a higher responsibility to teachers together with the freedom. A teacher may get confused which technique, activity or understanding to choose and lose time adapting or redesigning his teaching. A teacher should not misuse the authority assumed to them by this approach. It is in a teachers hand to decide the right time, right place, right target audience but with an adherence to general principles and policies of institutions and countries.

In conclusion, each method and approach has its own pros and cons. However, it could be said that each one of them contains some feature, principle which is to be applied to specific classes with specific needs. There is not 100 % formula to meet all needs and solve all problems encountered within a class.

To sum up, while some approaches have prioritized the teaching vocabulary as a whole, others have focused on some aspects of it such as the pronunciation of a word or its subservience to other skills. All of them will provide partially or totally a clear understanding as to what should be considered in teaching words through roots which is the main focus of this study.

2.3. Techniques in Vocabulary Learning

Different types of techniques might be used in vocabulary learning or teaching. These techniques may be used alone or together to enhance learning. Alqahtani (2015) presents different techniques which serve as an aid for learners of vocabulary not to forget the words under titles such as (not all of them listed):

a. Using Objects: Using realia to connect meaning and words which is useful especially for young learners (Gairns & Redman, 1986)

b. Drawing: Teachers and learners may benefit from drawings impromptu by drawing on the board or prepare flashcards with drawings on.

c. Using Illustrations and Pictures: Posters, wall charts, pictures from real magazines or newspapers are some examples which may enhance connecting meaning and words in teaching.

d. Contrast: As well as writing synonyms, learning the antonyms might help learning.

e. Enumeration: This is a technique that includes giving examples of a word to clarify meaning. To explain the meaning of furniture, for instance, you may give a number of examples such as tables, chairs, sofas.

f. Mime, Expressions and Gestures: These techniques might be used in showing the meaning of adjectives specifically. Important words might be focused on more by emphasizing using different facial or bodily movements. As cited in Alqahtani (2015), “Tellier (2007) determined three main roles for teaching gestures: management of the class (to start/end an activity, to question students, request silence, etc.), evaluation (to show a mistake, to correct, to congratulate, etc.) and explanation to give indications on syntax, underline specific prosody, explain new vocabulary, etc.).

g. Guessing from Context: Nation and Coady (1988) group context into two: “context within the text, which includes morphological, semantic and syntactic information in a specific text”, and “the general context, or non-textual context, which is the background knowledge the reader has about the subjects being read”. Learners may figure out the meaning of words by looking at the words around the unknown words. They may not guess the meaning precisely, but they may have some idea about the meaning which might be boosted by a final check in a dictionary.

h. Eliciting: The meaning of a word might be explained by directing students through clues towards the meaning. Learners may discover the meaning with the help of the teacher.

i. Translation: This technique includes introducing the meaning by using learners’ mother tongue or any other type of common language in their community. It can be used in several instances. For example, the teacher may want to gain time by directly translating a word. Translation technique might be used to compare two languages to overcome any misunderstandings in meaning (Takač, 2008).

j. Scales: Words might be listed in different grades or order to understand their relations within a group. For example, gradable adjectives may be presented as good, better, the best.

k. Examples of the Type: Words that belong to the same group might help explain the meaning better. For example, in order to explain the word tree, the examples of different trees might be provided.

l. Drilling: Drilling is used to practice pronunciation of a word as well as to memorize a word. Thornbury (2002) supports that drilling should be ‘clear and natural’.

2.4. Language Learning Strategies

Another point to be considered as a basis for the implementation of the study is the issue of learning strategies which are closely related to goals of learners and the issue of memory. First of all, learners strive for different goals in learning vocabulary. Some learn it for their study whereas some to improve their cultural knowledge. Their goals limit their expectations from a course. For instance, some academicians need and acquire knowledge from other studies in other languages, so they may only prefer to read and understand the content more than to listen to or give a speech on it. In this case, a course including speaking classes could be a loss of time. Some learners may focus on accuracy while others on fluency. If you, as a teenager, aim to join cultural activities within youth programmes such as AIESEC, you might need fluency more than accuracy. In addition to these, while setting up goals and sub-goals for their courses, teachers or syllabus makers might have to consider including ‘language, ideas, skills and text’ as much equally as possible.

The learning goals may be achieved through different language learning strategies. What are these strategies, though? There exists different approaches to the definition of Language Learning Strategies (LLS). Some see it as the strategies enhancing the construction of the language system (Wenden & Rubin, 1987), while some define it as a set of ‘thoughts or behaviors’ adopted by learners to understand and keep new information (O’Malley & Chamot, 1990) or as defined by Oxford (2001), LLSs are “employed by the learner to aid acquisition, storage, retrieval and use of information, specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations.” Oxford (1990) makes a list of twelve key features of LLS:

1. contribute to the main goal, communicative competence.
2. allow learners to become more self-directed.

3. expand the role of teachers.
4. are problem-oriented.
5. are specific actions taken by the learner.
6. involve many aspects of the learner, not just the cognitive.
7. support learning both directly and indirectly.
8. are not always observable.
9. are often conscious.
10. can be taught.
11. are flexible.
12. are influenced by a variety of factors.

All the features proposed by Oxford (1990) may also be attributed to Vocabulary Learning Strategies (VLS). Learning goals may determine the adoption of different learning strategies. For example, if a student's aim is simply to do better in an exam on the following day, s/he may try to memorize the list of words or grammar rules without paying attention to the functional use of the target language. Another may focus on fluency rather than the grammar before visiting a friend in a foreign country. Hence, s/he will not need any grammar or writing classes. Vocabulary learning strategies will be affected by specific aims of language students.

2.4.1. Vocabulary Learning Strategies

Language learning in general is a need in today's world. Vocabulary is an important part of this process. Not only learners but also teachers of English highlight the need for vocabulary. A survey (Macaro, 2003) has shown that vocabulary is viewed by secondary language teachers as a topic most needed research to shed light on to enhance the teaching and learning in classrooms. However, learning a word is not as simple as it may look at first sight. As Richards (1976) argues, knowledge of word frequency, collocation, register, case relations, underlying forms, word association, and semantic structure are significant factors in understanding and using a lexical item. The depth of knowing a word may be considered as one of the most difficult part of learning a language.

According to Mukoroli (2011), a total number of 4800 high-frequency, academic, and technical words needs to be learned for an effective communication. All these words in these categories cover 98% of texts. Starting from general purpose English and moving on to academic levels pose important challenges for learners. The situation gets even more crucial considering the remaining 2% of text covering low frequency words whose number is 128,000. “It is therefore important for teachers in ... ESL classroom to be knowledgeable about the most effective and current teaching strategies in vocabulary instruction and provide constant academic scaffolding...” (Mukoroli, 2011). Mukoroli (2011) implies that vocabulary acquisition is important for ‘academic, social, and professional success.’ Application of current teaching strategies as well as learning strategies would apply to vocabulary learning.

Nemati (2013; cited in Wenden, 1987) draws a parallel between learning strategies and the Chinese saying “*Give a man a fish and he eats for a day, teach him how to fish and he eats for a lifetime.*” Giving learners ready made lists of words and expecting them to learn or memorize them is a temporary solution to the problem. Learners, instead, should be trained to learn new words through vocabulary learning strategies. Learners may figure out the way to solve their most effective word learning technique for themselves. Nemati (2013) emphasizes that if learners are active and engaged in their learning process, they will be more analytical in and prepared for learning.

Language learning strategies can be applied directly to vocabulary learning strategies bearing in mind the complexity of knowing a word. The majority of language learning strategies are used for vocabulary teaching or learning (O’Malley and Chamot, 1990). Learning words through roots, in terms of retention and recall, is deemed as the core strategy in this study in order to prove the effectiveness for the memory. While learning words through roots learners will focus on the words and word families which will also boost their learning via meaningful learning.

Decontextualised vocabulary learning (memorizing word lists), partly contextualized vocabulary learning (writing your own sentences, word matching) and contextualised vocabulary learning (vocabulary through reading, listening, speaking and writing) might be implemented by teachers in a class.

Regarding the LLSs and techniques in vocabulary teaching, vocabulary learning strategies (VLSs) that could be used in teaching might be listed as follows:

1- Guessing from context,

Sökmen (1997) supports that guessing/inferring from context is a useful strategy to be utilized in a lesson. The problem with guessing from context is that it is quite a slow process when limited amount of energy and time is considered.

2- Using word parts and mnemonic techniques to remember words,

Yu-Ling, L. (2005) alleges that “scholars come to call for a greater need of an explicit approach to vocabulary instruction, such as word unit analysis, mnemonic devices, etc.”

3- Using vocabulary cards to remember words (Schmitt & McCarthy, 1997).

In addition to guessing and techniques to remember words, “considerable emphasis is put on encouraging independent learning strategies among students so that they know how to continue to learn vocabulary on their own.” (Yu-Ling, 2005). Sökmen (1997) also supports that “the pendulum has swung from direct teaching of vocabulary (the grammar translation method) to incidental (the communicative approach) and now, laudably, back to the middle: implicit and explicit learning” (p.239).

Murcia (2001) elaborates more on these three generally categorized examples. She supports that a context should be rich enough to give enough clues to guess the meaning of a word. She recommends the key word technique for mnemonics. When a learner hears a key word taught before to remember a word, then s/he retrieves the information more easily. As for the third technique proposed by Schmitt & McCarthy (1997), she suggests vocabulary notebooks. Learners may be taught or led to use different techniques other than these. The content of the vocabulary cards may vary from one student to another. The core understanding should include the three main strategies listed above. These strategies are used as an aid to memory by rendering retrieval, retention more available to learners of words.

2.5. Memory and Vocabulary

Studies show that there is a strong relation between vocabulary and memory (Kaushanskaya et al., 2011). Their findings show that “bilingual speakers may rely on short-term memory resources to support word retrieval in their native language more than monolingual speakers”. This means both monolingual and bilingual learners rely on memory resources to retrieve words. Another study by Talli (2018) shows the relation between memory and vocabulary skills. According to Talli (2018), “weak performance in short-term memory (STM) in children with cochlear implants (CI) may have an impact on vocabulary development.” Another study that displays the relation between vocabulary and memory is by Mendonça (2013). According to Mendonça (2013), “individuals with larger memory spans in both reading and speaking span tasks are more prone to keeping different stimuli active, and this seems to give them an advantage for a wide variety of cognitive tasks, among them vocabulary acquisition.”

2.5.1. Memory Strategies

Memory can be supported with the use of learning strategies. There are various learning strategies adopted by learners of English to memorize and retain words. Memorizing is categorized by Oxford (1990) into ‘direct strategies’ which means learning the target language in a direct way. Direct strategies are ‘cognitive strategies’, ‘memory strategies’, and ‘compensation strategies’. On the other hand, ‘indirect strategies’ are those strategies that support vocabulary learning with no direct focus on the target language (Oxford, 1990, p. 135) such as ‘social strategies’, ‘metacognitive strategies’, and ‘affective strategies’. Neath & Suprenant (2003), also dwell on the effectiveness of mnemonics to retain and remember knowledge. They allege that ‘many of the techniques that the less scholarly memory improvement books offer do work.’ They suggest that people pay attention during encoding. In other words, if learners focus on encoding the newly learnt words, they may recall these lexical items easily. It can be inferred that learners may use associations, distinctive features of words, or repeat them aloud to encode more permanently. In this study teaching word roots are considered within Direct Strategies as the technique includes direct association of meaning and roots in a meaningful context.

