İNGİLİZCE ÖĞRENEN TÜRK ÖĞRENCİLERİN KELİMELERE ANLAM VERMEDE ÖNEK VE SONEK KULLANIMLARININ ARAŞTIRILMASI

AN INVESTIGATION ON TURKISH EFL LEARNERS' USE OF PREFIXES AND SUFFIXES TO ASSIGN MEANING TO WORDS

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ANADOLU UNIVERSITY
THE INSTITUTE OF SOCIAL SCIENCES •

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Thesis of Master of Arts

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ESKİŞEHİR
SEPTEMBER,1996

To my family

ÖZET

Bu tezde, öğrencilerin kelimelerin anlamını çıkarsamada önek ve soneklerin anlamlarını bilmelerinin önemli bir etken olduğu vurgulanmaktadır. Eklerin bilinmesi, öğrencilerin kelimelerin anlamına ulaşma becerilerini etkili bir şekilde artıracaktır.

Morfolojik bilgi, kelimeleri parçalarına bölerek analiz edebilme, yani her bir parçanın anlamını öğrenerek kelimenin tamamının anlamını çıkarabilme becerisidir. Kelimelerdeki önek ve sonek bilgisi, doğrudan öğretilen yada bağlamsal analiz sonucunda öğrenilen kelimelerin ötesinde, öğrencilerin kelime bilgilerini artırmada da oldukça etkili olacaktır.

Bu çalışmada İngilizce öğrenen Türk öğrencilerin kelimelerin anlamını çıkarsamada, önek ve sonekleri kullanmadaki beceri ve bilgileri incelenmektedir.

Çalışmaya katılan 41 denek Anadolu Üniversitesi, Eğitim fakültesi, İngiliz Dili Eğitimi Anabilim Dalı'nda öğrenim gören öğrencilerdir. Birinci grupta bulunan 20 öğrenci hazırlık sınıfı öğrencisidir. İkinci grupta bulunan 21 öğrenci ise üçüncü sınıf öğrencisidir. Çalışmaya katılan öğrencilerle, üzerinde çalışılan önek ve soneklerle ilgili bir öğretim yapılmamıştır. Sadece, öğrencilerin varolan bilgileri incelenerek, önek ve sonek bilgilerini genel dil öğretimi çerçevesinde geliştirmiş olup olmadıkları araştırılmıştır. Önek bilgileri 29 önek kullanılarak değerlendirilmiştir. Seçilen 29 önek 8 gruptan oluşmaktadır. Bunlar sırasıyla; *Zaman yada Sıra, Yer, Derece yada Büyüklük, olumsuzluk, Eleştiri, Tutum, Sayı* bildiren ve *Fiil Yapan* öneklerdir. Sonek bilgileri 21 sonek kullanılarak değerlendirilmiştir. Sonekler 3 gruba ayrılmıştır; *Nötr olmayan sık rastlanan sonekler, Nötr olan seyrek rastlanan sonekler ve Nötr olan sık rastlanan soneklerdir.*

Çalışmanın sonucunda, ileri düzeydeki öğrencilerin önekleri anlamada orta düzeydeki öğrencilerden daha başarılı oldukları görülmüştür. Fakat, sonekleri anlamada her iki grubun başarısı arasında benzerlikler görülmüştür.

Sonuç olarak, her iki grupta bulunan öğrenciler önekli ve sonekli kelimeleri anlamada, kelime köklerinde olduğu gibi başarılı olamamışlardır.Bu yüzden, önek ve soneklerin kelimeleri anlamada öğrencilere faydalı olacağı düşünülerek, sistematik bir şekilde bu konuda yeterli eğitim verilmelidir.

ABSTRACT

The purpose of this thesis is to suggest that affix knowledge (i.e. prefixes and suffixes) must be taken into account as an important factor in helping students to improve their vocabulary at an accelerated pace. The affix knowledge will increase students' ability to deal with words effectively in understanding the meaning of words.

Morphological generalization involves analyzing an unfamiliar word by separating it into its parts (e.g.,prefix, stem, suffix), accessing the meanings of the individual parts, and then attempting to derive the meaning of the whole on the basis of these meanings. It should be kept in mind that students will have a powerful tool for expanding vocabulary beyond those words directly taught or those learned through contextual analysis.

This study investigates whether Turkish EFL learners are successful at making use of prefixes and suffixes to get the meaning of the whole word which includes a known base word and an affix.

Subjects in the study were 41 Turkish students studying for a degree in English Language Teaching at Anadolu University, Education Faculty, ELT Department in Eskişehir, Turkey. 20 of the subjects were prep-class students and 21 of the subjects were third year students.

Subjects in this study did not receive any instruction on the target prefixes and suffixes. The existing knowledge of students on affixes was investigated through the use of two tests and a questionnaire. Prefix knowledge was examined by using 29 prefixed words. There were 8 groups of prefixes; prefixes of *Time or Order, Place, Degree or Size, Negation, Criticism, Attitude, Number* and, *Verb Forming Prefix.*

Suffix knowledge was examined by using 21 suffixed words. There were 3 groups of suffixes; *Nonneutral high-frequency suffixes, Neutral low-frequency suffixes* and *Neutral high-frequency suffixes.*

When the performance of the two groups was analyzed, it was found that in general 'learners at the advanced level'(Group 2) performed better than 'the learners at the intermediate level'(Group 1) in understanding the meaning of prefixed words. But, the performance of both groups can be said to be more or less close to each other in understanding the meaning of suffixed words.

Finally, students in both groups were not found very successful on prefixed and suffixed words as they were on base words.

It can be concluded that language teachers should be prepared to teach the basic rules of productive word-forming processes. Prefixes and suffixes should be taught and developed systematicly since they provide essential clues for word recognition to Turkish EFL learners

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CHAPTER I

INTRODUCTION

"Science, after all, is fundamentally about process; learning why and how things happen is the soul of our discipline. You can't abandon the search for cause in favor of a dry documentation of pattern. You must take risks of uncertainty in order to probe the deeper questions, rather than stopping with sterile security."
(Stephen Jay Gould: 'Darwinism defined: The difference between fact and theory.' DiscoverJanuary 1987; cited in Seliger and Shohamy, 1989)

1.1 Background

The old proverb 'what is new is not true and what is true is not new' is particularly relevant to the history of vocabulary teaching. Much of what is said nowadays on the teaching and learning vocabulary has been around for a very long time; the history and development of vocabulary teaching is, therefore, not so much one of old insights leading to new; it is more a series of dominating ideologies or fashions that have succeeded one another and which sometimes come full circle (Carter and McCarthy, 1988:39).

The teaching of vocabulary to second language learners has long been an area of concern to language teachers. The cause for this concern is most visible when ESL

learners are required to read high school- or university-level texts. A 10 -to 20 -minute reading task for a native speaker becomes a 1- to 2-hour ordeal for the non-native speaker, as the reading process is broken into small fragments of discourse by constant (often excessive) recource to a dictionary.

While frequency counts indicate that a total of about 2000 words is an adequate amount for everyday conversational situations (Celce-Murcia and Rosensweig 1979; cited in Crow,1985:497), it is estimated that the average college student brings to any reading situation a passive vocabulary of approximately 60.000 lexical units, or over 150.000 words. If students were able to acquire 40 lexical units a day, 365 days a year, without forgetting a word, they would still need over four years to achieve native-speaker status.

Traditionally, vocabulary skills were viewed as necessary for understanding the grammatical structures of a language and, ultimately, its literature. The techniques used were mainly dependent upon word lists, root study, derivational affixes, and extensive dictionary use. These methods are still widely used in vocabulary classes today.

Most researchers today agree that one's approach to vocabulary instruction must be based upon active or passive needs of the students. Celce-Murcia and Rosensweig (1979; cited in Crow, 1985:499) propose different methods for teaching active and passive vocabulary, advocating good

dictionary skills, word-stem and word-form knowledge, and extensive reading to build passive vocabulary.

Second language learners can acquire an adequate active vocabulary relatively quickly and easily. However, as Chastain (1976; cited in Crow,1985:499) and others have pointed out, it is a passive knowledge of vocabulary that is needed for reading. If we are to help resolve the vocabulary problems our students face in advanced reading situations, we must find an approach that will allow students to acquire recognition ability for a large number of words in a relatively short period of time.

Vocabulary knowledge has similarly come to be recognized as a critical feature of reading ability. The need to read fluently, in a manner similar to a good L1 reader, would seem to require a knowledge of vocabulary more in line with the larger estimates for first language readers (Beck,Mckeown and Omanson, 1987; Goulden, Nation and Read,1990; cited in Grabe, 1991:380).The consequence of these arguments is that fluent readers need a sound knowledge of language structure and a large recognition vocabulary. As related to reading, using word-formation and affix information to guess word meanings is metacognitive knowledge. The ability to use metacognitive skills effectively is widely recognized as a critical component of skilled reading. In numerous studies it has been shown that good readers are more effective in using metacognitive skills than less fluent readers.

Derwing and Baker (1979; cited in Wysocki and Jenkins,1987:69) state that morphological generalization, or word structure analysis leads to vocabulary acquisition. Morphological generalization involves analyzing an unfamiliar word by separating it into its parts (e.g., prefix, stem, suffix), accessing the meanings of the individual parts, and then attempting to derive the meaning of the whole on the basis of these meanings. If students take advantage of morphological information, they have a powerful generative tool for expanding vocabulary beyond those words directly taught or those learned through contextual analysis.

For learning vocabulary, the study of morphological features is not a desirable end in itself, but knowledge of basic affixes is thought to be helping learners decode words and for that reason has long been a part of vocabulary studies (Francis,1963; cited in Carter and McCarthy, 1988:68).

Affixation can be subdivided into prefixation, suffixation, and a combination of the two (a third type, infixation, is not used in English). Prefixes occur before the root (*un-* in *un*do. *anti-* in *anti*terrorism). Suffixes occur after the root (ly in quickly, s in tempts). Suffixation is more characteristic of the formation of nouns and adjectives, while verbs are more usually formed by prefixation. Prefixes generally do not change the syntactic category of the root or stem to which they are added, while suffixes can and often do change the syntactic category of the newly formed word from that of its nonsuffixed root or stem. The root "is part of the word which carries the basic unextended meaning"

(Townsend, 1968; cited in Salager,1984:41), while the stem is the root plus affixes, if any, but minus inflectional endings. Affixes may be added to a bare root or to a stem (root plus affix [es]).

Affixes differ not only in location in the word but also in function. It is important to distinguish between inflectional and derivational suffixes. Inflectional suffixes do not change the part of speech of the base word to which they are attached. An inflectional suffix is one that is added to a base for a grammatical reason. Derivational suffixes, on the other hand, do change the part of speech of a base word they are added to.(for example, nation and symbol are nouns, but national is an adjective, symbolize is a verb). They add new meanings to the base. They are readily followed by inflectional suffixes, and in many cases more than one derivational suffix can be found in the same word (Falk, 1978:29 and Brockman,1965:23).

Yorkey (1971:51) emphasizes the importance of knowing the characteristics of suffixes with the nonsense sentence. '*Tashism vipped prodoption bortly*'. Learners do not have to know the meaning of the words in order to recognize these parts of speech. Learners have no idea of the meaning of these words. But they do recognize characteristic forms:-*ism* and -*tion* as noun endings, -*ed* as a verb ending, -*ly* as an adverb ending. Learners can improve their vocabulary by learning some of these common suffixes and how they change words from one part of speech to another.

There is some evidence that morphological generalization plays a role in vocabulary development.

Kaye and Sternberg (1982; cited in Wysocki and Jenkins,1987:70) presented college and secondary school native students with 85 low-frequency words that contained common Latin prefixes and stems, and instructed them to select the correct definition from among several partially correct options. Subjects' answers indicated whether they attended to prefixes, stems, both, or neither when defining words. The college students used word parts to derive meanings; junior and senior high school students did not.

Nicol et al.(1984; cited in White et al.,1989:286) found evidence of morphological generalization with prefixed words. Fourth-through sixth-grade native students were given instruction in prefix meanings. Students who had received the instruction correctly answered multiple-choice questions that required them to apply knowledge of prefix meanings to unfamiliar prefixed words, given the meaning of a base word (e.g., "If scrupulous means 'lawful' or 'honest', then unscrupulous means...")

Shepherd(1973; cited in Wysocki and Jenkins,1987:69) using college students, administered several measures that tested knowledge of words and word parts. He found a strong correlation (.62) between knowledge of derivatives that contain an English-word base and knowledge of the word parts of which such derivatives are composed. Thus, a person who had knowledge of the word friend and the affixes un-,

-ly, and -ship would most likely have an understanding of the words unfriendly , frienly, friendship .On the other hand, Shepherd found a weak correlation (.18) between knowledge of derivatives (e.g., confer) that contain a Latin-root base and knowledge of the word parts (con, ferre) of which such derivatives are composed.