2.5.2. Long-term and Short Term Memory

Learning or acquisition of new knowledge, retaining and recalling are included within the scope of memory (Ashcraft, 19994). Mendonça (2013), cites Ashcraft (1994) “the human memory has two main systems: the transitory duration system named short-term memory, and the longer period of duration system called the long-term memory.” According to Neath & Suprenant (2003), memory is ‘the ability to use or revive information that was previously encoded or processed. They list some types of memory that are encountered frequently as ‘Sensory, Immediate, Generic (Long-Term), Autobiographical and Generic (Semantic) memory’. While ‘sensory memory’ refers to the information received through sensations, ‘immediate memory’ refers to the information to be retained only briefly; ‘generic memory’ or ‘long-term memory’ to the information to be retained indefinitely; ‘autobiographical memory’ to personal history; and ‘generic memory’ or ‘semantic memory’ to ‘knowledge’. These distinctions are also supported by Shallice & Warrington (1970). They studied on patients with deficiency in their short-term memories but not with their long term memories. In other words, short term memory system can be cited as a different category from long term memory system which is supported by observations on patients with different brain deficiencies.

According to Atkinson and Shiffrin (1968), information is kept for a short period of time in short-term memory and if it is rehearsed, it could be transferred to the long term memory. Cognitive procedures with rehearsals affect whether the information is sent to the long term memory or left in the short term memory where it is used temporarily for the acquire-or not process

This study mainly focuses on the effect of teaching words through roots on generic memory (long-term). How long is long-term memory, though? Theoretically, the length of short-term memory may be defined within seconds, and ‘if the information is not rehearsed, it is forgotten over time.’ Long-term memory, on the other hand, is defined as ‘a theoretical memory store that holds an unlimited information’ but which ‘can be modified or made temporarily unavailable as a result of other incoming information’, (Neath & Suprenant, 2003). It can be inferred from Neath and Suprenant’s remarks that long-term memory might be considered as any amount of time other than those first a few seconds needed for short-term memory. According to Yongqi (2003), “Delayed recall after two weeks under experimental conditions is normally referred to

as ‘long term’ retention.” At this point, a one-month-period, which was selected for this study in terms of long-term memory, might, therefore, be acceptable if it is longer than at least two weeks. Moreover, the following remarks support the period of time span selected, as cited in McLeod (2010), “...memory model proposed by the Atkinson-Shiffrin, providing the lasting retention of information and skills..., duration [of long term memory] might be a few minutes or a lifetime.”

2.6. Meaningful Learning

The phrase ‘meaningful learning’ has appeared several times in the study so far. It is a must, as the fourth issue, to elaborate on this as it will shed more light on the impact of word root teaching method which is searched in this study. Meaningful Learning Theory is attributed to David Ausubel. According to his views (Ausubel, 1963; 1968; 1978), learners or people in general create their own conceptual maps in their minds. When a new piece of information is received, it is *accommodated* or *assimilated* within these maps. The adoption of the new knowledge requires its connection with already existing information. Students, accordingly, organize or re-organize their conceptual maps while learning. This is different from memorization as it entitles the manipulation of new concepts in an active way. In memorising, the new piece of knowledge is not related to already existing knowledge. As meaningful accommodation of new information requires more energy from the learner, it may seem more tiring when compared to memorisation as it requires only repetition with little effort. One positive side of exerting effort on the learning process, however, is that when the information is manipulated actively and then assimilated into already existing *mind maps*, it is retained longer. Many learners may experience the loss of memorised words after an exam, but if these words are handled consciously by a learner through different associations with shapes, colours, meanings, words or sentences already existing in his mind, it is more likely that they will be the property of him or her. In other words, memorisation is utilized for quick but short benefits while meaningful learning is for slower but long-term benefits. We may see a language learner trying to memorise words one day before a test but forget it after the exam. On the other hand, a learner might be expected to spend more time for each new lexical item starting long before a test. The allotment of more time for words will most probably allow the learner to retain and recall these words long after a test.

As the brain is used actively in meaningful learning, intrinsic motivation is crucial. Meaningful learning occurs when the learner is eager to play with a new concept in his or her mind. Learners may also be motivated extrinsically in a way that the type of motivation from outside should ease the way for intrinsic motivation. In other words, for intrinsic motivation to be promoted, a learner's environment should encourage him by giving more time or support so that he has the opportunity to deal with novelties.

In meaningful learning theory, conceptual maps may be improved, reshaped, or constructed from scratch according to the ease and quality of the new information and the readiness of a learner. A child who sees a dog may conceptualize animals as four-footed. However, he has to reshape his mind map after seeing a bird. This child may have to construct his knowledge from the very beginning after observing a toy robot moving on its tracks.

To sum up, meaningful learning theory of David Ausubel is to be taken into account before beginning to discuss why, , how, when, what, and/or whom to teach word roots. The effects of teaching new lexical items through word roots will be analysed in terms of meaningful learning as well. The reason is that teaching word roots are believed to contribute meaningful learning in that learners will bind their existing words with the new ones through roots they share. As a result, it is supported in this study that Ausubel's theory and word root teaching are interconnected.

CHAPTER III

METHODOLOGY

3.0. Introduction

Both qualitative and quantitative data collection were used in the study. A quantitatively supported descriptive approach to the study was adopted and administered throughout the study. In other words, Mixed-type research design was used. The study was piloted one year before its administration. The weak and strong sides were observed and tried to be adjusted. Student diaries, instructor observations, open ended questions in pre- and post-tests and face-to-face interviews provided the data to the researcher. Some numerical data were also gathered to gauge the contributors' level of vocabulary and grammar using multiple choice tests and rubrics whose details are provided below. More data were collected through post- and post-post tests to observe the level of vocabulary retention.

3.1. Design of the study

In the pilot study two groups were chosen: a control group and a study group. These groups were in different classes. There were not any changes made in their grouping. They were foundation year adult learners at School of Foreign Languages in Adana Science and Technology University. The main aim of the piloting was to see the shortcomings and strengths of the process as well as the effectiveness of word-root teaching and the learners' attitudes. The results of the pilot study will not be discussed here. After the pilot study, open ended questions were provided with their translations in Turkish as the learners had difficulty in understanding the questions and expressing themselves in English. Learners also suggested that they write their diaries in their mother language which was accepted and implemented in this study. The learners in the pilot study had some concerns about their secrecy of identity. They were assured that their personal information would not be shared in any way without their consent (see Appendix 4). In the study, these concerns were also taken into consideration and they were all informed before the study. They were also informed that they were free to choose whether to contribute to the study. In other words, only the volunteers took part in the study. After piloting, the main study was meant to be an experimental study;

however, due to the lack of contributors and therefore a control group, it transformed into a case study with only one group of learners. Instruction of two groups was also impossible as the schedule of the instructor was tight. More details about the study are presented in the following chapter.

3.2. Context and Participants of the study

Having to have been postponed for the new academic year, this study was put into action one year after the piloting, and it comprised of two respective stages in which a group of learners were selected using a convenience sampling strategy. Convenience sampling strategy involves “the selection of the most accessible subjects. It is the least costly to the researcher, in terms of time, effort and money, but may result in poor quality data and lacks intellectual credibility” (Marshall, 1996). The learners in this study were the only available volunteers and the institute was not enthusiastic to send the instructors to find other participants in other contexts as the instructors were expected to stick to the priorities of the institution. In other words, neither time nor place was available due to restrictions of the weekly programme of the classes in the university. This strategy has some other disadvantages than ‘poor quality data and intellectual data’, too. According to Farrokhi and Mahmoudi-Hamidabad (2012), “Groups chosen by convenience sampling are conducive to self-selection, administrative decision, time of the class, number of the years of exposure and many other polluting influences.” All these factors also comprise the limitation to the study.

A whole class of Translation Studies foundation year students between 17-26 were requested to contribute to the research with the consent of the institution. Having been asked to volunteer in the study, all members of the group were, then, asked to tick and write the English or Turkish meaning of sixty words in a list of words prepared beforehand. They selected words they did not know from the list of advanced vocabulary items. Of all, only the completely unknown words were shortlisted to be taught. That is, thirty words that are completely unknown to all students were selected to be taught through word roots. The aim was to make sure, as much as possible, that the contributors do not know or have the probability to encounter and learn these words during their normal English classes. It can, therefore, be concluded that they did learn these words only in this study. It is also considered as a pre-test that proves that the score of all learners is 0 %. In order to see really that students did not know any of the

shortlisted words, they were provided with a renewed list of 30 words shortlisted requiring them to write down the meaning of these words. A multiple choice test was not preferred as it involved the risk that students might select answers randomly even if they did not know the meaning of a word. It was clearly seen that none of the words were known by any of the students before the instruction.

3.3. Instruments

The second stage started with The Michigan Test of English Language Proficiency (MTELP). MTELP was prepared by A. Corrigan et al and copyrighted in 1979 by the Testing and Certification Division, English Language Institute, The University of Michigan was implemented to see the level of the group. The test consists of 100 multiple-choice questions. Questions 41-80 (40 in total) in MTELP aim to measure vocabulary knowledge.

Then, the period which involves instruction of new lexical items started. These were taught primarily through roots, secondarily their English definitions, as well as Turkish equivalents and example sentences. The order the words taught is shown in Figure 1.

1	Abhor	nefret etmek	Abhor - <i>verb</i> find repugnant, hate
		HOR: hate (HORrible)	She <i>abhors</i> any form of cruelty towards animals.

Figure 1. How words were taught in the instructional period.

First, the new word was shown. Then, learners were provided with a relative word deriving from the same root as well as the translation, English definition and an example sentence. However, the line of teaching was not strictly followed in this order. The instructor was free to present the words in any order he wished to. It was negotiated with the instructor that he focus on the definition, root, example sentences at the same time without emphasizing one technique over the other and be neutral as much as possible while implementing the teaching process.

Any of these techniques could be an auxiliary in the retention level. To see which of these factors contributed more to the retention of the word, students answers to the open ended questions in the post- and post-post tests (see appendix 2 open ended questions column 3: “Bu Kelimeyi Nasıl Hatırladınız ya da Hatırlayamadınız? How did

you remember the word/or could not remember the word) were analyzed through themes such as ‘cause of retention’ with key words such as ‘thanks to/because of a- (word) roots, b- thanks to/because of (example) sentences, c-thanks to/because of definitions (English or Turkish equivalent/meaning) d- thanks to/because of other (techniques). Below are two examples with key words selected from the learners’ answers.

1. *Thanks to* the examples given. (16 answers for different words)

2. *Thanks to* your live and energetic examples [mimics, acting]. It was demonstrated physically [hand moves, mimics, acting, you showed pictures]. (16 answers)

The words were revised in a loop order. The instruction of 3 new words and the revision of 3 previously learned items. The number of words to be taught in each lesson was limited to three at the most as it is argued that the number of lexical items should not exceed seven. According to Moras, S., & Carlos, S. (2001).

‘learning new items involve storing them first in our short-term memory, and afterwards in long-term memory. We do not control this process consciously but there seems to be some important clues to consider. First, retention in short-term memory is not effective if the number of chunks of information exceeds seven. Therefore, this suggests that in a given class we should not aim at teaching more than this number. However, our long-term memory can hold any amount of information.’

An immediate/post test was administered after the instruction of all words to observe the *short* term effects of this method and the difference in the retention of words. A post/delayed test with the same content was applied after one month to see the diachronic difference (i.e. the amount of retention of these words *in the long run*) within the selected group.