In another study that investigated the role of morphology in deriving word meanings, Freyd and Baron (1982; cited in Wysocki and Jenkins,1987:70) trained half of the average word-learners in the use of suffixes, and then retested both trained and untrained students on a list of simple and derived words. They had found that the untrained group did not improve on either type of word and that the trained group improved on the derived words only. So, they concluded that the duration of learners' training was insufficient to practice what they had been taught.

Taken together, the above studies carried out with native speakers of English suggest that morphological generalization may contribute to vocabulary knowledge. In particular, adults can use their knowledge of word stems and affixes to derive word meanings (Kaye & Sternberg, 1982; Shepherd, 1973; cited in Wysocki and Jenkins,1987).

Nurnberg and Rosenblum (1961:79) emphasize the importance of learning prefixes in getting the meaning of the words. For this reason, they call prefixes as mighty ones. The prefix is small but mighty. It is more than a mere addition to a word or root; it is often a dynamic aid in

prying loose the meaning of a word. It is guaranteed that learners' knowledge of words and their ability to remember them will be greatly increased if they master the prefixes.

And that isn't too hard to do, because the method of approaching the word through the prefix has certain definite advantages, among which the following may be found:

1. There are only a small number of important prefixes, less than a hundred compared with thousands of roots.

2. Prefixes are generally safer to handle and more dependable than roots because their meanings have undergone fewer changes.

3. Prefixes are more easily identifiable. Perhaps because of their position at the beginning of the word, their spelling has undergone fewer changes, the principal one being a rather easily recognized change made for the sake of euphony.

An example is found in the word *accord*,where *ad* has been changed to *ac* to blend with the c of cord (For the same reason *in+logical* becomes illogical and *in+press* becomes impress). Such changes in which the last letter of the prefix is changed to blend with the first letter of the root to which it is added are called assimilation, itself an example (*ad+similis*, like).Prefixes and combining forms are those important little syllables coming at the beginning of a word, which often control the destiny of the word. Wedded to a word, a prefix affects it for good for ill, for weal for woe, for better for worse (Nurnberg and Rosenblum, 1961:78).

Often the prefix is the master key that unlocks the meaning of a word. If you meet a word like juxtaposition, you don't need to go beyond the prefix juxta, meaning near, to know that the word contains the idea of nearness or "alongsidedness". All is well with words that begin with the prefix *eu-* . You know immediately that euphony must mean something pleasant, in this case a pleasant sound. All is right with words that begin with *ortho-* . An orthodontist corrects the malformation of the teeth. Learners will find that in some words all they have to know are the prefixes to get at the meaning.

Brown (Thompson, 1958; cited in Nation,1990:169) tabulated the most important prefixes and root elements and compiled a list of 20 prefixes and 14 root elements which pertain to over 14,000 words in Webster's Collegiate Dictionary and a projected 100,000 words in an unabridged dictionary.

There is difference of opinion as to whether such knowledge leads to language acquisition. A knowledge of prefixes and roots is a morphological tool, which requires monitoring before the learner can put it to use. Krashen (1979, cited in Schleifer, 1985:14) suggests that the employment of this kind of knowledge is time-consuming and probably does not lead to language acquisition. Beebe (1979, cited in Schleifer, 1985:15), however, states that "conscious construction" exists in foreign - language acquisition and probably aids it, because "the analysis of structure involved in the learning would automatically increase the probability

that input containing the structure would become intake." Thus, a knowledge of prefixes and roots could increase the learner's ability to infer meaning from a text. This, according to Carton and Castiglione (1979, cited in Schleifer, 1985:15) could indirectly lead to acquisition. "Inferencing is relevant to the acquisition of productive skills only to the extent that receptive linguistic competence may eventually facilitate productive linguistic skills."

It has been presumed that vocabulary can be acquired through reading and practising other language skills. However, this is not adequate; learners must be taught the structure of words regularly and systematically. They should have a clear understanding of the component units of words and how these units are put together to form new meanings. Words are elusive, and unless we understand their structure, by analyzing them into their component units, we cannot fix them permanently in our minds (Al-Kufaishi, 1988:42).

One of the basic facts about the English language is that it has borrowed words from almost all the world's languages and has adapted the borrowed words to its own uses. The present English elements that came from Greek and Latin words constitute 70 percent of all English words (Nurnberg and Rosenblum, 1961:45). It seems proper, then, to approach the vocabulary problem by studying these vital classical elements in the English language.

Students should also be equipped with an understanding of the principles of word construction - how the words of the English language are constructed of smaller

elements and how they can be taken apart into their component units. An understanding of the structure of English words will facilitate learning and enhance recall.

Randal (1979:3) suggests five pointers to improve vocabulary. Try to guess the meaning of the word from the way it is used. Look it up. Dig the meaning out by the roots. Get the powerpul prefixes under your belt. Put your new words to work at once. He states that the root is the basic part of the word - its origin (Most of the roots come from Latin and Greek words at least 2,000 years old - which come from even earlier Indo-European tongues!).

Learning the roots:1) Helps us remember words. 2) Gives us a deeper understanding of the words we already know. And 3) allows us to pick up whole families of new words at a time. That's why learning the root is the most important part of going to the dictionary. The root gives the basic clue to the meaning of a word. But there is another important basic clue - the prefix. A prefix is the part that is sometimes attached to the front of a word. There aren't many - less than 100 major prefixes - and you will learn them in no time at all just by becoming more aware of the meanings of words you already know.

Consequently, Yorkey (1971:47) agrees the mentioned ideas above.stating that there is a very clear relationship between vocabulary size and professional success. To a certain extent, the same is probably true for students of English as another language. Learning the use and meaning of

words in English can be made easier, and even enjoyable, if students understand something about one way in which many English words are formed. The English language makes frequent use of this method of word formation. By learning only a few prefixes and suffixes, students will be able to recognize or guess the meaning of hundreds of English words

For all the reasons mentioned above, the considerable emphasis on the use of prefixes and suffixes should be given in EFL classes, since they are the keys to many thousand words.

1.2 Aim and Scope

A survey of literature supports the benefits of knowing the meanings of prefixes and suffixes. White et. al. (1989:294) stated that morphological analysis requires three kinds of knowledge.a) knowledge of prefixes and their meanings b) knowledge of suffixes and their meanings c) knowledge of the meaning of the base words.

Derwing and Baker (1979; cited in Wysocki and Jenkins, 1987:69) emphasized that morphological generalization involves analyzing an unfamiliar word by separating it into its parts (prefix, stem, suffix), accessing the meanings of the individual parts, and then attempting to derive the meaning of the whole on the basis of these meanings. Humes (1976:11), furthermore, conveys that providing instruction and practice on the meaning and use of productive affixes and roots facilitates vocabulary development.

Yorkey (1971:47) agreed that the English language makes frequent use of affixes. By learning only a few prefixes and suffixes, students will be able to recognize or guess the meaning of hundreds of English words.

Dividing a word into its recognizable units can accomplish the following:

1.Let light in on a familiar word. It makes you see it as you have never seen it before.

2.Make a long unfamiliar word seem less formidable. You handle one part at a time and so conquer the whole word.

3.Help you remember the word, because you associate other similary rooted words with it.

4.help you spell the word correctly.

As mentioned in the previous section, it is seen beneficial to learn the meanings of prefixes and suffixes and students are assumed to get the meaning of the whole words by making use of affixes without any help from contextual information. Therefore, in this study, prefixed and suffixed items were presented as single words to see the effect of affix information rather than any contextual information. The studies mentioned in previous section were carried out with natives or SLA learners. This study aims at finding the acquisition level of affixes by Turkish EFL Learners. Subjects in this study did not receive any instruction on the target prefixes and suffixes. The existing knowledge of students on prefixes and suffixes was investigated.

This study is limited to;

1- 20 intermediate level students in prep-classes and 21 advanced third year students at Anadolu University, Education Faculty, ELT Department in 1994/95 academic year.

2- selected 29 prefixes and 21 suffixes within words (the base words.commonly known by students).(See section 3.2).

1.3 Statement of Research Question

This study investigates whether Turkish EFL learners are successful at making use of prefixes and suffixes to get the meaning of the whole word which includes a known base word and an affix.

In order to achieve this objective the following questions are to be answered.

1. Does the proficiency level have an influence on the use of affixes ?

2. What type of prefixes and suffixes are acquired in the earlier levels of foreign language proficiency and which of them are acquired in the later stages ?

1.4 Definitions

1.4.1 Prefix : A prefix is a combination of letters placed at the beginning of a word or word root to modify its meaning.

1.4.2 Suffix : A suffix is a combination of letters added at the end of a word or word root to indicate the function of the word in a sentence or to form a new word (Sezer and

Et.al.,1986). Some suffixes provide clear and predictable meanings that facilitate both encoding and decoding words. For example, -est means "the most" (e.g.,greenest), while -er may mean either "more" (e.g.,softer) or "a person who" (e.g., writer). Additionally, many suffixes are helpful in vocabulary decoding because they indicate part of speech; e.g., -ment and -ness are nominal suffixes, while -ful and -less are adjectival suffixes (Humes, 1976:30).

1.4.2.1 Classes of Derivational Suffixes

Current linguistic theory recognizes two classes of derivational suffixes whose distinguishing characteristics suggest that class of suffix might affect acquisition (Aronoff, 1976; Kiparsky,1982,1983; Lieber,1981; Selkirk,1982 cited in Tyler and Nagy, 1989).Neutral suffixes, such as *-ness, -er, -ize,* and *-ment,* have several properties which could make them relatively easy to learn. They attach to independent words; so, for example, when the suffix *-er,* is removed from *owner,* the result is an independent word, *own.* Neutral suffixes do not cause changes of stress or vowel quality in the word to which they are added. Usually, although not always, the meaning of a word formed from Neutral suffixes is transparently related to that of the stem.

Nonneutral suffixes, such as *-ity, -ify, -ous,* or *-ive,* differ from Neutral suffixes in several respects. They often attach to bound morphemes (stems which are not words in their own right); hence, taking off the *-ify* in *gratify* or *quantify* fails to produce an independent word. Nonneutral

suffixes tend to cause changes of stress and vowel quality in the stem to which they attach, as exemplified by the difference in the pronunciation of the a in profane and profanity. Finally, the meanings of words formed with Nonneutral suffixes are often not transparently related to their stems, as can be seen by removing the suffixes from *emergency, nativity, confident, virtual,* or *faction* (Tyler and Nagy, 1989).

1.4.3 Root or Stem : A root or stem carries the basic meaning or action of a word. The root can add on prefixes and suffixes to take on many forms. The Greek word PODOS, for example, means foot. In English, the root POD appears in TRIPOD (a support with three legs). PODIATRIST (a foot doctor) and CHIROPODIST (a foot doctor).

Sometimes a word stem can be used by itself, such as the word *act* or *form* .Most often a word stem can be used only in combination with a prefix or a suffix. For example, the word stem dict has a root meaning of "to say or to speak," but it is never used alone. Prefixes can be used before the stem (*pre*dict, *contra*dict), or suffixes added after the stem (dic*tion*, dict*ator*). Humes (1976) comments that knowing the meaning of the root *dict* facilitates comprehension and production of words like diction, edict, predict, dictaphone, dictionary, dictator, dictation. Recognizing a root within a word with multiple affixes facilitates sorting out the parts of the word for individual analysis (e.g., unpredictability - the root dict and

the prefixes un- and pre- with the suffixes -able and -ity). If students learn the most common of these, They will be able to analyze the meaning of many words without to look them up in a dictionary (Yorkey,1971).

1.4.4 Morphology : The term morphology, which literally means 'the study of forms' was originally used in biology, but, since the mid nineteenth century, has also been used to describe the type of investigation which analyzes all basic 'elements' which are used in a language.

1.4.5 Morpheme : Elements in the form of a linguistic message are more technically known as morphemes. The definition of a morpheme is "a minimal unit of meaning or grammatical function". For example; the word reopened in the sentence 'The police reopened the investigation' consists of three morphemes. open, re- (meaning 'again'), and -ed (indicating past tense).