Name:		Surname:		
		Write either english or turkish definition in your own words for the words below. Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kısma İngilizce örnek cümle yazınız.	Bu kelimeyi nasıl hatırladınız? Ya da neden hatırlayamadınız?
1	abhor	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kısma İngilizce örnek cümle yazınız.	Bu kelimeyi nasıl hatırladınız? Ya da neden hatırlayamadınız?
2	abrogate	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kısma İngilizce örnek cümle yazınız.	Bu kelimeyi nasıl hatırladınız? Ya da neden hatırlayamadınız?
3	belabour	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kısma İngilizce örnek cümle yazınız.	Bu kelimeyi nasıl hatırladınız? Ya da neden hatırlayamadınız?
4	billowing	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kısma İngilizce örnek cümle yazınız.	Bu kelimeyi nasıl hatırladınız? Ya da neden hatırlayamadınız?
5	debenture	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kısma İngilizce örnek cümle yazınız.	Bu kelimeyi nasıl hatırladınız? Ya da neden hatırlayamadınız?

Figure 2. The post-test form used in the study.

For triangulation, students were asked to keep diaries and provided with open-ended questions to evaluate the learning process of words through word roots. They were also allowed not to mention their names or surnames to express their feelings and thoughts freely. It was observed that all of them preferred to write their identity without any misgivings.

Öğrenci günlüğü (Lütfen her ders için günlüğü doldurunuz)		
Adı:	Soyadı:	Tarih:/....../2016
Bugünkü kelime öğrenme süreci ile ilgili deneyimlerinizi ve duygularınızı yazınız		
Yaşadığınız zihinsel süreçleri yazınız.		
Kelimelerin hafızanızda tutma düzeyi, kalıcılığı ve kolaylığı açısından kendinizi ve dersi değerlendiriniz.		

Figure 3. A sample student diary.

Although, the learners were asked to keep diaries about their learning process to make the study more powerful, they were given the alternative to choose any medium or format they wished to share their ideas. However, the majority of them preferred to keep their diaries in any language in the provided format feeling, hopefully, no restrictions that would affect the amount of feedback from them. Learners were also asked face to face why and how they could or could not retain the words effectively.

Their answers were written down in a journal by the researcher for further analysis. The content was analysed through categories such as ‘positive/negative remarks’ against this and that technique; ‘suggestions’; ‘other remarks’.

Positive Remarks: Example: S.1 : “This study is *good* and I expect it more frequently.” S.4 : “Learning words through etymology makes it *more permanent* in my mind. We may spare one lesson a week to learn vocabulary.”

Suggestions: Example: S.1: “This study is good and I *expect it more frequently*.” S.4 : “Learning words through etymology makes it more permanent in my mind. *We may spare one lesson a week to learn vocabulary*.”

Other remarks: Example: S. 12 : “I find it effective but *it depends on us, too. We need to repeat and use the words*.”

As some definitions and example sentences did not give clear idea about a student’s retention and recall of a word, the writer had the opportunity to ask and clarify the points during vis-à-vis interview. The interview also gave the opportunity to clarify more the positive or negative remarks about the techniques and suggestions by the learners. The questions and interview were not structured and they were administered in any language the learners chose for the same concerns expressed in the preceeding paragraphs. The content was analysed through categories such as ‘positive/negative remarks’ against this and that technique; ‘suggestions’; ‘other remarks’.

3.4. Procedure and data

Before the instructional period, sixty advanced and rarely used words were selected. They were given to the group as a list so that 30 of these words that were completely unknown to all of the learners would be selected.

One example answer sheet is shown below:

Değerli Katılımcılar,
Aşağıda size rastgele seçilmiş 42 adet sözcük verilmiştir. Bu sözcükler hakkında bilginizi ölçmek amaçlanmaktadır. Bu çalışma hiçbir şekilde notunuzu belirleme ya da sizi değerlendirme amaçlı değildir. Bu çalışma sadece sizinle birlikte yapacağımız akademik bir çalışma için veri toplamak amaçlı yapılmaktadır. Vereceğiniz cevaplar ve kimlik bilgileriniz sizden izinsiz kimseye paylaşılmayacaktır. Aşağıda verilen kutucuklardan uygun olana X işareti koyunuz. Diğer kutucuklardan 'Kesinlikle Biliyorum' ve 'Biliyorum' bölümlerini seçerseniz sizden Türkçe anlamlarını yazmanız istenmektedir. Çalışmamıza verdığınız destek için teşekkür ederiz.

Adı:
Soyadı:
Bölümü:

		Kesinlikle Biliyorum	Biliyorum	Emin Değilim	Bilmiyorum	Kesinlikle Bilmiyorum
1	Abasement	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
2	Abhor	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
3	Abrasive	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
4	Abrogate	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
5	Abetain	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz

Figure 4. A sample pre-test answer sheet

The group would then be instructed by an instructor other than the writer of this thesis. That is because the writer's positive prejudice against the supported method would have affected the reliability of the process. He would over-emphasize the method during classes which would mis-divert the contributor's attention unrealistically towards positive sides of the method. The instructor who volunteered to teach word roots was negotiated with to be neuter to any of the techniques as much as possible.

As stated previously, students learned words including their English definitions, Turkish equivalents, and example sentences respectively throughout the instructional period. The main focus while teaching words was on teaching through word roots. Students were taught the roots of the words as well as one relative easy word from the same root. For example, the word 'abhor' was associated with 'horrible' which are derived from the root '-hor-' that means 'hate'. This instructional process took ten weeks.

At the end of the instructional period, a post-test was administered immediately. The test required the learners to write either English or Turkish definitions of the lexical items and an example sentence in English in their own words. After writing the meaning and the example sentence, they were also required to express what helped them remember the word to see which learning style/strategy they utilized. Learners were made to fill in such a test form considering Nation's (2013) systematic work out of learning burden. According to his system, knowing a word involves 'Meaning, Form and Use'. A learner should not only know the spoken and written form of a word but

also see different associations such as the relation of the word to any L1 word, and also know and understand ‘grammatical functions, collocations’, as well as any ‘constraints on use’.

While analyzing (See table 1 below) the data, the following points were determined. ‘*’ sign means that the students wrote correctly the meaning of the word. ‘*x’ means that s/he knows the definition but cannot use it in a sentence in a meaningful way. For example, it was observed that a student translated words into turkish in a right way but his example sentences were as follows: “*Plaintiff* looks amazing; *Photopia* is amazing; *Tangible* is awesome”. These example sentences were regarded as wrong during the analysis.

Table 1

Symbols Used While Analyzing The Data

C	D	E	F	G	
	abhor	abrogate	belabour	billowing	d
**		*x	xx	oo	*i
**		oo	oo	oo	o

‘**’ means that the learners both wrote the meaning correctly and a valid (grammatically correct) and meaningful example sentence of their own which shows they remember the meaning and can use it in a sentence. Some answers were accepted as wrong as they did not show whether the student really learned the word. For example, a contributor wrote ‘fotopi’ for the word ‘photopia’. Although it may make it clear that she chose to memorize the word by encoding it with its borrowed form, the researcher did not take the risk but accept it as a wrong answer as the word was not taught in its borrowed form. The word was provided as follows: “photopia - noun vision in bright light”, while its translation was as this: “parlak ıřıkta g r ř”. To see how the student perceived during the interview, the learner was asked what “photopia” is. He repeated his answer as ‘fotopi’. When asked what ‘fotopi’ is, he answered, “Fotopi is fotopi.” and smiled.

In some cases, though, despite the difference between the taught meaning and the student's definition, the answer was accepted as correct and shown with '*' symbol. To exemplify, the word 'debenture' was taught as 'tahvil, senet' and defined as '*noun* a certificate or voucher acknowledging a debt; a bond that is backed by the credit of the issuer but not by any specific collateral'. He chose to write 'fatura' as its equivalent in Turkish which, in fact, means 'invoice' in English. In the interview, the student made clear that he meant 'tahvil, senet' but could not remember the exact words and chose the closest word in his mind which was 'fatura'.

'xx' symbol, on the other hand, means the learners attempted to write the meaning and an example sentence but neither were correct. One of the contributors wrote the meaning of the word 'occlusion' as "blockage". He wrote this example sentence: "Occlusion in the street is boring." Here, it can obviously be seen that he has some idea about the word but the meaning and the example sentences did not utterly display his understanding of the word. As a result, although it was clear that he started to learn the word, it was not accepted as correct and coded as "xx".

'oo' means that the learners did not attempt, in any way, to write either the meaning or an example sentence.

In this study, only ** marked words were accepted as *learned/retained/memorized* by a contributor.

Their correct and incorrect answers were put together in sum and their percentages were calculated. Please, see the results discussed in 3.5 Data Analysis chapter.

Apart from these, learners were asked two open ended questions in English along with their translations in Turkish to let students convey themselves more freely without any language restrictions:

- 1- What do you think about the course of the study you have been through?
(Aldığınız bu eğitim süreci ile ilgili ne düşünüyorsunuz?)
- 2- What do you recommend to improve the course? (Bu eğitimi geliştirmek için ne önerirsiniz?)

One month after the post-test (immediate test), a post-post (delayed test) with the same content was administered to students to see the amount of retention of the words

taught. The group was also asked to express what they thought about learning through word roots. The answers provided clues for the second research question: Does teaching EFL vocabulary through root strategies have a significant impact on learners attitude on vocabulary learning?

3.5. Data analysis

The data gathered in the MTELP were analyzed on SPSS v.21. The results were used to see whether the group was homogeneous or not. In order to stimulate homogeneity of lexical knowledge as much as possible, 30 academic words that none of the members of the group knew were selected with a procedure mentioned in the previous chapter. The word list served as a pre-test in which it was made sure that the results were % 0 by shortlisting only the unknown list to be taught.

A post-test was implemented in the study to see possible changes in students answers. Attempts (whether correct or not), partly correct (the meaning is correct but not used in example sentences), and fully correct answers (both the meaning and example sentence is correct) were analysed in detail.

Students diaries and questionnaires were also analysed qualitatively with word based techniques in which word repetitions and key-words-in-context (KWIC) were used. In this technique as Gery W. Ryan and H. Russell Bernard put forward “... researchers identify key words and then systematically search the corpus of text to find all instances of the word or phrase. Each time they find a word, they make a copy of it and its immediate context. Themes get identified by physically sorting the examples into piles of similar meaning” (Retrieved from: http://www.analytictech.com/mb870/readings/ryan-bernard_techniques_to_identify_themes_in.htm on 27/10/2010 at 10.50) Themes to understand positive/negative/neutral attitudes towards the method as well as to find out the impact of it on vocabulary retention have been seeked. Similar expressions were grouped as those in favor of the continuation (to see suggestions/recommendations) and content of the study as well as those reflecting the effectiveness of the method from students’ eyes.

Stages in Thematic Data Analysis

Marshall and Rossman (1999) suggest that thematic analysis

can be divided into six phases:

- organise the data
- generate categories or themes
- code the data
- test emergent understandings of the data
- search for alternative explanations of the data
- write-up the data analysis

Open ended questions and diaries were read through a few stages regarding the Thematic Data Analysis suggested by Marshall and Rossman (1999):

- Organizing the data
- Generating categories and themes
- Coding the data
- Testing emergent understandings of the data
- Searching for alternative explanations of the data
- Writing-up the data analysis
- Organizing the data

All the answers were read without any comments or interference in order for the researcher to get familiarised with the content.