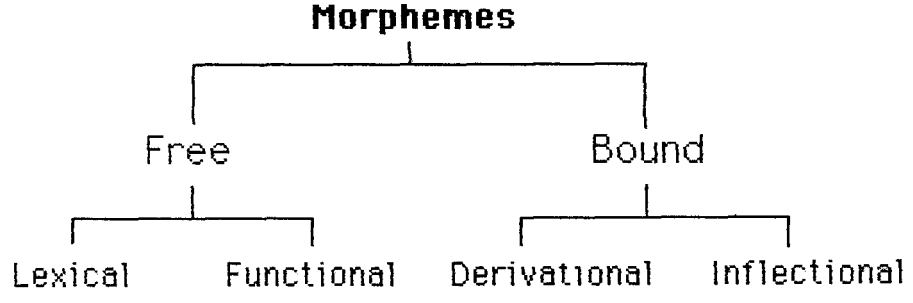

Figure 1. : Categories of Morphemes (adapted from Yule,1985)

A broad distinction between two types of morphemes can be made. Free and bound morphemes (Yule,1985).

1.4.5.1 Free Morphemes : They are morphemes which can stand by themselves as single words, e.g., open and tour. They fall into two categories. The first category is that set of ordinary nouns, adjectives and verbs which are thought as the words which carry the 'content' of messages conveyed are called lexical morphemes.

The other group of free morphemes are called functional morphemes such as conjunctions, prepositions, articles and pronouns.

1.4.5.2 Bound Morphemes : They are morphemes which cannot normally stand alone, but which are typically attached to another form. e.g. re-, -ist, -ed, -s. All affixes in English are bound morphemes. The set of affixes can also be divided into two types. One type are the derivational morphemes. These are used to make new words in the language and are often used to make words of a different grammatical category from the stem. A list of derivational morphemes will include suffixes and prefixes.

The second set of bound morphemes contains what are called inflectional morphemes. These are not used to produce new words in the English language, but rather to indicate aspects of the grammatical function of a word (Yule,1985).

The linguist's use of terms such as free, bound, root, affix, prefix, suffix, inflectional, and derivational is necessary for a complete, clear, and explicit description of word formation in human languages. Such terms provide a means through which we can fully appreciate the complexity

of the knowledge all speakers have about their language. It should be apparent that every speaker of English knows the widely differing properties of the morphemes of the language (Falk, 1978).

CHAPTER II

REVIEW OF LITERATURE

2.1 Introduction

Skilled reading depends not just on knowing many words but on being able to deal effectively with new ones. The nature of language is such that one cannot expect to have prior knowledge of all the words one will encounter in a text. It is clear that no program of vocabulary instruction could attempt to cover all the new words a student will read. What students need, then, is not just knowledge of many words, but strategies for handling new words in text (Mason, Herman, & Au, 1990; cited in Nagy and et al.,1991:5)

Students encounter increasing numbers of words in print that are not in their oral vocabulary; decoding strategies alone will not provide information about their meaning. However, the majority of new words in text are related to more familiar ones through prefixation and suffixation. If the reader can recognize the familiar parts and understand how these parts fit together, the meaning of words will not be difficult to understand. Hence, students' knowledge of morphology -- that is, the ability to gain information about the meaning, pronunciation, and part of speech of new words from their prefixes, roots, and suffixes -- determines in part how effectively they will be able to deal with new words.

The vast majority of long words have some discernable morphological structure; it is difficult to find a word of more than eight letters that does not contain some recognizable prefix, stem, or suffix that gives at least partial information about its meaning and pronunciation. Such considerations have served to highlight morphological knowledge as an important component of vocabulary growth and skilled reading. In addition, there has been shown to be a relationship between general verbal ability and the use of morphology in learning new words and in the comprehension of sentences containing suffixed words (Tyler & Nagy,1990, cited in Nagy,1991:5)

Humes (1976:10-11) considers the knowledge of the meaning of affixes and roots as an important section of the design for a vocabulary development program. The internal structure of words may frequently be used to determine the meaning of words encountered in reading and, less commonly, in listening. Partial meanings of affixes and compound words may be grasped if known root words or component words within them can be recognized. It also facilitates generating new words. Additionally, suffixes generally indicate the part of speech, limiting the range of possible meaning. Thus, recognizing this function of a suffix is utilitarian. Providing instruction and practice on the meaning and use of productive affixes and roots facilitates vocabulary development.

2.2 Why the Field Ignored Research in Vocabulary in the Past

Among the various aspects of second language education, until very recently vocabulary has played a secondary role. Even in the late 1970s, when the "communicative approach" came to the fore as an alternative to the structural syllabus, vocabulary continued to play a marginal role, the only difference being that now it was subordinated to the teaching of communitive functions. The underlying assumption was that words and their meanings did not need to be taught explicitly since, it was claimed, learners will "pick up" vocabulary indirectly while engaged in grammatical or communicative activities or while reading. In short, lexical learning was seen as taking place automatically or unconsciously as a cumulative by-product of other linguistic learning (Maiguashca,1993:84)

Allen (1983:3) summarizes the reasons for the general neglect of vocabulary as follows :

1. Many who prepared teachers felt that grammar should be emphasized more than vocabulary, because vocabulary was already being given too much time in language classrooms.

2. Specialists in methodology feared students would make mistakes in sentence construction if too many words were learned before the basic grammar had been mastered. Consequently, teachers were led to believe it was best not to teach much vocabulary.

3. Some who gave advice to teachers seemed to be saying that word meanings can be learned only through experience, that they cannot be adequately taught in a classroom. As a result, little attention was directed to techniques for vocabulary teaching.

Various developments have taken place during the last twenty years in the area of vocabulary research within the field of second language education. Vocabulary has been the "poor relation" of language teaching in the 1960s and 1970s, it has moved during the 1980s into the "guest of honor" position. As for the 1990s, while there is no doubt that great strides have been made, it is also convincing that there are still great challanges ahead for those who do research in the area of vocabulary (Maiguashca, 1993:83).

Today, lexis can no longer be regarded as a neglected aspect of language teaching. The study of vocabulary at present is perhaps the fastest growing area of second language education in terms of research output and publications.

2.3 What Does It Mean to Know a Word?

To move away from seeing vocabulary as lists of items to be learnt and to move towards the learner raises the question of precisely what it means to 'learn' vocabulary. Richards (1976, cited in Carter,1988) brings the characterization of lexical competence down to eight broad assumptions:

1. Native speakers continue to expand their vocabulary in adulthood. Little is known about the average language-user's vocabulary but anything from 20.000 - 100.000 words could be within a person's receptive vocabulary.

2. Knowing a word means knowing the degree of probability of encountering it and the sorts of words most likely to be found associated with it.

3. Knowing its limitations of use according to function and situation (temporal, social, geographical, field, mode, etc.).

4. Knowing its syntactic behaviour.

5. Knowing its underlying forms and derivations.

6. Knowing its place in a network of associations with other words in the language.

7. Knowing its semantic value.

8. Knowing its different meanings.

Learning a foreign-language word, like getting to know someone, is a process that involves several stages.

Dale (cited in Krakowian 1984:27) suggest that learning a foreign - language word might take place in the following four stage :

1. I have never seen the word,

2. I have heard of it, but I don't know what it means,

3. I recognize it in context, it has something to do with...., and

4. I know the word in one or several of its meanings.

Learning a foreign - language word begins only when we recognize it as one we have met before. Krakowian (1984:27) implies that the process of learning a word does not stop with the learning of "one or several of its meanings," but continues until we learn how to use it correctly in achieving communication goals.

Harmer (1991:158) states that knowing a word means far more than just understanding one of its meanings. By being aware students will be more receptive to the contextual behaviour of words when they first see them in texts, and they will be better able to manipulate both the meanings and forms of the word

Harmer (1991:158) summarizes the requirements of 'knowing a word' in the following figure. In Figure 2, the knowledge of prefixes and suffixes is seen crucial to get the meanings of words. Knowing the meanings of the parts, learners will be able to see a connection between the meaning of the parts and the dictionary meaning of the new word.

As it is seen , there are many ways to get the meanings of words. But, knowledge of prefixes and suffixes is one of the indispensible elements to reach the meanings of words and it is seen important in the language learning process.

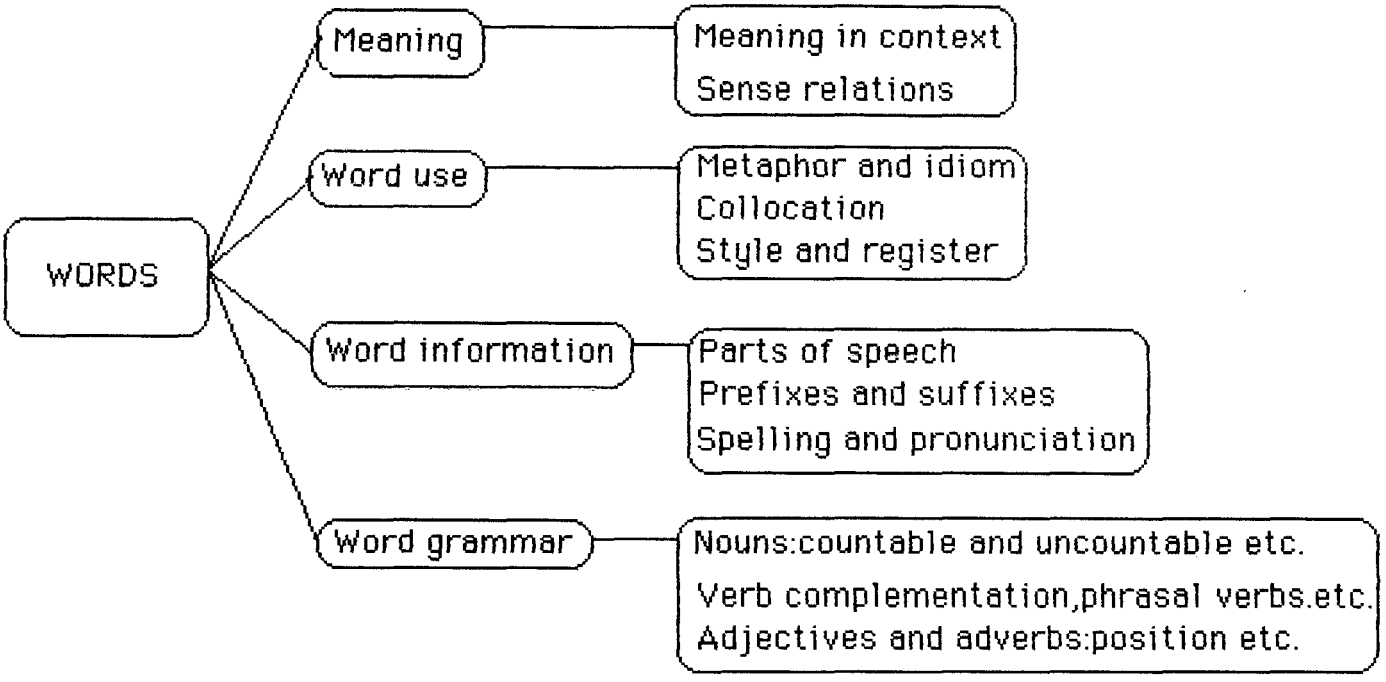

Figure 2: Requirements of "Knowing a word"
Adapted from Harmer (1991:158)

2.4 Psycholinguistic Evidence on Affixes

There is abundant evidence from studies of lexical access and structure that, at the very least, morphological structure is lexically represented. Some psycholinguists have even argued that the evidence indicates that only bases appear in the lexicon, with complex forms being produced and comprehended via the application of morphological rules. Others have suggested that, while affixed forms may be lexically available, it is the stem which is the head of the lexical entry, and hence the basis for lexical access (Cutler & et. al., 1985).

The evidence for separate processing of stem and affix is the strongest in the case of inflections, such as tense or

number marking. There is abundant evidence that inflected words do not have lexical representation independent of their base form, and that base word and inflection are separated in language processing. (Gibson and Guinet 1971; Rosenberg et al.1966; cited in Cutler & et al.,1985)

There is no indication that words with derivational suffixes are in any way more difficult than monomorphemic words. However, there is evidence that the morphological structure of derived words is computed as they are understood. For instance, Manelis and Tharp (1977; cited in Cutler & et al.,1985) found that subjects took longer to decide whether two letter strings were both words if one was suffixed and the other not (printer/slander) than if both were suffixed (printer/drifter) or both simple (slander/blister). Similarly, understanding a derived word produces facilitation for understanding its morphological relatives.

The psycholinguistic evidence on the processing of prefixes is in some ways similar to the evidence on suffixed words. Simply recognizing prefixed words is no more difficult than recognizing monomorphemic words. But recognizing a prefixed word produces facilitation for its stem. Taft and Forster (1975; cited in Cutler & et. al.,1985) claimed that the process of recognizing a prefixed word necessarily required stripping the prefix from the stem, since lexical access could only proceed via a stem representation.

The most basic conclusion to be drawn from psycholinguistic studies of affixation is that there is a

processing distinction between stem and affix; both types of information are necessary but they must be separable. The information carried by affixes is of a different nature from that carried by stems.

2.5 The Model of Morphological Analysis

White et.al (1989) proposed a model of the process of morphological analysis. Students engage in a three stage process while using word-part clues to derive the meaning of unfamiliar affixed words.

Stage 0

The student who is reading along in a text does not engage in morphological analysis unless two conditions are met. First, s/he must have encountered an unfamiliar word. Second, the student must be motivated to discover the meaning of the unfamiliar word.

Stage 1

The reader initially looks for and removes the prefix, if any; otherwise, s/he looks for a suffix and removes it. The reader then determines the meaning of the affix.

Stage 2

The reader looks at the remaining base word, and tries to retrieve its meaning from semantic memory using available context cues. If the reader cannot recognize a base word, then s/he looks for and removes any remaining suffix(es) and tries again to identify a familiar base. Thus, Stages 1 and 2 may be repeated for multiply affixed words.

If the reader cannot identify a base word in Stage 2 and has already attempted to remove any additional suffixes, s/he aborts the analysis.

Stage 3

Finally, the reader combines the meaning of the base word with the meaning of the affix(es). For instance, for the meaning of *unbelievable*, one would add "not" (from the prefix *un-*) to "able to be believed" (from the root *believe* plus the suffix *-able*, which means roughly "able to be Xed," where X is the meaning of the verb).

To successfully complete all three stages of morphological analysis requires three kinds of knowledge:

(a)knowledge of prefixes and their meanings;

(b)knowledge of suffixes and their meanings, including, perhaps, knowledge of associated changes in spelling and pronunciation; and

(c)knowledge of the meaning of the base or root word.

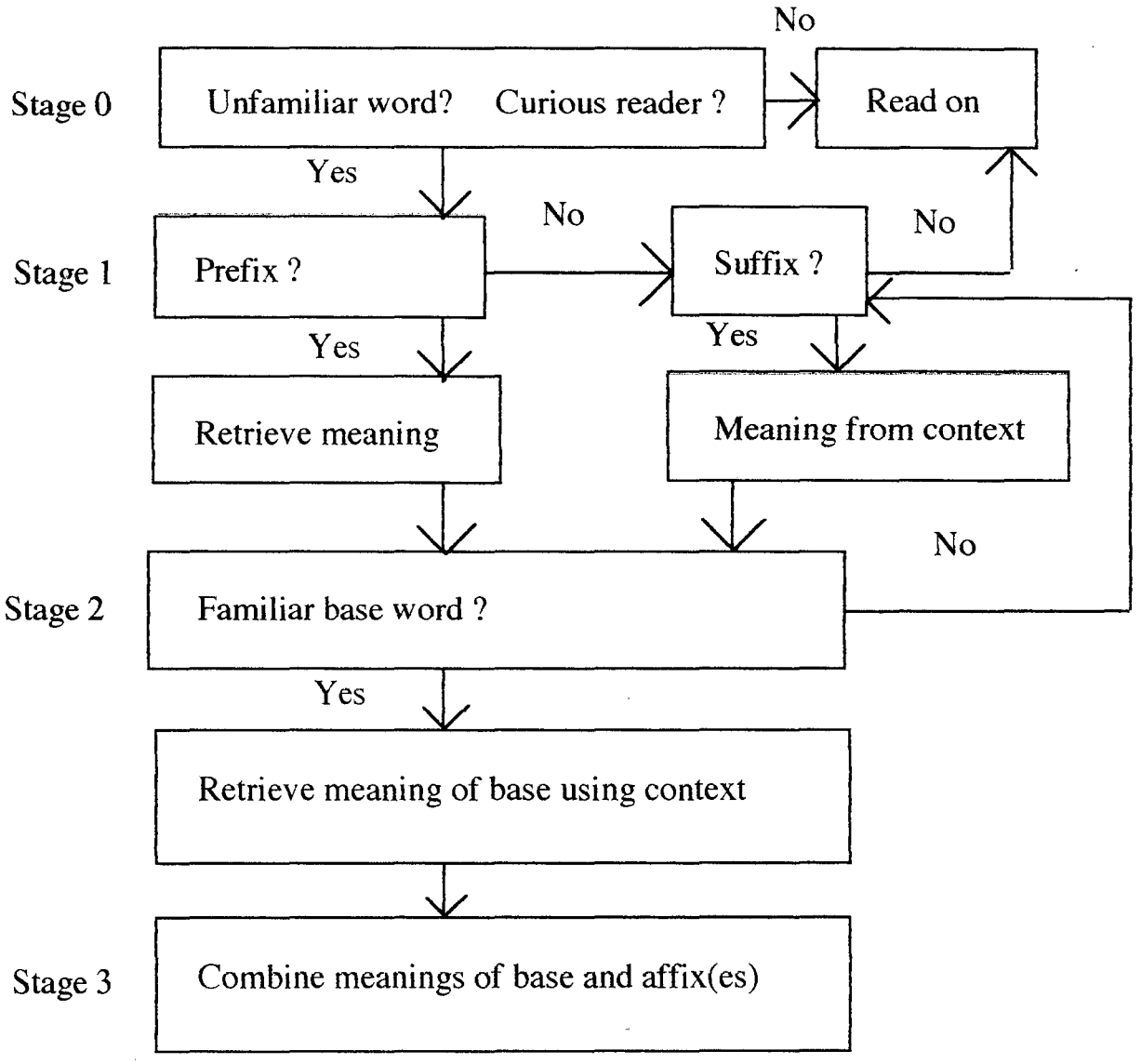

Figure : 3 Flowchart representing the model of morphological analysis (White et al., 1989:292)

2.6 A Word of Warning about Prefixes and Suffixes

In the study of word formation, when it is said that something is "added" to a base, it is not necessarily meant that at one time there was the base, and then somebody decided to attach something to it and make a new word, any more than a chemist means that hydrogen has been "added" to oxygen to make water. The chemist just states that water contains both hydrogen and oxygen. It is sometimes convenient if we talk about it as though one of these elements had been added to the other. In language, we take words the way we find them, especially if we are learners of the language. We cannot set about combining bases, prefixes, and suffixes, like a cook in the kitchen, to make new words. Nevertheless, it helps a great deal if we can take the words apart and see what they have in them, even though we know that sometimes words that look related are not. The learner of English must never attempt to create new forms, but should use only those that s/he has heard native speakers say or has found in his reading (Brockman, 1965).

White et.al.(1989) emphasized that the greatest obstacle that students will face in analyzing affixed words is the misleading analysis. Linguists and vocabulary theorists are fond of presenting examples of words whose meanings cannot be accessed through morphological analysis alone, such as *unassuming*, which means "modest" rather than "not assuming", and *indelicate,* which means "offensive" rather than "not fragile".

These examples show that the meaning of an affixed word can be more than just the sum of its parts. On the contrary, most affixed words-probably at least 80% are what their parts suggest.(Nagy and Anderson, 1984; cited in white et.al., 1989) As mentioned in section 1.1 and will be mentioned in section 2.7, quiet a number of affixes are detectable and facilitate understanding the meaning of words.

2.7 Researh on Affixation

A survey of literature supports that morphological generalization plays a role in vocabulary development. There are studies showing evidence on the benefits of morphological information.

Strader and Joy (1980) determined the effects of three different methods of vocabulary instruction on college students. The first approach involved highly structured vocabulary study with emphasis on Greek and Latin combining forms (prefixes, roots, and suffixes). Students were encouraged to internalize the meanings of these combining forms in order to be able to determine more appropriately the meanings of the thousands of additional words in which they occur. A second group studied vocabulary in a less structured manner. They did not study the combining forms. Words were discussed as they were used in class. A third group did no vocabulary study. Very limited attention was given to contextual meanings of words as they occurred in reading material.

The Joy Combining Forms Test was administered to the entire sample. This test consisted of 30 multiple choice items. Each item presented single word without context. Students who received the direct, frequent, and highly structured instruction in vocabulary had higher scores on a measure designed to test knowledge of combining forms. Those students who did not receive the highly structured vocabulary instruction scored significantly lower.

Strader and Joy (1980) concluded that combining forms are important vocabulary tools, and perhaps a highly structured vocabulary teaching method is advisable for remedial college students.

Wysocki and Jenkins (1987) investigated the relationship between morphological generalization and vocabulary size. They focused on morphological generalization with derivational suffixes. The purpose of the study was to investigate students' use of contextual and morphological information to derive meanings for unfamiliar words.

They selected 24 word pairs. The words within each pair were designated randomly as a stimulus and a transfer word. A multiple-choice pretest was constructed for the 24 transfer words and administered to all students. The 12 words missed most frequently by all eighth-grade subjects were selected as the target words. Students were randomly assigned within classrooms to receive stimulus word training. Training consisted of fast-paced lessons with whole-group.

Target vocabulary was practised both in isolation and in sentence context. They were concerned that the stimulus word training itself would provide a strong suggestion that the students should use the stimulus words to help them on the morphological generalization tests. Later students were posttested, in weak and strong contexts, on words that were morphologically related to both sets of training words.

Strong context helped students at each grade level to infer meanings of unfamiliar words, but older students (in the sixth and eighth grades) derived more help from context than younger students. Students in the three grade levels differed significantly in their ability to use morphological information when tested in weak context. The sixth and eighth grade students also showed comparable levels of morphological generalization, and both surpassed the level achieved by fourth grade students. However, subjects did not combine these two information sources to get higher vocabulary scores than obtained with either source by itself. Their study provides some evidence for the role of morphological generalization with derivational suffixes in accounting for the large growth in vocabulary.

Tyler and Nagy (1990) made a study on the use of derivational morphology. They focused on differences in readers' use of derivationally suffixed and non-suffixed words to establish sentence-level meaning and syntax while reading sentences for comprehension. They used a reading comprehension task which isolated the independent semantic

and syntactic contributions of target words. Subjects were tested for their use of syntactic and semantic information from morphologically complex and simple words in establishing overall sentence meaning. Subjects were asked to choose which of four choices constituted the best paraphrase for a target sentence. Correct answer was interpreted as evidence that the subject understood and used both the lexical-semantic and syntactic information of the target word.

Their findings suggest that derivationally suffixed words provide both an advantage and a disadvantage to readers. The advantage is in terms of semantic accessing; the disadvantage is in terms of syntactic accuracy. Even though derivational suffixes provide an overt marking of part of speech, subjects made more syntactic errors on suffixed words than non-suffixed words. The subjects appeared to use the stem morpheme of a derivationally suffixed word to establish overall sentence meaning but often did not use the syntactic information contained in the derivational suffix. The results of their study offer strong support for a model of the lexicon in which the morpheme plays a key organizing and accessing role.

Nagy and et. al.(1991) investigated students' acquisition of familiar English derivational suffixes. Their research focused on the syntactic function of these suffixes- how the suffix affects the meaning. Their primary goal was to develop a task that would assess the relationship between this knowledge and measures of general verbal ability in a

meaningful way. They limited their choice of suffixes to neutral suffixes, that is, suffixes that are added only to free-standing words. They used novel (or very low-frequency) but well-formed suffixed words with high-frequency stems.20 rare suffixed words were selected. For each suffixed word a multiple-choice item was created to assess the students knowledge of how the suffix governed the use of that word in the sentence. For each such item, a corresponding 'stem item' was constructed using a frequent, non-suffixed word of the same part of speech that made sense in the same sentence context. Subjects' scores for the derivative versions of items are on the average from 10% to 20% lower than their scores on the stem versions of items. Some students had serious problems with these suffixes. Their findings suggest that knowledge of morphology appears to be a distinct component of verbal ability.

Tyler and Nagy (1989) assessed different aspects of students' knowledge of English derivational suffixes. Children appear to develop a rudimentary knowledge of derivational morphology - the ability to recognize a familiar stem in a derivative - before fourth grade. Knowledge of the syntactic properties of derivational suffixes appears to increase through eighth grade. Knowledge of the distributional properties of suffixes (e.g., *-ness* attaches to adjectives but not to verbs, so *quietness* is a fine word in English while *playness* is not) also increases, with sixth-grade students showing an increase in overgeneralization

errors parallel to that found for inflectional suffixes in much younger children. Results from this study confirm that different aspects of knowledge about suffixes are acquired at different times. The results are consistent with the hypothesis that children first acquire the ability to recognize familiar base morphemes in unfamiliar derived forms, that knowledge of syntactic properties of suffixes may develop more slowly, and that knowledge of distributional constraints on suffixes reflects the most sophisticated level of knowledge, and the last to be acquired.