- Generating categories and themes

The content was read again to find general categories regarding the similarities in answers and comments of the participants with the research questions in mind. The content was underlined according to their reflection of the impact of any methods, of learners' attitudes towards methods whether positive or negative as negative attitudes and comments would provide negative evidence for any possible overgeneralizations. Themes were also detected for the long or short term effects of word roots by grouping similar remarks together. Other than the researcher, the instructor was asked to categorize the content bearing in mind the themes detected.

- Coding the data

While reading words and phrases reflecting the negative, positive attitudes against the word root technique were underlined and highlighted using coloured highlighters. The groupings were double checked in case of any misinterpretations and any researcher effect. Sentences reflecting different categories were grouped together with learners' codes as S.1, S.2, or S.3. Positive remarks were highlighted in green. Learners remarks such as 'thanks to the method', 'the root helped me to remember', or 'I dissected the word into its roots' were assessed together as an evidence to the effect of word roots on learning.

- Testing emergent understandings of the data

Learners were asked details about their answers when interviewed face to face with the aim to discuss some points which might be misunderstood or not fully understood. This technique was used with the aim of supporting reliability through triangulation.

- Searching for alternative explanations of the data

Face to face interviews showed the researcher whether to explain the data with a different point of view. Any alterations necessary were made regarding the explanations of the interviewees. Both positive and negative attitudes or positive, negative or neutral effects of word roots were tried to be included for a more sound assessment of the theoretical construct of the research.

- Writing-up the data analysis

Memos other than interviewee comments/explanations were utilized to gather literal, reflective or interpretive notes. Reflective notes were supported and clarified considering the learners' replies. A more objective interpretation was sought throughout the writing of the data analysis; however, from a constructionist point of view, interpretation by the researcher is inevitable. Therefore, softer statements and comments were tried to be used with 'can, might, may' modals.

CHAPTER IV

FINDINGS

4.0. Introduction

This part of the study puts forward the findings of the study acquired through the data analysis tools including multiple choice tests, questionnaires, diaries and other observations.

4.1. Findings of the MTELP, post (immediate) and post-post-(delayed) tests

The number of volunteers was 16 throughout the study. In order to see the level of homogeneity within the group, they have been sat in a Michigan Test of English Language Proficiency (MTELP

The results are shown on the tables 2 and 3 below:

Table 2

The Total Number Of Volunteers Who Took The Test

Data Tool	Participants					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Michigan Test	19	100 %	0	0 %	19	100 %

Table 3

The Means and Standard Deviation Within the Group

Data Tool	Report		
	Mean	N	Std. Deviation
Michigan Test	42,215	19	8,53476

Table 2 and 3 above show that of all 19 contributors, 100% have finished the test completely. They have answered as many questions as they could. The average

overall score in the MTELP was 42 % with the lowest score of 31 % and the highest of 61 %. When only the vocabulary part was taken into consideration it was seen that the lowest score was 18% whereas the highest score was 58 % which is pretty consistent with the overall scores. The overall score of 42 % implies that the learners are between A2 and B1 levels according to CEFR equivalencies estimated by cambridgemichigan.org. (<http://cambridgemichigan.org/institutions/products-services/tests/placement-progress/mtelp-series/levels-scoring/> Retrieved on 20/10/2017 at 10:03). It is important to note that “There has not yet been a formal CEFR standard-setting study conducted for the MTELP Series itself.” which implies that these equivalencies are only estimations. The students took a non-standardized proficiency test in their university at the beginning of the year and were all below the 80% level stipulated by the institution to be eligible to pass the preparation year.

The amount of the standard deviation (Std. dev.= 8,53476) in the second table shows that the group is heterogeneous. This was not what the writer of this study aimed for at the beginning of the study as it was meant to see what the method promised within a homogeneous group. Later, it had to be accepted that it was impossible to gather a group of learners with the same background in terms of language education.

Then, to stimulate homogeneity of lexical knowledge as much as possible, 30 academic words that none of the members of the group knew were selected with a procedure mentioned in the previous chapter. It was made sure that all words were unknown to them with a form including a word list which included contributors to check the words they know or familiar with in any way and vice versa. Words which were checked as ‘I definitely know the word/I know the word/I am not sure’ were eliminated. Only those checked as ‘I do not know the word/I definitely do not know the word’ were shortlisted to be integrated into the instruction program.

The researcher did not include himself directly in the instructional period with the fear that he could affect the learning process by emphasizing the method in favor of other learning styles and strategies. It was important to see what learners think or how they would be affected by the method. Otherwise, it would be less probable to see the real effect on them. A colleague was asked to teach them the new words. He was made aware that word-root teaching should not be overemphasized in favor of others and learners should be allowed to notice the new method and choose if they would prefer in their future learning.

Table 4

Comparison of average scores in percentages 1

AVERAGE SCORES COMPARISON TABLE (%)				
MTELP OVERALL SCORE (%)	MTELP VOCABULARY SCORE (%)	POST-TEST (Immediate Test) See Appendix 2		
		attempts	fully correct (**) (meaning example sentence provided)	partly correct (*o or *x) (only the meaning provided correctly)
		46 %	17 %	20 %
42	39,5	POST-POST TEST (Delayed Test) See Appendix 2		
		attempts	fully correct (**) (meaning example sentence provided)	partly correct (*o or *x) (only the meaning provided correctly)
		74 %	72 %	41 %

Table 4. shows the average scores of learners in different tests applied before and after the instruction of words. On the left columns of the table the average scores attained in the MTELP is shown. 42 % is the general achievement level of all students who took the test. 39,5 % is the level of achievement when only the vocabulary part is considered.

In the post test, learners tried to write the meaning (in Turkish or English) and an example sentence for a word which is encoded as ‘attempts’ in the table. In other words, if a student tried to write something, even if it is incorrect, it was considered as an attempt to answer it. The table, therefore, clarifies that 46 % of the students tried to write an answer in the post-test, whereas the number increases dramatically to 74 %. The percentage of fully correct answers rises from 17 to 72 in the post-post test which shows quite a big increase and gap between the immediate and delayed test. The percentage of partly correct answers rises from 20 to 41 in the post-post test.

The answer to the first research question, “Does teaching EFL vocabulary through root strategies have a significant impact on learners' long term vocabulary retention?” could be “Yes.”; however, these results pose a problem: The results suggest that learners' success was a lot better than their post-test scores even though little time had past when they took the test. As the immediate test was applied after the instructional period, it is expected to be higher than the post-post or delayed test which was sat one month later. The results need a deeper attention for this anomaly. The amount of rise in success is to be analysed further: What really made the figures go up so drastically? The table in four, as discussed in the previous chapters, might be providing some deceptive data. Such a big difference between two tests looks unreasonable. The results look low after the instructional period; however, they rise up to high levels. When their diaries, answers in their interviews and in the post test form were analysed, several factors were observed to have affected the scores.

First of all, a few students noted that they had not attended some classes before the post test but studied the words they missed afterwards. These answers may show that if they had been taught the words they missed during normal instructional period, the results of the post test would have been higher. The difference between the two tests would have been lower. Considering the attendance of students, those who have missed more than two classes have been eliminated from the analysis of the MTELP, post-test (immediate) and post-post test (delayed). Six learners were eliminated from the analyses. These contributors had studied the words after the instruction period which resulted in the low scores in the post test but high scores in the post-post test. However, their diaries and answers to the open ended questions in the tests were included in the analyses to seek for the answers to the second research question.

Table 5

Comparison of Average Scores in Percentages 2

AVERAGE SCORES COMPARISON TABLE (%)				
MTELP OVERALL SCORE (%)	MTELP VOCABULARY SCORE (%)	POST-TEST (Immediate Test) See Appendix 2		
		attempts	fully correct (**) (meaning example sentence provided)	partly correct (*o or *x) + (only the meaning provided correctly)
40,3	38,7	57 %	44 %	20 %
POST-POST TEST (Delayed Test) See Appendix 2				
		attempts	fully correct (**)	partly correct (*o or *x)
		54 %	42,3 %	18 %

Table 5. was redesigned after the elimination of non-attendant students. Diaries, answers to the open ended questions and interview transcriptions were revisited to understand if there are any learners who studied words after the instructional period as it could affect the reliability of the method. Table 5. shows the average scores of learners in different tests applied before and after the instruction of words. The overall score of the MTELP decreased from 42% to 40,3 whereas the vocabulary score to 38,7. There are slight differences between the scores attained in post and post-post tests. The implications of these results will further be discussed in the discussions part.

4.2. Findings of Diaries and Questionnaires

The attendance problem and its effects were not the only factor in the huge difference between the tests. Another factor affecting the high amount of difference in

scores might be the students' change of attitudes towards the words asked in the tests. Some students were prejudiced against these words as they thought they would never see these lexical items in their daily lives. They had emphasized that these words were too academic and difficult to learn. It was observed that their attitudes changed not solely because of the root word instruction but the belief that they would come across these words in their business life as some aimed to be translators. They soon noticed, during their normal classes, that they needed a wide range of words be it daily or academic. They took the words more seriously and they attempted more to answer the questions. They utilized their learning styles and strategies more and the level of success has arisen. Many of them confesses that they had focused on the words more.

Another factor is directly related to the method. One student (S.12) wrote in her diary that the root-method was completely useless. However, in her comment in the delayed test she changed her view and wrote: "It is really fun and beneficial to find the meaning by looking at the roots but to do this, we need to know the structure of languages they come from..." This and other similar answers support a change in their attitudes, too.

Most of the learners selected had no negative attitudes towards the method. Three students had negative attitudes and two others wrote no comment. One participant changed her attitude (S.14) completely. She had commented, "Trying to find the meaning of a word by looking at the roots is really nonsense. This method is useless and there is very little retention. Instead, it will be more effective to repeat the words continuously either in the class or individually." Her comment in the post-post test was "Learning words with roots gives me a different point of view. I think it would be better to give examples which will help remember and make connections with the word."

One other student made no comments in the post-post test. He had commented in post test that the study could have been made more effective and he could not remember the words and it was not a creative way to remember words. In his interview, he said he was not negative towards the method and added that he liked to deal with words this way if accompanied by other learning methods.

Another student's comment in the post test was as follows: "I feel that I will forget all the information as the words pile up without really learning the words you taught previously." A reading text in which we can guess the meaning of the words might be useful in learning the words." Unfortunately, the negative attitude of this

learner has not changed in the duration of the course. Her second comment in post-post test was “I find the procedure weak. Repeating a word after learning and making no connections with our [normal] classes hampers the retention and learning of these words.”

Parallel to their positive and negative changes in their attitudes towards the method, the learners made some additional remarks or suggestions as well. Some recommended that other methods, techniques and strategies accompanied this method such as learning through songs, word games such as taboo, sparing more time for vocabulary in classes, repeating words more, learning antonyms/synonyms, reading passages including the words learned, and choosing more daily words to learn. These factors their implications will be discussed in the following.



CHAPTER V

DISCUSSION

5.0. Introduction

This part of the study discusses the research questions in relation with previous studies, theories and methods, which is hoped to lead to some useful recommendations and implications for future studies.

5.1. Discussions of the Research Questions

It was aimed to observe the effects of teaching word roots on learners of English in a context consisting of Turkish adult EFL learners learning English to prepare themselves for their university studies. The study focused especially on how this strategy works in terms of retention of new words in the long run and on whether there is any change in the attitudes of learners towards word learning through word roots.