White et. al.(1989) examined students' knowledge of prefixes, suffixes and root words. The resulting estimates support the practice of direct morphological instruction and help to explain the rapid growth in vocabulary. They stated that the instruction should be based on knowledge of frequently occurring affixes, and strategic and contextualized, preparing students to use morphological cues and to deal with unanalyzable words

The studies mentioned so far and many others are designed for native or SLA learners. Studies on the affix knowledge of Turkish EFL learners have not been found. Therefore, this study aims at considering the importance of the evaluation of using affix knowledge by Turkish EFL learners in getting the meaning of words. The previous studies support the instruction on affixes for a rapid growth in vocabulary. But, Maiguashca (1993:84) notes that lexical learning is seen as taking place automatically or

unconsciously, as a cumulative by-product of other linguistic learning. According to the mental-effort hypothesis, which predicts that the retention of inferred meanings is higher than the retention of given word meanings, inferring the L2 meaning should be preferred in vocabulary learning. In fact, experiments conducted by Hulstijn (1992; cited in Scherfer,1993:1143) allow the conclusion that in incidental learning, words are better remembered when their meaning has been inferred. Haastrup's (1991; cited in Scherfer,1993:1143) hypothesis support the view that "if words are acquired through inferencing plus feedback they are better retained than words acquired through presentation followed by formal practice."

One of the questions discussed in this domain is whether it is necessary to make direct efforts by analyzing explicitly the word formation patterns of the L2-words through specific instruction, or whether L2-words could and should better be learned indirectly, incidentally with the result of general language instruction. Therefore, the aim of this study is to find out to what extent affix learning takes place unconsciously or incidentally. by Turkish EFL learners.

CHAPTER III

METHODOLOGY

An important domain of the lexical system of English that yields itself to systematic study and logical organization is the area of word formation. From a practical point of view, word formation study not only shows how new words are manufactured, it also tells language teachers and their students much about the make-up of tens of thousands of current words in the lexicon of English. To a student attempting to increase his English vocabulary, the study of stems, prefixes, and suffixes is a major tool (Sezer and Et.al.,1986).

The present study was undertaken because of the evidence of the effectiveness of knowledge of prefixes and suffixes in getting the meaning of words and the scarcity of research in this area in EFL classes The purpose of the study was to determine whether knowing prefixes and suffixes would have any effect on students' ability to assign meaning to words. Subjects did not receive any instruction on the target prefixes and suffixes. The existing knowledge of students on prefixes and suffixes were investigated.This study is expected to reveal the fact that the use of affix knowledge in understanding the meaning of a word should be taken into account as an important strategy when dealing with words because they may frequently be used to determine the meaning of words and facilitate vocabulary development.

3.1 Subjects

The subjects were 41 Turkish students studying for a degree in English Language Teaching at Anadolu University, Education Faculty, ELT Department in Eskişehir, Turkey.

20 of the subjects were prep-class students (Group 1) and 21 of the subjects were third year students (Group 2). Students in Group 1 had been classified as 'intermediate' at the start of the 1994-95 academic year. In other words, group 1 was already established by the ELT Department's level assignment procedures (Placement Test). Third year students are at the ' advanced level' since they completed 4 years of education including preparatory class. Also students attending prep classes receieve a planned and intensive program on the English language.

All the subjects were between the ages 17 and 25. And 34.of the subjects were females and 7 were males. But, age and sex differences of the subjects were not taken into account in the study.

3.2 Materials

In this study, two tests and a questionnaire were used as the bases of the materials. These are Word Determining Vocabulary Test (W.D.V.T.,Test 1), and Affixed Vocabulary Test (A.V.T.,Test 2). A common type of internal consistency reliability referred to as split-half reliability was used to measure the reliability of Test 2.(Gay, 1987; Tekin, 1991) The value of reliability of the Test 2 in the study was

estimated as 0.78 which is considered very good according to Ural and et.al.(1980). The preparation of the tests are as follows.

To determine the meaning of each base word, prefixed word and suffixed word presented in both tests, the following dictionaries were used as the primary reference in the written order. Oxford Advanced Learner's Dictionary of Current English (1985), Collins Cobuild Dictionary (1988) and The New Lexicon Webster's Dictionary (1990).If more than one definition for a word was written or listed in the dictionary used, a single meaning was selected as being most familiar and understandable.

The first task in the study was to obtain an estimate of students' knowledge of base word meanings. Because, even if students know the meanings of prefixes and suffixes attached to a certain word, they wouldn't be able to detect the meaning of base word. For instance, knowing that re- means "again" will not help a student with rediscover if he or she does not know the meaning of discover.(White and et al.,1989). Specificially, it may be difficult for students to utilize their knowledge of prefixes and suffixes when the stems involved are unfamiliar or only superficially known

So, in the Word Determining Vocabulary Test, main focus was on unaffixed base words (which students would be more likely to know). The words chosen were the ones that can possibly take prefixes and suffixes. This test aimed to choose the base words that are familiar to the students.

The aim of the Affixed Vocabulary Test is to measure the level of affix knowledge of learners in two different proficiency level. However, 16 of the words included in Word Determining Vocabulary Test were themselves suffixed words (e.g. *payment*). Those 16 suffixed words were among the base words selected for the first test and they were chosen for adding prefixes (e.g., *non-payment*). That is, selected suffixed word *payment* is appropriate to use with the prefix *-non*. In other words, the suffix *-ment* was not removed from the word *pay*. It was taken as *payment*. That's why those 16 suffixed words were included in the Word Determining Vocabulary Test.

For this test of base word meanings, a sample of 135 words were extracted. All affixes (except the suffixes of above mentioned 16 words) were stripped off the words. 85 base words out of 135 words were appropriate to take target prefixes and the remaining 50 words were appropriate to take target suffixes.The word determining vocabulary test consisted of 135 five-alternative multiple-choice vocabulary items.

Nagy and Anderson (1984, cited in White and et al.,1989) found that an estimated 84 percent of the prefixed words and 86 percent of the derivationally suffixed words in printed school English have a semantically transparent relationship to their immediate ancestor. By semantically transparent, they mean that the affixed word would be understandable for a student, given knowledge of the base word to which the affix was attached. For example, a reader

who knew the meaning of *understanding* would comprehend *misunderstanding*

Prefixes in the study were chosen through examining the following sources. The World Book of Word Power (1992), MacMillan Student's Dictionary (1985), How to Build a Better Vocabulary (1961), Tests for Proficiency in English (1988), The Key to English Vocabulary (1965), Etymology of English (1990), Study Skills for Reading (1984), and .Study Skills for Students of English (1971). So, The most common and semantically transparent prefixes were diagnosed among the above mentioned sources.

While choosing the target prefixes, the focus was on semantically transparent sample words. 29 semantically transparent prefixes were extracted. For instance, in the word *Predict*, *pre-* is a prefix. When the prefix is removed, the remaining part *dict* has no meaning in itself. It can not stand by itself but, it should be attached to other bound morphemes. Such prefixed words were excluded from the study. So,(free) lexical morphemes were selected in the study. Consider the word *Coauthor* .When the prefix *co-* is removed, the remaining word *Author* has a meaning in itself. That is, it can stand by itself without attaching to other bound morphemes.

Affixed vocabulary test was prepared according to the results of the word determining vocabulary test. 70 percent and above 70 percent correctly answered items by subjects were chosen for the affixed test. Those base words were added prefixes and suffixes.Then, 50 five-alternative multiple-choice vocabulary items were developed.

The second test (Affixed Vocabulary Test) consisted of 29 prefixed words in random order. Prefixes were grouped according to the criteria given in Davies and Whitney (1984), and Sezer and et al.,(1986). Prefixes fell into eight groups: *Time or Order, Place, Degree or Size, Negation, Criticism, Attitude, Number* and, *Verb Forming Prefix*. There were 21 suffixed words in the following order. Derivatives fell into three categories on the basis of their suffix: seven had *high-frequency nonneutral suffixes*, seven had *low-frequency neutral suffixes*, and seven had *high-frequency neutral suffixes*. Characteristics of suffixes are based on the study done by Tyler and Nagy (1989) Taken together, the number of total affixed words were 50. In the test 2, the questions from 1 to 29 were prefixed words and from 30 to 50 were suffixed words (See appendix 2).

Students knowledge of prefix and suffix meanings were tested in a multiple-choice format as done in the Word Determining Vocabulary Test Because, producing definitions is more demanding than recognizing correct definitions. Each test item presented a prefixed or a suffixed word and five multiple-choice alternatives.There was a correct answer and four distractors. The correct choices for each item were presented in a random sequence.The subject's task was to select the appropriate definition or meaning for the item being tested.

The new test was proofread and multiple choices were checked by a native speaker of English who worked as an

instructor in the ELT department at the Faculty of Education in the 1994-95 Academic Year. The choices were judged to be understandable and clear for the learners of English Language. Same subjects who took the first test were gathered and given the affixed vocabulary test two weeks later.

The New Word Strategy Questionnaire was adapted from Nagy and et al.(1991). It was given with the aim of obtaining self-report measures about what students do when they encounter new words. Following choices were included for the questions in the questionnaire.

For the first question, the possible choices were:

a) about one in every sentence, b) a few in every paragraph, c) two or three on a page, d) one or two a day, and e) I know almost every word I read.

For the remaining questions, the choices were:

a) Always b) Sometimes c) Never

There were 9 questions in the questionnaire prepared by Nagy and et al. (1991). The questions were increased from 9 to 10 by the researcher by forming two different questions instead of question 3 which mentioned 'word parts' in general. This might cause a misunderstanding among the students. So, two different questions were formed ,one asking the frequency of the use of prefixes and the other asking the frequency of the use of suffixes.

As a self-report data, as Nagy and et al. (1991) stated , the answers to questions such as these would not necessarily

be a very accurate reflection of what students do, or how often they do it, when they encounter unfamiliar words. On the other hand, such a questionnaire does provide some information about what students think they do, and about the relative reliance they think they place on different strategies.

3.3 Procedure

Two groups were used for this study. There were totally 41 students from each group. They were a sample of prep-class and third year students. Prep-class students were called as Group 1 and third year students were called as Group 2. Subjects did not receive any instruction on the target prefixes and suffixes. The existing knowledge of students on prefixes and suffixes was investigated. Students in 2 different levels were chosen to compare their achievement in making use of prefixes and suffixes to get the meaning of words. The study was conducted in the subjects' classrooms at their usual hours with the researcher.The subjects were told that they were going to participate in a study but nothing was mentioned about the nature of the study. First, A test (W.D.V.T) including 135 five-alternative multiple-choice items was given to each group. The results were obtained, and depending on the results, the second test (A.V.T) including 50 five-alternative multiple-choice items was developed and given to each group. Only students who took Test 1 participated to Test 2. There were two weeks duration between test 1 and test 2. The results of both tests were expressed in percentages.

The tests were administered by the researcher during the month of June. Classroom teachers introduced the

researcher and emphasized the importance of the tests. Students worked at their own pace, and sufficiant time was allowed for all subjects to complete each test. Subjects were told that they were going to work with isolated words. To avoid any contextual information the words were not presented within sentences, instead single words were given in the tests. A separate answer sheet was distributed to the students and they were required not to circle on the test booklets. At the beginning of the test session the researcher read the instruction aloud, then students began to answer the questions.

3.4 Data Analysis

As mentioned before, subjects were given two tests. Test 1 was named as Word Determining Vocabulary Test which consisted of 135 five-alternative multiple-choice vocabulary items. Test 1 was used as a tool to form Test 2. Test 2 was developed according to the results of Test 1. 70 percent and above 70 percent correctly answered items by subjects were chosen for the Affixed Test. So, for this study, only the data gathered from Test 2 was analyzed. Test 2 was named as Affixed Vocabulary Test. It consisted of 50 five-alternative multiple-choice vocabulary items. In analyzing the results of the study, the frequencies were computed for the selection of each item by each group. Frequencies are used to indicate how often a phenomenon occurs and they are based on counting the number of occurrences.

Subjects were not given marks separately. Instead, subjects' performance for each item in the tests were considered. To do this, the correct answers of each subject given to each item were found. Then, the correct answers of total subjects (in different groups) for each item were counted. Finally, the correct answers were expressed in percantages considering the number of the subjects in groups and the number of correct answers to the item. After the percantages were obtained, the results were shown in tables. Tables show the number and percent distribution of correctly answered prefixed words and groups of prefixes, suffixed words and categories of suffixes, and all affixed words.

CHAPTER IV

ANALYSIS OF RESULTS

4.1 Analysis of Groups of Prefixes

Levels of prefix knowledge that students could apply to words were examined by using 29 semantically transparent prefixed words. Prefixes were grouped according to their functions. Groups of prefixes were as follows;

1. Time or Order (ex-, fore-, re-, pre-, post-)
2. Place.(inter-, sub-, trans-)
3. Degree or Size (extra-, hyper-, under-, arch-,over-,)
4. Negation (in-, dis-, non-)
5. Criticism (mal-, mis-, pseudo-)
6. Attitude (co-, pro-, anti-,counter-,auto-)
7. Number (multi-, semi-, bi-, mono-)
8. Verb Forming Prefix (en-)

The following are the explanation of number and percent distribution of prefix groups correctly identified by learners.

4.1.1 Prefixes of Time or Order

TABLE 1

Number and Percent Distribution of Prefixes of Time or Order Correctly Identified by Learners

Prefixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Exwife	20	11	55	21	12	57.14
Foretell	20	6	30	21	14	66.66
Refill	20	19	95	21	17	80.95
Prepay	20	4	20	21	12	57.14
Postdate	20	8	40	21	13	61.90
TOTAL	**100**	**48**	**48**	**105**	**68**	**64.76**

As seen in Table 1, for prefixes of Time or Order, the percentage of correct answers of Group 1 was 55% for *ex–*, 30% for *fore–*, 95% for *re–*, 20% for *pre–*, and 40% for *post–*.

For Group 2, it was 57.14% for *ex–*, 66.66% for *fore–*, 80.95% for *re–*, 57.14% for *pre–*, and 61.90% for *post–*.

The table indicates that percentages of the subjects in Group 1 and Group 2 were quite close to each other in the use of prefix *re-* (95% for Group 1 and 80.95% for Group 2). In the use of prefix *ex-* both groups were again close in percentages (55% for Group 1 and 57.14% for Group 2). However, when the use of prefix *ex-* is compared to the use of prefix *re-*, it is possible to say that both groups were more successful in the use of prefix *re-*. When the prefix *pre-* is considered it is observed that percentages of both groups differ. The subjects in Group 1 (20%) were not as successful as the subjects in Group 2 (57.14%). In addition, it is possible to say that prefix *pre-* was the most problematic prefix for both groups when compared with the other prefixes of Time or Order. Because, percentages of both groups for prefix *pre-* were lower than the others.

To sum up, prefixes showing Time or Order were answered correctly by 48% of Group 1, and by 64.76% of Group 2. The percentage difference between Group 1 and Group 2 in the correct use of prefixed words was 16.76%. So, Group 2 seems to be more successful than Group 1 in understanding the meaning of prefixes of Time or Order.

4.1.2 Prefixes of Place

TABLE 2

Number and Percent Distribution of Prefixes of Place Correctly Identified by Learners

Prefixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Intermarry	20	9	45	21	12	57.14
Subnormal	20	7	35	21	4	19.04
Transplant	20	11	55	21	14	66.66
TOTAL	**60**	**27**	**45**	**63**	**30**	**47.61**

As seen in Table 2, for prefixes of Place, the percentage of correct answers of Group 1 was 45% for *inter–*, 35% for *sub–*, and 55% for *trans–*.

For Group 2, it was 57.14% for *inter–*, 19.04% for *sub–*, and 66.66% for *trans–*.

The table indicates that percentages of the subjects in Group 1 and Group 2 were quite close to each other in the use of prefix *trans-* (55% for Group 1 and 66.66% for Group 2). In the use of prefix *inter-* both groups were again close in percentages (45% for Group 1 and 57.14% for Group 2). However, when the use of prefix *trans-* is compared to the use of prefix *inter*, it is possible to say that both groups were more successful in the use of prefix *trans-*

.When the prefix *sub-* is considered, it is observed that both groups were not as successful as the others in this one. That is, Group 1 (35%) and Group 2 (19.04%). it is possible to say that prefix *sub-* seem to be a problematic prefix for both groups when compared with the other prefixes of Place

Briefly then, prefixes showing Place were answered correctly by 45% of Group 1, and by 47.61% of Group 2. The percentage difference between Group 1 and Group 2 in the correct use of prefixed words was 2.61%. So, the performance of Group 1 and Group 2 is very close to each other in understanding the meaning of prefixes of Place.

4.1.3 Prefixes of Degree or Size

TABLE 3

Number and Percent Distribution of Prefixes of Degree or Size Correctly Identified by Learners

Prefixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Extraordinary	20	7	35	21	12	57.14
Hypersensitive	20	18	90	21	19	90.47
Undersell	20	15	75	21	16	76.19
Archangel	20	7	35	21	8	38.09
Oversleep	20	14	70	21	16	76.19
TOTAL	**100**	**61**	**61**	**105**	**71**	**67.61**

As seen in Table 3, for prefixes of Degree or Size, the percentage of correct answers of Group 1 was 35% for *extra–*, 90% for *hyper–*, 75% for *under–*, 35% for *arch–*, and 70% for *over–*.

For Group 2, it was 57.14% for *extra–*, 90.47% for *hyper–*, 76.19% for *under–*, 38.09% for *arch–*, and 76.19% for *over–*.

The table indicates that percentages of the subjects in Group 1 and Group 2 were very close to each other in the use of prefix *hyper-* (90% for Group 1 and 90.47% for Group 2). In the use of prefix *under-* both groups were again close in percentages (75% for Group 1 and 76.19% for Group 2). And in the use of prefix *over-* both groups were close in percentages (70% for Group 1 and 76.19% for Group 2). However, when the use of prefix *hyper-* is compared to the use of prefixes *under-* and *over-*, it is possible to say that both groups were more successful in the use of prefix *hyper-*. When the prefix *arch-* is considered it is seen that the prefix *arch-* is the least known one for both groups.That is, for Group 1 (35%) and for Group 2 (38.09%). In addition, it is possible to say that prefix *arch-* seems to be a problematic prefix for both groups when compared with the other prefixes of Degree or Size.

To sum up, prefixes showing Degree or Size were answered correctly by 61% of Group 1, and by 67.61% of Group 2. The percentage difference between Group 1 and Group 2 in the correct use of prefixed words was 6.61%. So,

the performance of both groups is quite close to each other in understanding the meaning of prefixes of Degree or Size.

4.1.4 Prefixes of Negation

TABLE 4

Number and Percent Distribution of Prefixes of Negation Correctly Identified by Learners

Prefixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Indiscipline	20	16	80	21	15	71.42
Disorder	20	15	75	21	19	90.47
Nonpayment	20	5	25	21	9	42.85
TOTAL	**60**	**36**	**60**	**63**	**43**	**68.25**

As seen in Table 4, for prefixes of Negation, the percentage of correct answers of Group 1 was 80% for *in–*, 75% for *dis–*, and 25% for *non–*.

For Group 2, it was 71.42% for *in–*, 90.47% for *dis–*, and 42.85% for *non–*.

The table indicates that percentages of the subjects in Group 1 and Group 2 were quite close to each other in the use of prefix *in-* (80% for Group 1 and 71.42% for Group 2). And in the use of prefix *dis-* both groups were close in percentages (75% for Group 1 and 90.47% for Group 2).

But, Group 1 is more successful than Group 2 in the use of prefix *in-* and Group 2 is more successful than Group 1 in the use of prefix *dis-*. When the prefix *non-* is considered it is seen that the prefix *non-* is the least known one for both groups.That is, for Group 1 (25%) and for Group 2 (42.85%).So, it is possible to say that prefix *non-* seems to be a problematic prefix for both groups when compared with the other prefixes of Negation.

In summary, prefixes showing Negation were answered correctly by 60% of Group 1, and by 68.25% of Group 2. The percentage difference between Group 1 and Group 2 in the correct use of prefixed words was 8.25%. So, the performance of both groups is very close to each other in understanding the meaning of prefixes of Negation.

4.1.5 Prefixes of Criticism

TABLE 5

Number and Percent Distribution of Prefixes of Criticism Correctly Identified by Learners

Prefixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Malpractice	20	3	15	21	5	23.80
Misbehave	20	12	60	21	19	90.47
Pseudoscience	20	2	10	21	15	71.42
TOTAL	**60**	**17**	**28.33**	**63**	**39**	**61.90**

As seen in Table 5, for prefixes of Criticism, the percentage of correct answers of Group 1 was 15% for *mal–*, 60% for *mis–*, and 10% for *pseudo–*.

For Group 2, it was 23.80% for *mal–*, 90.47% for *mis–*, and 71.42% for *pseudo–*.

The table indicates that percentages of the subjects in Group 1 and Group 2 differed in the use of prefix *mis-* (60% for Group 1 and 90.47% for Group 2), Group 2 is more successful than Group 1 in the use of prefix *mis-* In the use of prefix *mal-* percentages of both groups were close to each other (15% for Group 1 and 23.80% for Group 2).But, for both groups the percentages are very low. When the prefix *pseudo-* is considered it is seen that percentages are different in both groups. Group 2 (71.42%) is more successful than Group 1 (10%) in the use of prefix *pseudo-* The prefixes *pseudo-* and *mal-* are the least known ones by Group 1 and the.prefix *mal-* is the least known one by Group 2. So, it is possible to say that prefix *mal-* was a problematic prefix for both groups.

Briefly, prefixes showing Criticism were answered correctly by 28.33% of Group 1, and by 61.90% of Group 2. The percentage difference between Group 1 and Group 2 in the correct use of prefixed words was 33.57%. So, Group 2 can be said to be more successful than Group 1 in understanding the meaning of prefixes of Criticism.

4.1.6 Prefixes of Attitude

TABLE 6

Number and Percent Distribution of Prefixes of Attitude Correctly Identified by Learners

Prefixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Coauthor	20	8	40	21	12	57.14
Proslavery	20	1	5	21	19	90.47
Antiwind	20	15	75	21	16	76.19
Counterrevolution	20	4	20	21	8	38.09
Autobiography	20	16	80	21	16	76.19
TOTAL	**100**	**44**	**44**	**105**	**62**	**59.04**

As seen in Table 6, for prefixes of Attitude, the percentage of correct answers of Group 1 was 40% for *co–*, 5% for *pro–*, 75% for *anti–*, 20% for *counter–*, and 80% for *auto–*.

For Group 2, it was 76.19% for *co–*, 33.33% for *pro–*, 80.95% for *anti–*, 33.33% for *counter–*, and 71.42% for *auto–*.

The table indicates that percentages of the subjects in Group 1 and Group 2 were quite close to each other in the use of prefix *anti-* (75% for Group 1 and 76.19% for Group 2). In the use of prefix *auto-* both groups were again close in percentages (80% for Group 1 and 76.19% for Group 2). When the prefix *co-* is considered it is seen that percentages are slightly different in both groups. Group 2 (57.14%) is more successful than Group 1 (40%) in the use of prefix *co-* The prefixes *pro-* and *counter-* are the least known ones for Group 1. The prefix *counter-* is the least known one for Group 2. So, it can be said that the prefix *counter-* seem to be problematic for both groups.

As a result, prefixes showing Attitude were answered correctly by 44% of Group 1, and by 59.04% of Group 2. The percentage difference between Group 1 and Group 2 in the correct use of prefixed words was 15.04%. So, Group 2 can be said to be more successful than Group 1 in understanding the meaning of prefixes of Attitude.

4.1.7 Prefixes of Number

TABLE 7

Number and Percent Distribution of Prefixes of Number Correctly Identified by Learners

Prefixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Multipurpose	20	10	50	21	20	95.23
Semiconscious	20	8	40	21	16	76.19
Bimonthly	20	3	15	21	14	66.66
Monorail	20	10	50	21	13	61.90
TOTAL	**80**	**31**	**38.75**	**84**	**63**	**75**

As seen in Table 7, for prefixes of Number, the percentage of correct answers of Group 1 was 50% for *multi–*, 40% for *semi–*, 15% for *bi–*, 50% for *mono–*.

For Group 2, it was 95.23% for *multi–*, 76.19% for *semi–*, 66.66% for *bi–*, 61.90% for *mono–*

The table indicates that percentages of the groups were not similar in the prefixes of Number. Group 2 is more successful than Group 1 in the given prefixes. Group 1 had similar percentages for the prefixes *multi-* (50%), *mono-* (50%), and *semi-* (40%). But, had the lowest percentage for the prefix *bi-* (15%). Whereas, Group 2 had the highest

percentage for the prefix *multi-* (95.23%) and the lowest percentage for the prefix *mono-* (61.90%).

To sum up, prefixes showing Number were answered correctly by 38.75% of Group 1, and by 75% of Group 2. The percentage difference between Group 1 and Group 2 in the correct use of prefixed words was 36.25%. So, Group 2 can be said to be more successful than Group 1 in understanding the meaning of prefixes of Number.

4.1.8 Verb Forming Prefix

TABLE 8

Number and Percent Distribution of Verb Forming Prefix Correctly Identified by Learners

Prefixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Endanger	20	3	15	21	10	47.61
TOTAL	**20**	**3**	**15**	**21**	**10**	**47.61**

As seen in Table 8, There is only one prefix in this group, that is *en-*. The percentage of correct answers of Group 1 was 15%, for Group 2 it was 47.61%.The percentage difference between Group 1 and Group 2 in the correct use of prefixed word was 32.61%. So, Group 2 is more

successful than Group 1 in understanding the meaning of Verb Forming Prefix. It can be said that Verb Forming Prefix is problematic for both groups.