Despite Fang's (2006) prediction that unfamiliar language of a text such as technical terms might sound challenging, the learners in the study have not found the concepts of 'Latin, Greek, Word Roots' threatening. Nor have they been prejudiced against the strategy although they have different learning styles and strategies.

The results and how they relate to the literature have been discussed further in following parts.

5.1.1. Discussions of Research Questions 1

Is teaching vocabulary through word roots efficient in terms of long term retention of newly learned words?

Table 4. and 5. in Chapter 4.1. show the results achieved by students and the comparison of these results. It was highlighted before that the number of attempts and correct answers have almost doubled due to several reasons. These reasons were discussed in detail but it could be beneficial to remember some. First, some students missed classes before post test which lowered the possible average score. As can be concluded from the discrepancies between the results in scores in Table 4. and 5., it may

concluded that higher results in post-post test were not only due to the effectiveness of the method but the factor of attendance as well. Still, this could be a sign that the learners have benefitted from the method.

It might, therefore, be considered as a sign that the method might be the other factor in the slight change in scores despite the one-month-period delay. To see this, the comments of the students should be considered. They were asked what they thought about the method and here are their answers:

S.1 : “This study is good and I expect it more frequently.”

S.2 : “I believe it is very efficient. We should spare more classes.”

S.3 : “We may continue this way. Dissecting words into roots make the learning process more efficient. We may repeat more.”

S.4 : “More words could be learned this way. Learning words through etymology makes it more permanent in my mind. We may spare one lesson a week to learn vocabulary.”

S.5 : “It was helpful and forthcoming [he means ‘promising’]”

S.6 : “I think I learn better.”

S. 7 : “Learning words with roots gives me a different point of view.”

S. 8 : “It is fun and effective to learn words this way.”

S. 9 : “I find it successful.”

S.10: “There aren’t any problems. It is quite effective. I recommend that we continue this way. We may spare at least one hour for vocabulary.”

S. 11 : “I think you should be meticulous in teaching words. Continue this way.”

S. 12 : “I find it effective but it depends on us, too. We need to repeat and use the words.”

S. 13 : “I believe that this way to learn words makes it more permanent and easier to remember. Roots of words could be surprising for our mind and we may focus more. We need more, also we should pay attention.”

It is obvious that the students in the study have accepted the method’s effectiveness which could have affected the learning environment. They seem to look for a classroom context where they are instructed through this method. This, in turn, may provide them with the learning friendly and secure atmosphere within a class. The

comfort of the environment or the ease of content may influence learners attitudes as supported by Charles Curran's CLL. In his approach Curran highlights the importance of being "psychologically comfortable". He favours the importance of a 'secure' environment. Students have the opportunity to analyze the content or words in this context which serves as a helping factor in their learning.

Students' comments support the idea of the effectiveness of teaching or learning words through roots from their eyes. However, there was more concrete evidence for this, too. Learners were asked "How did you remember this word?" to get more concrete data. The answers may be categorised as follows:

1. Thanks to the examples given. (16 answers for different words)

This answer might be a good example for Nation's (2013) view which can be paraphrased as follows: Vocabulary learning includes as an integral part of language learning. These parts include "...grammatical constructions..." , as well. Providing students with examples in order for them to learn words seems to have a sound place within Nation's scope of teaching words.

2. Thanks to your live and energetic examples [mimics, acting]. It was demonstrated physically [hand moves, mimics, acting, you showed pictures]. (16 answers)

This answer is in line with Nation's understanding that "All linguistic skills should be utilized within a balanced programme." In other words, a teacher should not only utilize one single technique but benefit from bodily movements, acting, watching and mimicking.

Gouin had also observed that children used their languages to perform a set of basic actions in their environment. Accordingly, the participants have enjoyed acting and performing some actions to learn the words.

Another scientist who supports this idea is Asher. He thinks that language learning is the main function of the right hemisphere. Following Jean Piaget, he concentrates on the connection between a child's motor movement and language acquisition. We can infer at this point that this factor is also important for adult learners.

Richards & Rodgers (2014) also have provided us with grounds for this answer by saying that “known words could be used to teach new vocabulary using mime, demonstration, and pictures”.

3. We dwelled on this word./We repeated this a lot. /My friend was asking me this words a lot. (5 answers)
4. Thanks to its pronunciation. /Its pronunciation was interesting. /It has a sweet pronunciation. /It sounded like the word ‘... ’ (18 answers)
5. Thanks to the roots. [these learners also wrote the root of the words]. (90 answers)

The number of individual answers support the importance of ‘thinking what words are, how they mean, how they relate to other words...” (McCarthy, O’Keeffe & Walsh, 2010) and the effectivity of roots utilized as a form of mnemonics should be dwelt on. It is effective because ‘people pay attention during encoding”... and “...if learners focus on encoding the newly learnt words, they may recall these lexical items easily” (Neath & Suprenant, 2003).

There are also some alternative techniques and factors uttered by a few students. Some are as follows:

- “I made my word game as it was difficult to memorise the word.”
- “I searched it on the internet.”
- “I asked my teacher.”
- “I asked my friend.”
- “I looked it up in my dictionary as I could not remember it.”
- “It was a very interesting word. I kept it in my mind in a way.”
- “I encountered it in a song.”
- “Thanks to a film I watched on YouTube.”

The number of potential answers for one category is 480. In other words, if one student says he or she remembers a words thanks to a technique for all 30 words, it amounts to 480 possible answers for 16 students. This shows that at least 18 % of the

words were remembered thanks to the roots. The closest technique is category number four whose percentage is about 0,04 % to the total number. All these figures and comments make clear that learning words through word roots has an overwhelming amount of positive effect over other techniques utilized by the learners. It is also clear that learners remember words even one month after the instructional period mostly thanks to the method favored in this study. However, when the answers are analysed, one eye-catching point shows itself. Out of 16, six learners have especially focused on word-root method while learning the words. They recorded that they used the word root method for most of their answers. Their average post-test score is 82,2 % which is higher than the rest of the class that amounts to 51,8 %. It should be noted that the rest of the class used the method to some extent, not for all the words.

Moreover, a student who criticised the method at the beginning of the course, changed her idea about the method. Her average score has risen up to 97 % from 63 %. Another student who utilized this method has scored 77 % in the post-test and 87 % in the post-post test. These two students have shown the roots and the meanings of these roots in their answers to the question “How did you remember this word?” In terms of the reliability of the answers, it should be highlighted once more that to make these results more concrete, more students should be included in a similar study. Nevertheless, it is still a promising point to see that the method has contributed to the retention of words in the long run.

5.1.2. Discussions of the Research Questions 2

What is/are specific attitude/s of learners towards the method of teaching words through word roots?

Some comments were provided in the discussion of the first research question. Some students made no comments, though. The majority of the learners have positive attitudes towards the method since the beginning. Others have changed their negative ideas into positive ones. This is considered as the success of the approach and sheds light on the ease of changing possible prejudices against the method.

5.1.2.1. What are the Differences Between These Attitudes?

Most of the learners selected had no negative attitudes towards the method. Three students had negative attitudes and two others wrote no comment. As previously discussed, one student (S.14) had harshly criticised the method but changed her idea. She had commented, "Trying to find the meaning of a word by looking at the roots is really nonsense. This method is useless and there is very little retention. Instead, it will be more effective to repeat the words continuously either in the class or individually." Her comment in the post-post test was "Learning words with roots gives me a different point of view. I think it would be better to give examples which will help remember and make connections with the word." When asked what changed her idea, she replied that at first she was prejudiced as the roots were difficult to remember but then realized that these roots were more frequent than she had observed previously. She could see the roots in more daily words now which helped her to break the ice with them.

One other student (S.16) made no comments in the post-post test. He had commented in post test that the study could have been made more effective and he could not remember the words and it was not a creative way to remember words. In his interview, he said he was not negative towards the method. He added that he liked to deal with words this way if accompanied by other learning methods.

Another student's (S.10) comment in the post test was as follows: "I feel that I will forget all the information as the words pile up without really learning the words you taught previously." A reading text in which we can guess the meaning of the words might be useful in learning the words." Unfortunately, the negative attitude of this learner has not changed in the duration of the course. Her second comment in post-post test was "I find the procedure weak. Repeating a word after learning and making no connections with our [normal] classes hampers the retention and learning of these words." This comment implies that learners should be provided with a moderate level and reasonable amount of new items in a course as according to Asher (1977), "in an hour, it is possible for students to assimilate 12 to 36 new lexical items depending upon the size of the group and the stage of training". In his Suggestopedia, Asher put forward a few principles in terms of leveling: "A Suggestopedia course lasts thirty days. The dialogues are graded by lexis and grammar. This means words are graded and limited according to the levels of learners." When the comment of the learner is analysed more closely the need to connect new items to real life appears which can be explained in

Gattegno's words as "the importance of teaching functional words which may go under the categories of food, travel or family." New items should at least have functions in real life.

5.2. Pedagogical Implications of the Study

Parallel to their positive and negative changes in their attitudes towards the method, the learners made some additional remarks or suggestions as well. Some recommended that other methods, techniques and strategies accompanied this method such as learning through songs, word games such as taboo, sparing more time for vocabulary in classes, repeating words more, learning antonyms/synonyms, reading passages including the words learned, and choosing more daily words to learn. These factors and their implications for future syllabi will be discussed in this part.

When analysed in detail, it can be seen that students' remarks correspond with Nation's (2013) theoretical and practical views. According to Nation (2013),

"There are three important general cognitive processes that may lead to a word being remembered. These include noticing (through formal instruction, negotiation, the need to comprehend or produce, awareness of inefficiencies), retrieval and creative (generative) use. These processes can be viewed as three steps with the later steps including the earlier steps. Schmitt (2008:339) looked at a variety of factors affecting vocabulary learning, concluding that anything that increases the amount of exposure, use, time, or attention to vocabulary is likely to increase learning."

These comments made by students support Nation's idea of 'exposure, (creative/generative) use, time, or attention':

"We may spare at least one hour for vocabulary." or "We should spare more classes." (exposure, time)

"I expect the study to be more frequent." (exposure, time)

"We should revise the words either in class or by ourselves so that it is more beneficial." (noticing [awareness of inefficiencies], exposure, attention)

"I feel that my word knowledge will just fade away as the words pile up without fully learning previous ones." (noticing [the need to comprehend or produce], exposure)

“It would be more beneficial in learning words if we saw the words in a reading text so that we could guess the meaning.” (exposure, [generative] use, attention)

“Let’s be more active. We may, for example, play the taboo game.” (exposure, [generative] use, attention)

“We need to learn more up-to-date words.” (noticing [the need to comprehend])

“More mnemonics, or examples to connect the word with might be better in learning.” ([creative/generative] use)

“I don’t think we study hard like you. We need more, also we should pay attention as much as you do.” (noticing [awareness of inefficiencies])

This comment is closely connected with Ausubel’s (1963; 1968; 1978) ideas in which he says “learners or people in general create their own conceptual maps. “The adoption of the new knowledge requires its connection with already existing information. Students, accordingly, organize or re-organize their conceptual maps while learning. This is different from memorization as it entitles the manipulation of new concepts in an active way. In requires more energy from the learner, it may seem more tiring...” The student is aware of the need to exert some energy whatever method he or she adopts. The following remark is the expression of this idea, too. “The method is effective. The effectiveness depends on us, too. We need to repeat more and use the words in sentences.” (exposure, [creative/generative] use)

The students’ answers have many common points, which have connections to the theoretical points of “Involvement Load Hypothesis” (ILH) of Laufer and Hulstijn (2001) as well. Similar to Nation’s views, The Involvement Load Hypothesis of Hulstijn and Laufer (2001) declares that the more needs, search and evaluation are included in learning words, the more a new word is retained by a learner. According to Laufer and Hulstijn (2001), “students should feel the need to learn a word” and “search” for it. If they are provided with words determined by instructors without asking them, then their productive skills will not be activated. Having met these two points learners may be expected to “evaluate” the choice of words and understand if they really need to learn them. Thus, if word-roots are to be taught, it is important to let students which words and word roots are necessary for them. However, it does not necessarily mean that instructors will not be involved in any part of the planning process.