4.2 Summary of the Analysis of All Prefix Groups

TABLE 9

Number and Percent Distribution of All Groups of Prefixes Correctly Identified by Learners

Groups of Prefixes	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
1. Time or Order	100	48	48	105	68	64.76
2. Place	60	27	45	63	30	47.61
3. Degree or Size	100	61	61	105	71	67.61
4. Negation	60	36	60	63	43	68.25
5. Criticism	60	17	28.33	63	39	61.90
6. Attitude	100	44	44	105	62	59.04
7. Number	80	31	38.75	84	63	75
8. Verb Forming P.	20	3	15	21	10	47.61
TOTAL	**580**	**267**	**46.03**	**609**	**386**	**63.38**

As seen in Table 9, when the performance of the two groups was analyzed totally, in general Group 2 performed

better than Group 1 in understanding the meaning of prefixes.

The low percentages by Group 1 for prefixes of Time or Order (48%), Place (45%), Attitude (44%), Number (38.75%), Criticism (28.33%), and Verb Forming Prefix (15%).may lead to the idea that students in this group need time to learn these prefix groups. That is , the prefix groups above may be learned in the later stages of language proficiency. Whereas, prefixes of Degree or Size and Negation were correctly identified by 61% and 60 % of learners in Group 1. So, prefixes of Degree or Size and Negation may be said to have learned by learners in the earlier level of language proficiency.

The high percentages by Group 2 for prefixes of Number (75%), Negation (68.25%), Degree or Size (67.61%), Time or Order (64.76%), Criticism (61.90%), and Attitude (59.04%).may lead to the idea that students in this group have no problem with these prefix groups. But, prefixes of Place and Verb Forming Prefix were correctly identified by 47.61% of learners in Group 2. It can be said that prefixes of Place and Verb Forming Prefix seem to be causing more difficulty for both groups of learners.

According to the performence of subjects in Group 1, prefixes of Degree or Size (61%) is the most known ones, whereas Verb Forming Prefix.(15%) is the least known one.

According to the performence of subjects in Group 2, prefixes of Number (75%) is the most known ones, whereas Verb Forming Prefix.(47.61%) is the least known one.

The percentage difference between Group 1 and Group 2 in the correct use of prefixed words was greater for the prefix groups given below. In other words, students' percentages between Group 1 and Group 2 showed differences and Group 2 can be said to be more successful than Group 1 in getting the meaning of the prefixed words in the following groups;

36.25% for *Number*, 33.57% for *Criticism*, 32.61% for *Verb Forming Prefix*, 16.76% for *Time or Order*, 15.04% for *Attitude* (percentages indicate the difference between Group 1 and Group 2).

The percentage difference between Group 1 and Group 2 in the correct use of prefixed words was lower for the prefix groups given below. In other words, students' percentages between Group 1 and Group 2 were quite close to each other. The performance of both groups can be said to be more or less similar in the following groups;

8.25% for *Negation*, 6.61% for *Degree or Size*, 2.61% for *Place* (percentages indicate the difference between Group 1 and Group 2).

The performance of students in total prefixed words was 46.03% for Group 1 and 63.38% for Group 2. The percentage difference between Group 1 and Group 2 in the correct use of prefixed words was 17.35%. So, it is possible to say that Group 2 is more successful than Group 1 in understanding the meaning of total prefixed words.

4.3 Analysis of Groups of Suffixes

Students knowledge of suffixes were examined by using 21 suffixes in the following categories:

1.Nonneutral high-frequency suffixes
(-ive, -ity, -tion, -ate, -ory, -ic, -arian)
2.Neutral low-frequency suffixes
(-ship, -wise, -some, -hood, -like, -dom, -age)
3.Neutral high-frequency suffixes
(-ize, -ful, -ist,-ly, -less, -ish, -ness)

The following are the explanation of number and percent distribution of suffix groups correctly identified by learners.

4.3.1 Nonneutral High-Frequency Suffixes

TABLE 10

Number and Percent Distribution of Nonneutral High-Frequency Suffixed Words Correctly Identified by Learners

Suffixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Secretive	20	14	70	21	8	38.09
Explosivity	20	7	35	21	9	42.85
Valuation	20	10	50	21	8	38.09
Centrate	20	2	10	21	11	52.38
Contributory	20	2	10	21	1	4.76
Poetic	20	11	55	21	13	61.90
Disciplinarian	20	10	50	21	9	42.85
TOTAL	**140**	**56**	**40**	**147**	**59**	**40.13**

As seen in Table 10, for 7 suffixes in this group, the percentage of correct answers of Group 1 was 70% for *–ive*, 35% for *–ity*, 50% for *–tion*, 10% for *–ate*, 10% for *–ory*, 55% for *–ic* , and 50% for*–arian*.

For Group 2, it was 38.09% for *–ive*, 42.85% for *–ity*, 38.09% for *–tion*, 52.38% for *–ate*, 4.76% for *–ory*, 61.90% for *–ic* , and 42.85% for*–arian*.

The table indicates that in general, the performance of the subjects in Group 1 and Group 2 was close to each other in the use of the given suffixed words. Their performance is different in suffixed words *secretive* and *centrate*. Group 1 (70%) is more successful than Group 2 (38.09%) in the use of suffix *-ive*. But, Group 2 (52.38%) is more successful than Group 1 (10%) in the use of suffix *-ate*. When the suffixed word *contribuory* is considered it is seen that Group1 (10%) and Group 2 (4.76%) had the lowest percentages for this suffixed word.

To sum up, for Nonneutral high-frequency suffixes Group 1 answered correctly 40%, and Group 2 answered correctly 40.13%. The percentage difference between Group 1 and Group 2 in the correct use of suffixed words was 0.13%. So, the performance of both groups is nearly the same in understanding the meaning of words with Nonneutral suffixes.

4.3.2 Neutral Suffixes

Neutral suffixes are examined in two groups as Neutral low-frequency and Neutral high-frequency suffixes.

4.3.2.1 Neutral Low-Frequency Suffixes

TABLE 11

Number and Percent Distribution of Neutral Low-Frequency Suffixed Words Correctly Identified by Learners

Suffixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Pupilship	20	11	55	21	12	57.14
Clockwise	20	3	15	21	6	28.57
Darksome	20	3	15	21	4	19.04
Manhood	20	12	60	21	11	52.38
Lifelike	20	5	25	21	11	52.38
Stardom	20	14	70	21	11	52.38
Carriage	20	10	50	21	13	61.90
TOTAL	**140**	**58**	**41.42**	**147**	**68**	**46.25**

As seen in Table 11, for 7 suffixes in this group, the percentage of correct answers of Group 1 was 55% for *–ship*, 15% for *–wise*, 15% for *–some*, 60% for *–hood*, 25% for *–like*, 70% for *–dom* , and 50% for*–age*.

For Group 2, it was 57.14% for *–ship*, 28.57% for *–wise*, 19.04% for *–some*, 52.38% for *–hood*, 52.38% for *–like*, 52.38% for *–dom* , and 61.90% for*–age*.

The table indicates that in general, the performance of the subjects in Group 1 and Group 2 was quite close to each other in the use of the given suffixed words. Their performance differed in the suffixed word *lifelike*. Group 2 (52.38%) is more successful than Group 1 (25%). Group 1 and Group 2, as seen in Table 11, had the lowest percentages for the suffixed words *clockwise* and *darksome*.

In summary, for Neutral low-frequency suffixes Group 1 answered correctly 41.42%, and Group 2 answered correctly 46.25%. The percentage difference between Group 1 and Group 2 in the correct use of suffixed words was 4.83%. So, there is just a slight difference between the groups in understanding the meaning of words with Neutral Low-Frequency Suffixes.

4.3.2.2 Neutral High-Frequency Suffixes

TABLE 12

Number and Percent Distribution of Neutral High-Frequency Suffixed Words Correctly Identified by Learners

Suffixed Words	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Silverize	20	6	30	21	8	38.09
Hateful	20	9	45	21	14	66.66
Nutritionist	20	16	80	21	13	61.90
Wonderfully	20	9	45	21	11	52.38
Moneyless	20	17	85	21	21	100
Childish	20	19	95	21	21	100
Fullness	20	11	55	21	14	66.66
TOTAL	**140**	**87**	**62.14**	**147**	**102**	**69.38**

As seen in Table 12, for 7 suffixes in this group, the%age of correct answers of Group 1 was 30% for *–ize*, 45% for *–ful*, 80% for *–ist*, 45% for *–ly*, 85% for *–less*, 95% for *–ish* , and 55% for*–ness*.

For Group 2, it was 38.09% for *–ize*, 66.66% for *–ful*, 61.90% for *–ist*, 52.38% for *–ly*, 100% for *–less*, 100% for *–ish* , and 66.66% for*–ness*.

The table indicates that in general, the performance of the subjects in Group 1 and Group 2 was close to each other in the use of the given suffixed words. Their performance differed in the suffixed words *hateful* and *nutritionist.* Group 2 (66.66%) is more successful than Group 1 (45%).in the use of suffixed word *hateful.* And, Group 1 (80%) is more successful than Group 2 (61.90%).in the use of suffixed word *nutritionist.* Group 1 and Group 2, as seen in Table 12, had the lowest percentages for the suffixed word *silverize.*

To sum up, for Neutral high-frequency suffixes Group 1 answered correctly 62.14%, and Group 2 answered correctly 69.38%. The percentage difference between Group 1 and Group 2 in the correct use of suffixed words was 7.24%. So there is a slight difference between the groups in understanding the meaning of words with Neutral High-Frequency Suffixes

4.4 Summary of the Analysis of All Suffix Groups

TABLE 13

Number and Percent Distribution of All Groups of Suffixed Words Correctly Identified by Learners

Groups of Suffixes	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
1. Nonneutral High-Frequency	140	56	40	147	59	40.13
2. Neutral Low-Frequency	140	58	41.42	147	68	46.25
3. Neutral High-Frequency	140	87	62.14	147	102	69.38
TOTAL	**420**	**201**	**47.85**	**441**	**229**	**51.92**

As seen in Table 13, According to the groups of suffixes, the percentage difference between Group 1 and Group 2 in the correct use of suffixed words was as follows. The percentage difference is 0.13 % for Nonneutral suffixes, 4.83% for Neutral law-frequency suffixes and 7.24% for Neutral high-frequency suffixes. As it is seen, the percentage differences aren't very high between the two groups as they are for the prefix groups. For suffix groups, the percentage differences are below 10%. The performance of both groups from the least known to the most known suffix groups was in

the following order; Nonneutral high-frequency suffixes, Neutral law-frequency suffixes, Neutral high-frequency suffixes. It was found that Nonneutral high-frequency suffixes were the least known group by Group 1 and Group 2. And, students' performance in both groups for Neutral high-frequency suffixes was higher than the performance for Neutral low-frequency suffixes. Since the percentages for derivatives formed with neutral suffixes were higher than the percentages formed with nonneutral suffixes, it is possible to say that neutral suffixes are easier to learn than nonneutral suffixes. The performance of both groups can be said to be more or less close to each other.

The performance of students in total suffixed words was 47.85% for Group 1 and 51.92% for Group 2. The percentage difference between Group 1 and Group 2 in the correct use of suffixed words was 4.07. So, it is evident that the performance of Group 1 and Group 2 is nearly same in the correct use of total suffixed words.

4.5 Analysis of All Affixed Words

TABLE 14

Number and Percent Distribution of All Affixed Words Correctly Identified by Learners

Affixes	GROUP 1			GROUP 2		
	N	Number of Correct Answers	%	N	Number of Correct Answers	%
Prefixes	580	267	46.03	609	386	63.38
Suffixes	420	201	47.85	441	229	51.92
TOTAL	**1000**	**468**	**46.8**	**1050**	**615**	**58.57**

As seen in Table 14, Group 1 performed similarly in the whole groups of prefixes and suffixes. But, Group 2 was more successful in the all groups of prefixes than in the all groups of suffixes.

In conclusion, the percentage difference between Group 1 and Group 2 in the correct use of *prefixed words* was 17.35; and it was 4.07 for the correct use of *suffixed words*. It can be said that Group 2 is more successful than Group 1 in the correct use of prefixed words. But, the performance of both groups can be said to be more or less close to each other in the correct use of suffixed words.

The performance of students in total affixed words was 46.8% for Group 1 and 58.57% for Group 2. The percentage difference between Group 1 and Group 2 in the correct use of affixed words was 11.77. So, this means that Group 2 performed better than Group 1 in understanding the meaning of all affixed words.