Nation (2013) believes in the productivity of the ILH in evaluating teaching techniques but emphasises the importance of repetition ve time-on-task, too. It can be inferred that students should also be given more opportunities to review of words/roots and spend enough time to assimilate the new items into their already existing schemata as one learner (S.10) in the study had complained, “I feel that I will forget all the information as the words pile up without really learning the words you taught previously.” While planning classes, instructors should, therefore, provide learners with opportunities to review, revise and consolidate what they learn.

Some other factors or conditions that help vocabulary learning is “Motivation, Noticing, Negotiation, Definition, Textual Enhancement (highlighted hyperlinks), Word Consciousness (awareness of word parts, word order, word choice-technical; formal-informal), Retrieval, Creative use and retention” (Nation, 2013). Considering these factors, word-root teaching may especially be efficient in retrieval and retention which could result in high motivation for learners. As already known words are meaningfully connected to the new words through word roots, students can remember the meaning by consciously negotiating the meaning by him/herself. One learner many others wrote that, “word-roots work as we can make some associations”, which supports this idea because a learner will be more motivated if s/he feels improvement in word knowledge. This sentence may remind one of Ausubel’s Meaningful Learning concept once again: “connection with already existing information”. By focusing on the information itself students have the opportunity to make associations and “accordingly, organize or re-organize their conceptual maps while learning. Through “the manipulation of new concepts in an active way” learners open the way for the permanency of new lexical items.

On the other hand, one learner wrote that “some roots mislead me while trying to guess the meaning that makes it more complex to learn the word and its real meaning.” Fortunately, there is only one student who complained this way. However, when example sentences are given by the learners are analysed, it can be said that students may misinterpret the meaning or misuse words in a wrong way. The problem is actually more prevalent than it could be expected. It can be concluded that learners’ understanding of words should be checked regularly to maintain motivation, word consciousness, retention of words with their correct meanings, and using words creatively in correct sentences. As discussed before, this might be the case with “fixed

expressions” which was put forward by the Lexical Approach: “language consists not of traditional grammar and vocabulary but often of multi-word prefabricated chunks... A learner may know these words ‘blue, out of, the’ separately but ‘out of the blue’ has a different meaning.” Similarly, roots may have different meanings from the ultimate word used in today’s language which may render it difficult to guess the correct meaning. Still, just as “fixed expressions take up a big amount of place in a language...” and “new combinations are rarer”, roots or stems take up a big amount of place in word formations today. Even new words are derived out of old roots and if there is any change in meaning or any difficulty in guessing, that specific word should be treated as a chunk or “fixed expression.” This does not necessarily mean that the learner may not make any meaningful connection between the word and its root as after learning a word’s story it may disclose the development of the connection to the learner. Having learnt the history behind a word and its root, students may re-organize their concept maps and permanency might be achieved. In Neath & Suprenant’s (2003) terms new information might be retained indefinitely in ‘generic memory’ or ‘long-term memory’. In this case, it can be concluded that the information coming from outside will turn into ‘knowledge’ within the ‘generic memory’ or ‘semantic memory’.

The misinterpretation of meaning is not limited to guessing meaning through word roots, though. A similar problem in a different area can also be observed in Miller and Gildea’s (1987) and Scott and Nagy’s (1997) studies. They studied with native speaking children (Miller and Gildea, 1987; Scott and Nagy, 1997) and non-native speakers (Nesi and Meara, 1994). They observed that students misinterpreted dictionary definitions. The problem was caused by the children’s focusing on one part of definitions provided. The word ‘intersect’ was defined as ‘divide (sth) by going across it’. Here is what a learner gave as an example sentence:

“*We must intersect the river for arrive village.” (Nesi and Meara, 1994:9)

Similarly, knowing the root of a word does not necessarily mean that a learner will correctly define and write a truly related example sentence for a word. Here is an example encountered in tests carried out in the study:

“*The fluvial of river is fast.”

The word '*fluvial*' was defined as

“fluvial - adj. of or relating to or happening in a river”

and the example sentence was:

“The fluvial effects of Seyhan and Ceyhan are similar.”

The word was defined in Turkish as

"nehir veya ırmakla ilgili".

The root is

FLO= akmak and easy words to associate with were “FLOW: akmak; FLUId: akar, sıvı; FLUent: akıcı”.

Still, the student has come up with this sentence: “*The fluvial of river is fast.”

Another example was “Occlusion in the street is boring.” Here, it can obviously be seen that the learners have some idea about the words but the meaning and the example sentences did not utterly display their understanding of the word. A student gave this example: “*This car is manacle”. In fact, what the learner wants to say is that “This car is manual.” He meant that the car could be used shifted through gears by hand. However, he was misled by the root “-manu: hand” and the relative word “manacle” could be used instead of “manual”. It can be inferred from all these examples that students might be misled by the meaning of a word root. The point here is that despite the lack of proper creative use by the learner, the root may give at least some idea about the meaning of the word and problems and misunderstandings may be overcome by negotiation of meanings and giving more examples as even native speakers and learners tend to misunderstand definitions by focusing on a limited part of them.

Retention of words will be enhanced if learners are encouraged to negotiate the meaning of new words not only with the instructor but also within themselves. The idea is supported by some studies, too (Ellis et al., 1994; Newton, 2013). Learners can even write their creative definitions and sentences for these words without looking up the words in their dictionaries. Word consciousness which includes awareness of word parts will highly be met with this method. Learners are more likely to see words as entities that might be broken into parts which are connected with many other words. One student wrote this comment in his diary: “As an engineering student, I have always been bad at memorizing things. I try to learn things by analyzing. I always make associations to retain information. This method provides permanence by teaching me how words derive.”

The negotiation process will be supported more and yield better solutions if pursued together as a pair and group work or a whole class activity. One student commented that when they analysed the words together, they imprinted them better on their minds and by making inferences together they established connections between related words. He added that giving examples and elaborating on them he grasped different uses and meanings better. A stronger but anti-word root comment is as follows: “I retain words with this method but it is thanks to many repetitions we make by asking and answering questions on them rather than Latin or Greek roots. That is why I do not think word root instruction alone is a beneficial technique.” This sound comment by the learner reveals more the need to negotiate meaning either individually or as a group.

Negotiation of meanings through word roots will boost learning by letting learners focus more on the word. It should be emphasized that by doing this we may neglect some aspects of learning a new word. As Barcroft (2009) argues, with limited processing capacity, learners may focus on only one aspect of words which implies that other features of word learning will be neglected and poorly learned. Nation (2013) adds that “a word-form-focused task involving thoughtful processing would have better results than a different form-focused task involving more superficial processing... Large amounts of information may distract rather than enrich learning.” It can be understood that focusing on the form of a word might be more beneficial to a learner than providing him/her with a lot of information about a word. Some aspects might be neglected to teach more efficiently. Parallel to this idea, in future instructions, simple

definitions might be given rather than burdening learners with long definitions. The same understanding was adopted during the instructional period in this study. Definitions of words were given briefly and clearly in English as well as their L1 equivalents. “Definitions should be brief and clear in order not to confuse learners. L1 definitions make it short and simple for learners to learn the meaning of a word fast (Chaudron, 1982; Nation, 1982). To exemplify, the word “Dictionary” may be provided in a typical class as this: “*dict=söz*, söylemek; *Dictionary: Sözlük* (T: Can you tell me other related words? [negotiation] S1: *predict*, S2: *dictate*).

In planning the teaching of word roots it might be taken into consideration that some important points such as goals (of both learners and educational institutes), needs and context (of the teaching environment) analysis, content and the order of the content to be taught, assessment and evaluation of learning. First of all, to design his or her word root teaching syllabus an instructor should understand the goals of his institution and learners. Students in a university preparatory class aim naturally to pursue their studies in their own English-medium departments. For instance, in Adana Science and Technology University, the classes are taught 100 % in English in most departments. Students start with a high motivation to learn English which will be a useful tool to achieve their goals. This seems to be an advantageous point when it comes to teaching English; however, these learners are from different departments and their goals limit the range, type and level of words to be taught to them. A student from Tourism and Management Department may resist to learn some words to be taught. For example, s/he does not have to learn technical words related to Aerospace Engineering. What seems to be a motivation factor might not actually sound this way for different departments.

The goals of the institutions are also a factor in determining the syllabus of word root teaching. The vision put forward by the institution where the study was conducted is as follows:

“The important aspect of our vision constitutes presenting an efficient and fruitful education equipped with advanced technological facilities, being a model through teaching methods and techniques, supporting lecturers’ professional development, taking an active role in national and international activities, and internationalizing. The cornerstones of our vision are to help the

students gain knowledge and skills required in academic, professional and social lives; enable them to become responsible and autonomous individuals; and raise “life-long learning” awareness.”

(<http://yadyo.adanabtu.edu.tr/PagesEng/detay.aspx?pageId=9>, retrieved on 10/04/2017 at 14.44)

When this text alone is considered, it can be seen that the institution will surely support new methods and techniques as long as they serve the development of the instructors and improvement of the skills and knowledge of students. The instructors in this institution may not disregard the content of this vision put forward.

Second important factor is needs and context (of the teaching environment) analysis in creating a word root teaching syllabus. If referred back to the text above, it could be seen that students at the School of Foreign Languages (SFL) at Adana Science and Technology University (ASTU) are expected to have all language skills such as reading, writing, listening and speaking. Moreover, they are expected to graduate from the SFL at least with an intermediate level of English in all skills. Therefore, learners may oppose the idea of sparing classes only for word roots in an environment already dense with coursebooks, assignments, writing tasks and portfolios and so on. Learners in this study seem to be undisturbed by this fact and in their interviews, they supported the idea of having more vocabulary classes but if only accompanied by different types of activities involving them in speaking and listening as well. This demand actually corresponds with the aim of the institution and it is pleasing to conclude that a word-root syllabus contain all skills.

The choice of words is also another issue in determining a syllabus. As not all the learners have the same goals and departments, they need only general service vocabulary to meet their needs. Words might be chosen from different vocabulary lists. There are many word lists which categorise words into levels considering CEFR (Common European Framework of Reference for languages) criteria. Frequency counts are also used for the classification of words for different levels. For example, ‘Englishprofile.org/wordlists/text-inspector’ provides a useful tool to determine the level of a text you choose. A syllabus designer should therefore pre-determine what words to teach considering all potential problems that may arise by using different tools and approaches..

Needs do not include only the category or frequency of words but also the need to use different vocabulary learning strategies. Learners might be unaware of useful type of strategies adopted to learn a word. Or, not all learners have the same strategy preference. Questionnaires, class discussions or interviews should be included while setting up goals for word roots teaching. This way, the process should be more comprehensive in terms of learning preferences. Learners must be made aware of different learning strategies when or if needed.

All these points are integral parts of the context of teaching which should be included in an analysis procedure. Teachers, the institution itself and even learners are part of this environment. A proposed type of teaching may or may not be applied by a teacher. S/he ought to be given the freedom to choose from among various techniques or activities. The problem might even be that the teacher himself might be disinterested in adopting or reluctant to apply the technique. Even the institutions they work in may not encourage them to try a new method or may not have necessary time and resources to support this technique. Learners, on the other hand, may see this type of direct teaching as a loss of time. To overcome these obstacles, the elements within the teaching context should be regarded and if needed they should even be convinced. In some cases, the situation could be even worse. In an international class, for example, the direct translation of word roots will not be useful unlike a monolingual group of learners, so a teacher will have to adopt a different technique in such a case.

Third factor to be considered is the content and the order of the content to be taught. Should a teacher start by teaching prefixes and suffixes or directly with word roots? Are all the roots to be taught? If not, which roots should be included? Questions may vary, but answers are not that complicated. The syllabus to be prepared should help the instructor or guide him in general and give him or her a chance to choose, add, eliminate or improve the content. One suggestion is that more generative stems be chosen as some word roots are productive while some are not. To exemplify, the root “-phot-” which means ‘light’ has over 25 words derived out of it while the root “-petr-” that means ‘stone, rock’ has only 13 (Akarslan, 2013). Moreover, some words may be considered as elementary while some, advanced or even obsolete. Some are really technical words which learners do not need in their lives at all. Considering the frequency and level of words, the roots may be added to or eliminated from the syllabus. Another example is that, rather than teaching Latin and Greek word roots,

young learners might be provided with more fun side of word roots. Etymological stories may sound interesting to them. Teaching them the roots of days of the week might be interesting. Letting them see that 'Sunday' is sun + day, 'Saturday' is saturn + day, and 'Monday' is actually moon + day, may sound interesting.

Fourth, assessment and evaluation of learning is another factor in determining your own word root teaching syllabus. A syllabus designer should determine what to teach at first hand. In this case, it is important (after determining who, why and where one is teaching) to diagnose and place your students at the beginning of a course. Supposing that the instructors have acquired any needed permissions to place students, they should determine the level of their learners within a group. Then, in order to monitor the improvement or the current situation of their learners, teachers may sit them in achievement tests which could vary from multiple choice to open ended questions. Achievement tests will allow teachers to adapt or change the course of the study. Tests might be sat every class hour, week or month. A word roots instruction procedure does not have to include formal assessment. Learners might be let observe their own learning by keeping diaries and writing comments there, or play word guessing games through word roots. The main goal should not be assessing and evaluating learners but help them keep themselves motivated to learn words through roots.

CHAPTER VI

CONCLUSION

6.1.0. Introduction

This part of the study focuses on the researcher's conclusion based on the pedagogical implications to be considered while developing a special syllabus including word roots instruction. Recommendations for future studies based on the findings of the data acquired as well as the limitations of the study were also presented in this chapter.

6.1.1. Conclusion

The study aimed to see the effects of word roots teaching on long-term retention of newly learnt words. It was conducted with 19 participants over 10 weeks after another over-ten-week piloting with students studying at the SFL of Adana Science and Technology University, Adana, Turkey during the 2016-2017 Fall term. Only 16 learners completed the study. The participants were taught 30 advanced words that they did not know which was made sure by a pre-test. Then, they were asked to take a post- and post-post-test to see the changes in their scores which would show the effects of word root teaching. They were also asked to write diaries during the process. The instructor was also requested to share his views and observations in this period.

As a result, the findings indicated that teaching words through word roots may provide a very useful tool for learners to learn new words. Learners' were observed to be positive against the method which was motivating for them and providing them with a meaningful learning environment.

Another important point is that learners have different learning styles and strategies that implies the inefficiency of any methods alone. Therefore, even if a specific method is more effective than another, it does not necessarily mean that other methods, techniques, learning styles or strategies be neglected. An ideal learning environment should include all of them moderately. However, it was observed that participants were not aware of such a method and were happy to have another tool to use in their language studies. It is also promising to see that the participant are aware

that they have to exert effort even if a method makes retention and recall of words easier.

According to Nation (2012), instructional environments should “include noticing (through formal instruction, negotiation, the need to comprehend or produce, awareness of inefficiencies), retrieval and creative (generative) use.” Considering his ideas, it can be said that method includes the negotiation of meaning together with formal instruction. Learners may feel the need to analyse unknown or even the known words to see if the method works for them. When the ‘retrieval’ point is considered, it was observed that participants could remember new highly academic words with a higher percentage. When learners’ example sentences were regarded, it was seen that participants can use the new words generatively, too.

6.1.2. Limitations and Recommendations for Further Studies

This study has tried to understand the long term effects of teaching words through the instruction of roots. It has been observed that word roots have some positive effects on the retention, recall and use of words as they provide a foundation to guess words and relate difficult words to easy relative words. Many restrictions throughout the study weakens the reliability of the results. Despite every effort to overcome any weaknesses, some were not thoroughly ridded of as there were some inevitable limitations to this study.

One weak point of the study was that the administration of the study was limited to teenagers at preparatory year classes in Adana Science and Technology University. The results, therefore, will not be comprehensive enough to draw general conclusions. For instance, it is impossible, with this study, to guess possible effects of this method on children or adults. The answers to the question of how to teach learners of different ages may be discussed in detail in future papers.

Another limitation about the present study is that the number of available students was 30 at the beginning but only 16 participants attended the study regularly which renders the possible results questionable in terms of reliability and comprehensiveness even within this age group. Future studies must include, if possible, more participants to contribute to the reliability and the scope. A further study should bear this in mind that more number of attendants are needed to boost the reliability.

A third limitation was that words chosen to be instructed were deemed as impractical by some learners because they were selected from highly academic and rare words. A student suggested that they come across “words that could be used more in daily life”. Similarly, another one recommended us to “use more up-to-date words.” He added that “instead of ‘dodecagon’, a more academic or up-to-date word could have been taught.” However, some students uttered that as they are prospective translators, businessmen or scientists and they could encounter any of these words in their professional life, and concluded that they should not complain about this issue. These words were selected lest the learners should come across and learn them without being instructed through roots. Therefore, future studies may include words that might be shortlisted considering an high academic level but more frequent words

Next, students were not given any vocabulary learning strategies instruction before the beginning of the study. In the future, researchers might prefer to show what this technique actually is. In this way, learners may have the opportunity to observe the method better and decide more precisely whether it works for them or not, because it was observed that some students did not even focus on the new technique to be tested. Next, learners were observed to be more eager to combine different learning styles and strategies, so a study may involve the effects of two or three blended techniques including word roots instruction.

In conclusion, the techniques used in this study shed light into effective vocabulary teaching since technique alone will not be the answer to the question of learning a new word. Ilson (1983) thinks that studies on word roots give a richer instructional environment. However, memorisation or retention could be boosted by consolidating words through different tasks following the teaching process through various types of activities (Nation, 2013).

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APPENDICES

Appendix 1: Michigan Test of English Language Proficiency (MTELP) Front Cover

This form of the MTELP is no longer used by the ELI Testing Service. Scores on this test should not be used for initial admission purposes or sending out score reports.

FORM Q



MICHIGAN TEST
OF ENGLISH LANGUAGE
PROFICIENCY

PREPARED BY A. CORRIGAN, B. DOBSON, E. KELLMAN, M. SPAAN, L. STOWE, AND S. TYMA.

The Michigan Test of English Language Proficiency (MTELP), a test of grammar, vocabulary, and reading, was used as one part of the official Michigan Test Battery by the English Language Institute Testing Service of The University of Michigan. At the time this form of the MTELP was used by the ELI Testing Service, a Michigan Test Battery consisted of a written composition, a listening test, and an MTELP.

Appendix 2: Post (Immediate) and Post-post (Delayed) Test (Pages 1 and 2)

Name: <u>SELT</u>	Write either english or türkish definition in your own words for the words below. Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Bu kelimayı nasıl hatırladınız? Ya da neden hatırlayamadınız?
1 abhor	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>nefret etmek</u> <u>kak</u>	Write an example sentence in English below. <u>I don't abhor people</u>	Bu kelimayı nasıl hatırladınız? <u>İnşallah</u>
2 abrogate	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>derste yoktum</u>	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
3 belabour	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
4 billowing	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
5 debenture	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
6 dodecagon	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
7 effigy	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
8 fluvial	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
9 haughtiness	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
10 isogloss	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
11 manacle	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
12 mortician	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
13 noxious	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
14 nullify	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
15 nuzzle	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>buyn boun deşirmek</u>	Write an example sentence in English below. <u>in different culture</u> <u>nocturnal</u>	Bu kelimayı nasıl hatırladınız? <u>sinifla uyguladıkları dersleri</u>
16 obdurate	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>duration</u>	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Bu kelimayı nasıl hatırladınız? <u>öğretmen</u>

17 occlusion	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>close</u>	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Bu kelimayı nasıl hatırladınız? <u>kelime kök</u>
18 pellucid	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
19 photopia	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>light</u>	Write an example sentence in English below. <u>I don't know what photopia</u>	Bu kelimayı nasıl hatırladınız?
20 placid	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>please</u> <u>applied</u>	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Bu kelimayı nasıl hatırladınız?
21 plaintiff	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
22 plaudit	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>applaud</u>	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Bu kelimayı nasıl hatırladınız?
23 plausible	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>possible</u>	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
24 profuse	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız.	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
25 recriminate	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>complaint</u>	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Bu kelimayı nasıl hatırladınız?
26 repent	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>to be sorry</u>	Write an example sentence in English below. <u>Say repent!</u>	Ya da neden hatırlayamadınız?
27 replete	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>repet</u>	Write an example sentence in English below. <u>Don't regret</u>	Bu kelimayı nasıl hatırladınız?
28 sojourn	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>a lot</u>	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Ya da neden hatırlayamadınız?
29 tangible	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>touchable</u>	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Bu kelimayı nasıl hatırladınız?
30 tardy	Kelimelerin İngilizce ya da türkçe tanımlarını kendi kelimelerinizle yazınız. <u>late</u>	Write an example sentence in English below. Bu kuma İngilizce örnek cümle yazınız.	Bu kelimayı nasıl hatırladınız? <u>sinifla uyguladıkları dersleri</u>

What do you think about the course of the study?

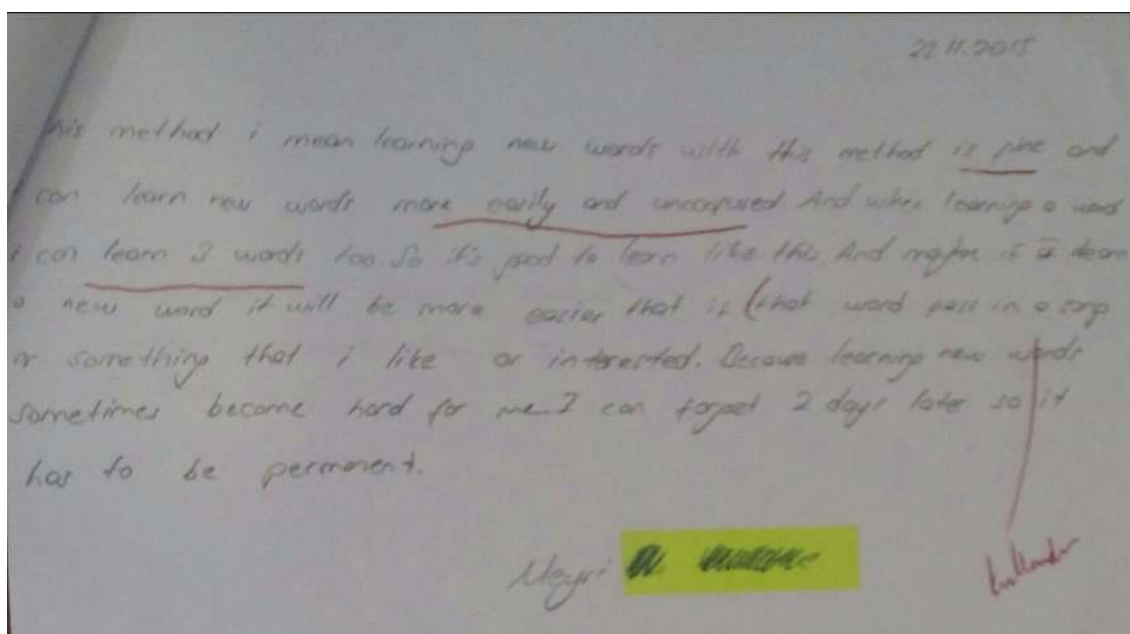
Yaptığımız bu çalışmanın gidişatı ile ilgili ne düşünüyorsunuz?

Çalışma iyi daha sık yapılmasını temenni ederim -

What do you recommend to improve the study?

Çalışmayı geliştirmek için ne önerirsiniz?

Kelimelerin word formationını uygulamak -

Appendix 3: Sample Student Diary

Appendix 4: Vocabulary Selection Tool

Değerli Katılımcılar,
Aşağıda size rastgele seçilmiş 42 adet sözcük verilmiştir. Bu sözcükler hakkında bilginizi ölçmek amaçlanmaktadır. Bu çalışma hiçbir şekilde notunuzu belirleme ya da sizi değerlendirme amaçlı değildir. Bu çalışma sadece sizinle birlikte yapacağımız gönüllü olarak katılabileceğiniz akademik bir çalışma için veri toplamak amaçlı yapılmaktadır. Vereceğiniz cevaplar ve kimlik bilgileriniz sizden izinsiz kimseyle paylaşılmayacaktır. Aşağıda verilen kutucuklardan uygun olana X işareti koyunuz. Diğer kutucuklardan 'Kesinlikle Biliyorum' ve 'Biliyorum' bölümlerini seçerseniz sizden Türkçe anlamlarını yazmanız istenmektedir.
Çalışmamıza verdiğiniz destek için teşekkür ederiz.

Adı:
Soyadı:
Bölümü:

		Kesinlikle Biliyorum	Biliyorum	Emin Değilim	Bilmiyorum	Kesinlikle Bilmiyorum
1	Abasement	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
2	Abhor	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
3	Abrasive	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
4	Abrogate	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
5	Abstain	Bu bölümü işaretlediyseniz Kelimenin Türkçe	Bu bölümü işaretlediyseniz Kelimenin Türkçe	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz

		Anlamını Yazınız	Anlamını Yazınız			
6	Belabour	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
7	Billowing	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
8	Blasphemy	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
9	Creditable	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
10	Debenture	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
11	Deleterious	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
12	Dodecagon	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz

13	Effigy	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
14	Egregious	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
15	Enshroud	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
16	Fluvial	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
17	Haughtiness	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
18	Isogloss	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
19	Manacle	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
20	Mortician	Bu bölümü işaretlediyseniz Kelimenin	Bu bölümü işaretlediyseniz Kelimenin	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz

		Türkçe Anlamını Yazınız	Türkçe Anlamını Yazınız	niz		
21	Noxious	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
		Kesinlikle Biliyorum	Biliyorum	Emin Değilim	Bilmiyorum	Kesinlikle Bilmiyorum
22	Nullify	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
23	Nuzzle	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
24	Obdurate	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
25	Occlusion	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
26	Pellucid	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
27	Perfidy	Bu bölümü işaretlediyseniz Kelimenin Türkçe	Bu bölümü işaretlediyseniz Kelimenin Türkçe	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz

		Anlamını Yazınız	Anlamını Yazınız			
28	Photopia	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
29	Placid	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
30	Plaintiff	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
31	Plaudit	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
32	Plausible	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
33	Plethora	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
34	Profuse	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz

35	Recriminate	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
36	Repent	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
37	Replete	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
38	Reprehensible	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
39	Sojourn	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
40	Tangible	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
41	Tardy	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz

42	Tawdry	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü işaretlediyseniz Kelimenin Türkçe Anlamını Yazınız	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz	Bu bölümü X ile işaretleyiniz
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Appendix 5: Words Taught in the Course

1	Abhor	nefret etmek	Abhor - <i>verb</i> find repugnant	hate; HOR (HORRIBLE)
2	Abroga te	iptal	Abrogate - <i>verb</i> revoke formally	cancel; deny; repeal from ab- "away"
3	belabo ur	(aşırı) çalışmak	belabour - <i>verb</i> to explain, worry about, work at repeatedly more than necessary	labor, elaborate
4	Billow ing	dalga, şişmek	Billowing - <i>adj.</i> moving in surges and billows and rolls; characterized by great swelling waves or surges	swelling; fluttering; waving (BELLY)
5	debent ure	senet	debenture - <i>noun</i> a certificate or voucher acknowledging a debt; a bond that is backed by the credit of the issuer but not by any specific collateral	certificate of indebtedness. (debt, indebted)
6	dodeca gon	onikigen	dodecagon - <i>noun</i> a twelve-sided polygon	do=two; deca=ten
7	effigy	büst, resim	effigy - <i>noun</i> a representation of a person (especially in the form of sculpture)	(meaning of the root 'form' figure, configure)
8	fluvial	nehir ırmak	fluvial - <i>adj.</i> of or relating to or happening in a river	(FLOW, FLUID, FLUENT)
9	Haughti ness	kibir	Haughtiness - <i>noun</i> overbearing pride evidenced by a superior manner toward inferiors	arrogance; pride (HIGH)
10	isoglos s	eş girtlak	isogloss - <i>noun</i> a line on a map marking the limits of an area within which a feature of speech	(in the study of the geographical distribution of dialects) a line on a

			occurs, as the use of a particular word or pronunciation	map marking the limits of an area within which a feature of speech occurs, as the use of a
11	manacle	kelepçe	manacle - <i>noun</i> shackle that consists of a metal loop that can be locked around the wrist; usually used in pairs; <i>verb</i> confine or restrain with or as if with manacles or handcuffs	(manual, manicure)
12	mortician	ölü gömen	mortician - <i>noun</i> one whose business is the management of funerals	(MORG, IMMORTAL)
13	Noxious	zararlı	Noxious - <i>adj.</i> injurious to physical or mental health	harmful; poisonous; lethal (innocent, necro)
14	Nullify	geçersiz kılmak	Nullify - <i>verb</i> make ineffective by counterbalancing the effect of; show to be invalid	to counter; make unimportant (nill= zero; ne illus=unus 'one' (not any.
15	Nuzzle	sokulmak	Nuzzle - <i>verb</i> dig out with the snout; rub noses	cuddle; snuggle (nose)
16	Obdurate	inatçı	Obdurate - <i>adj.</i> showing unfeeling resistance to tender feelings; stubbornly persistent in wrongdoing	stubborn (from ob "against" (see ob-) + durare "harden, render hard," from durus "hard"
17	occlusion	örtme, kapanma	occlusion - <i>noun</i> (dentistry) the normal spatial relation of the teeth when the jaws are closed; closure or blockage (as of a blood vessel)	include, close, conclusion
18		pellucid	anlamı açık, ışıkgeçiren	pellucid - <i>adj.</i> (of language)

				transparently clear; easily understandable; transmitting light; able to be seen through with clarity
19	Photopia	parlak ışıkta görüş	photopia - <i>noun</i> vision in bright light	vision in bright light (photograph; optics)
20	Placid	sakin	Placid - <i>adj.</i> (of a body of water) free from disturbance by heavy waves; living without undue worry; taking life easy	calm; peaceful (place??)
21	Plaintiff	davacı	Plaintiff - <i>noun</i> a person who brings an action in a court of law	petitioner (in court of law) (complain)
22	Plaudit	alkış	Plaudit - <i>noun</i> enthusiastic approval	statement giving strong praise (applaud, explode) from
23	Plausible	mantıklı	Plausible - <i>adj.</i> apparently reasonable and valid, and truthful; given to or characterized by presenting specious arguments	can be believed; reasonable (applaud, explode) from ad "to" (see ad-) + plaudere "to clap, strike")
24	profuse	bol	profuse - <i>adj.</i> produced or growing in extreme abundance	fus=akmak (confusion)
25	recriminate	şikâyete karşı şikâyet ya da iftiraya karşı iftirada	recriminate - <i>verb</i> return an accusation against someone or engage in mutual accusations; charge in return	to bring a countercharge against an accuser. (crime)

		bulunmak		
26	repent	pişman olmak	repent - <i>verb</i> feel remorse for; feel sorry for; be contrite about; turn away from sin or do penitence	penalty
27	Replete	dolu	Replete - <i>adj.</i> (followed by 'with') deeply filled or permeated; filled to satisfaction with food or drink	full (complete)
28	sojourn	geçici, misafir olarak kal- mak	sojourn - <i>noun</i> a temporary stay (e.g., as a guest); <i>verb</i> spend a certain length of time; reside temporarily	journal, journey
29	Tangible	somut	Tangible - <i>adj.</i> perceptible by the senses especially the sense of touch; (of especially business assets) having physical substance and intrinsic monetary value	can be touched (tangent, tact=touch)
30	Tardy	gecikmiş	Tardy - <i>adj.</i> after the expected or usual time; delayed	slow; late; overdue; delayed (mentally retarded)

Sources for word definitions:

<http://www.thefreedictionary.com>

<http://www.dictionary.com>

<https://www.vocabulary.com>

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25	recriminate	şikâyete karşı şikâyet ya da iftiraya karşı iftirada bulunmak	recriminate - <i>verb</i> return an accusation against someone or engage in mutual accusations; charge in return
26	repent	pişman olmak	repent - <i>verb</i> feel remorse for; feel sorry for; be contrite about; turn away from sin or do penitence
27	Replete	dolu	Replete - <i>adj.</i> (followed by `with')deeply filled or permeated ; filled to satisfaction with food or drink
28	sojourn	geçici, misafirlik	sojourn - <i>noun</i> a temporary stay (e.g., as a guest); <i>verb</i> spend a certain length of time; reside temporarily
29	Tangible	somut	Tangible - <i>adj.</i> perceptible by the senses especially the sense of touch ; (of especially business assets) having physical substance and intrinsic monetary value
30	Tardy	gecikmiş	Tardy - <i>adj.</i> after the expected or usual time; delayed

CURRICULUM VITAE

PERSONAL INFORMATION

Name & Surname : Kenan AKARSLAN

Date/Place of Birth : 26.12.1981/ Tokat

E-mail : kakarslan@adanabtu.edu.tr

Marital Status : Married

EDUCATIONAL BACKGROUND

2013 – 2017 : MA, Çukurova University Institute of Social Sciences, English Language Teaching Department

2000 – 2004 : BA, Marmara University Education Faculty, English Language Teaching Department, İSTANBUL

1996– 2000 : Mehmet Erdoğan Anatolian High School, Fethiye/MUĞLA

WORK EXPERIENCE

2014 – 2017 : Instructor, Adana Science and Technology University, School of Foreign Languages