Considering the results of the New Word Strategy Questionnaire (see Appendix 7), it is possible to say that even though the results are not supposed to be the accurate reflection of what students do and how often they use those strategies, the questionnaire mentioned above can be supposed to give some overall information about the strategies that they think they utilize It can also be used as a supplementary support to the other results. For example, looking at the second question in the questionnaire (When you come across a word you don't know, how often do you use prefixes to figure out what the word means?), it is observed that most of the subjects in Group 1 and Group 2 claimed that they *sometimes* use prefixes in such a case (90% of the students in Group 1 and 76.19% of the students in Group 2). These percentages are high enough to support the results.

CHAPTER V

CONCLUSIONS

Many teachers provide direct instruction on the meaning and spelling of affixes - prefixes and suffixes. Students are taught to engage in morphological analysis: to break an unfamiliar word into parts and then recombine the parts into a meaningful whole. The assumption is that students with knowledge of word parts and analysis have magical keys for unlocking the meanings of hundreds, perhaps even thousands of words.

Work indicating which prefixes and suffixes should be taught is still limited and insufficient.(O'Rourke,1974; Stauffer,1942; Thorndike,1941; cited in White et. al.,1989).

There is yet no empirical evidence that would permit even a rough guess as to how much vocabulary growth could be expected from morphological teaching. Educators' opinions about the benefits of morphological teaching are diverse. For instance, E.L. Thorndike (1941;cited in White et. al.,1989) argued strongly for "deliberate and systematic" teaching of English suffixes to secondary students, but he did not consider prefixes. O'Rourke (1974; cited in White et. al.,1989) advocated a systematic program for teaching prefixes and suffixes, beginning in elementary school and continuing through high school and beyond.

Thus, there is still no answer to the fundamental teaching question:Is morphological instruction worthwhile?

There is little information on several important characteristics of affixed words: their composition (number and type of affixes), their analyzability, and the frequency of their occurrence in texts written for students at different grade levels.

On the other hand, there is evidence from other studies, which supports incidental gathering of words with the general frame of language instruction (Maiguashca, 1993, and Hulstijn (1992) and Haastrup (1991) ; cited in Scherfer,1993). In the light of these ideas, it is thought that it would be worthwhile to find out to what extent affix learning takes place unconsciously or incidentally by Turkish EFL learners. Therefore, 41 subjects who did not receive any instruction on the target prefixes and suffixes were used in this study. Just the current knowledge of students was investigated. Students in Group 1 were at the 'intermediate' level and students in Group 2 were at the ' advanced level' .The data was obtained and analyzed through the Affixed Vocabulary Test which was prepared to measure the affix knowledge of students.

The most striking aspect of the data obtained in this study is that students in both groups had low percentages on Nonneutral derivational suffixes. According to Tyler and Nagy (1989) neutral and nonneutral suffixes differ in their applicability. Neutral suffixes have a wide range of applicability. Nonneutral suffixes do not have the same broad range of applicability. This is supported by Iverson and Tyler (1985; cited in Tyler and Nagy,1989) too. They found

that of 496 new English words formed from suffixation of existing words, 455 were formed from Neutral suffixes while only 41 were formed from Nonneutral suffixes. Characteristics of Neutral and Nonneutral suffixes would affect students' acquisition of the two types of suffixes.

Also, Dale and O'Rourke (1974) and Gordon (1988) (cited in Tyler and Nagy,1989) found that subjects at all ages had significantly more knowledge of Neutral suffixes than of Nonneutral suffixes. In terms of groups of suffixes, the results of this study are consistent with the findings of the studies mentioned above. Also, in this study, the percentage of correctly answered items for Nonneutral suffixes was lower than Neutral suffixes in both groups. Nonneutral suffixes can be said to be more difficult to learn than Neutral suffixes.

When we come back to the research question 1 ,when the performance of the two groups was analyzed, in general Group 2 performed better than Group 1 in understanding the meaning of prefixes. Students' percentages between Group 1 and Group 2 showed differences in the use of the prefix groups given below. That is, Group 2 can be said to be more successful than Group 1 in getting the meaning of the prefixed words in the following prefix groups; *Number* (38.75% for Group 1 and 75% for Group 2), *Criticism* (28.33% for Group 1 and 61.90% for Group 2), *Verb Forming Prefix* (15% for Group 1 and 47.61% for Group 2), *Time or Order* (48% for Group 1 and 64.76% for Group 2), *Attitude* (44% for Group 1 and 59.04% for Group 2).

On the other hand, students' percentages between Group 1 and Group 2 were quite close to each other in the following prefix groups; *Negation* (60% for Group 1 and 68.25% for Group 2), *Degree or Size* (61% for Group 1 and 67.61% for Group 2), *Place* (45% for Group 1 and 47.61% for Group 2).

According to the performance of subjects in Group 1, prefixes of *Degree or Size* (61%) is the most known ones, whereas *Verb Forming Prefix*.(15%) is the least known one.

According to the performance of subjects in Group 2, prefixes of *Number* (75%) is the most known ones, whereas *Verb Forming Prefix* (47.61%) is the least known one.

When we come back to the research question 2, when the performance of the two groups was analyzed, in general Group 2 performed better than Group 1 in understanding the meaning of suffixes. However, the percentage differences in the groups in the use of suffixed words were not as high as the percentage differences in the use of prefixed words. For the groups of suffixes the percentages are as follows:*Nonneutral High-Frequency* (40% for Group 1 and 40.13% for Group 2), *Neutral Low-Frequency* (41.42% for Group 1 and 46.25% for Group 2), *Neutral High-Frequency* (62.14% for Group 1 and 69.38% for Group 2).

To sum up, for suffix groups, it was found that Nonneutral high-frequency suffixes were the least known group by Group 1 and Group 2. And, students' performance in both groups for Neutral high-frequency suffixes was higher than the performance for Neutral low-frequency

suffixes. The performance of both groups can be said to be more or less close to each other in understanding the meaning of suffixes.

As it can be concluded from this study, some incidental learning of prefix and suffix knowledge undoubtedly does occur, but it would be a mistake to conclude that direct morphological instruction is unnecessary or wasteful of class time. Incidental learning of affix knowledge might mean that frequently occurring affixed words, such as *unusual,* play a key role in morphological and, hence, vocabulary development. This can be seen in this study by the percentages given to the prefixed word *Hypersensitive.* It was correctly identified by 90% of students in each group.

As a result of these evaluations, it can be said that there is a need for the teaching of the content of affixes to Turkish EFL learners. As it is found in this study, some of the frequently used affixes are acquired. So, these would be identified by different studies and the instruction should be organized accordingly . Since word formation study tells language teachers and their students much about the make-up of tens of thousands of current words in the lexicon of English, language teachers should be prepared to teach the basic rules of productive word-forming processes (Soudek,1981). Prefixes and suffixes should be taught and developed systematically as they provide essential clues for word recognition to Turkish EFL learners. Especially the suufixed words are more urgent than the prefixed words. So, suffixes should be taught priorily.

5.2 Suggestions for Further Research

Further research is needed to explore.the effect of context in understanding the meaning of affixed words. Also, in further studies, the benefits of teaching latin roots together with affixes might be investigated.

Experimental research can be carried out to see the difference between taught and untaught groups in making use of prefixes and suffixes.

Students' ability of conveying affix information through verbal definitions could be measured in further researches. To do this, any future study may demand subjects to produce definitions for prefixed and suffixed words in order to see whether subjects have difficulty in paraphrasing given prefixed and suffixed words.

Since prefixes are not limited to those mentioned in this study, numerical prefixes can also be studied in detail

Finally, the following questions may be dealt with in future studies:

Do the text types have any effect in the learning of affixes ?

Are some prefixes and suffixes learned earlier than other type of affixes ?

Do the performance of students increase if the content of affixes are taught via definitions ?

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APPENDICES

APPENDIX 1

WORD DETERMINING VOCABULARY TEST

INSTRUCTION : In this test , you are given isolated words. You are required to choose the appropriate option among the given choices. Circle the correct item on the answer sheet.

1. Author
a) composer b) authority c)writer
d) performer e) reader

2. Exist
a) be present b) push c) be healty
d) elect e) care

3. Star
a) nervous person b) rich person c) ill person
d) selfish person e) famous person

4. Member
a) protector b) representative c) salesman
d) seller e) conductor

5. President
a)head of the faculty b)head of a university
c) head of the hospital d) head of the government
e) head of the orphanage

6. Wife
a)unmarried woman b)divorced woman
c) married woman d) Widow e)lonely woman

7. Ordinary
a) original b) great c) observable
d)clever e) usual

8. Marital
a) of school b) of marriage c) of management
d) of union e) of army

9. Curricular
a) relating to circumstances
b)relating to railway timetable
c) relating to community
d)relating to a course of study
e)relating to law

10. Arm
a)a long lower body part used for standing and walking b)the part of the body between the head and the rest of the body
c)the joint halfway up each leg
d)parts of the body from the shoulder to the hand
e)the inner surface of the hand

11. Warn
a) advise b) compete c) complain
d) work e)figure

12. Tell
a) test b) thank c) say
d) dictate e) terminate

13. Sensitive
a) unable to see
b) easily offended
c) accusation of guilt
d) unconnected
e) without the power of sight

14. Active
a) in a curve b)giving respect c) being bold
d) mad e)in operation

15. Critical
a)willing to accept b) badly organized
c)fault-finding d) in a state of disrepair
e)concerning

16. Sufficient
a) enough b) efficient c) superior
d) very much e) less in amount

17. Discipline
a) religious rules b) traffic rules
c) financial moral d) training of the mind
e) human rights

18. Secure
a) severe b) certain c) great
d) clear e)dangerous

19. Marry
a) several people together b) to be happy
c) join as husband or wife d) to make a chain
e) to become separate

20. Planetary
a) relating to one of the bodies in ocean
b) relating to one of the bodies in underground
c) relating to geometry of figures
d) relating to the position of a ship
e)relating to one of the bodies in space

21. State
a) independent village in a country
b) organized political community with its gowernment
c) organized unions within a country
d) dependent village in a country
e) system of government by a single ruler

22. Function
a) follow b) consider c) change
d) operate e) include

23. Practice
a)performance b) regulation c)demonstration
d)reservation e) montage

24. Nutrition
a) meat b) nuisance c) food
d) fruit e) vegetable

25. Behave
a) act b) order c) move
d) make false e) having everything

26. Apply
a)put in order b) disuse c) hesitate
d)put in a proper place e) put to use

27. Guide
a) pay attention b) direct c) indirect
d) attract e) attack

28. Purpose
a) effect b) image c) aim
d) opinion e) fear

29. National
a) traditions of people in a community
b) habits of community
c) festivals prepared by the nation
d) characteristic of a large community of people
e) features of holidays of a nation

30. Racial
a) relating to every kind of contest in the world
b) relating to any of several subdivisions of mankind
c) relating to culture of mankind
d) relating to discipline of human being
e) relating to daily activities of people

31. Conscious
a) bright b) unwilling c) essential
d) calm e) aware

32. Circular
a) latin word ' circa' meaning about
b) course outline followed by teachers
c) round in shape
d) one obeying the certain rules
e) square in shape

33. Soil
a) salary b) companion c) statement
d) earth e) solid

34. Standard
a) requirement b) stimulus c) receipt
d) policy e) specimen

35. Normal
a) artificial b)unnatural c) concerning norms
d) setting a standard e) natural

36. Administration
a) society b) management c) consideration
d) department e) admiration

37. Slavery
a) condition of being free
b) one living in slovania
c) an odd appearance
d) condition of being the property of another
e) being very slow in the pedestrian crossing

38. Liberal
a) favouring labour party
b) unwilling to be free
c) showing a broad mind
d) one limiting the rights
e) showing a narrow mind

39. Fill
a) become full b) become covered
c) make false d) become empty e) feel good

40. Discover
a) to cover everything
b) solve the problem
c) to make something detailed
d) to get well after ilness
e) find out

41. Point
a) wait b) direct attention to
c) reduce the importance d) prevent e) pass

42. Obey
a) express b) put c) cause
d) order e) carry out

43. Approve
a) agree to b) authorize c) forbid
d) have different ideas e) appoint

44. Order
a) shine b) occupy c) command
d) omit e) collect

45. Arrange
a) keep b) promise c) arrest
d) organize e) state

46. Determine
a) end b) decide c) search
d) inform e) deduce

47. Pay
a) produce b) share money c) print
d) take money e) give money for goods

48. Date
a) absence of light b) facts c)time
d) lack of fact e) cause danger

49. Graduate
a) being grateful
b) person who holds a university degree
c) recently married couples
d) to grade students
e) newly returned soldier

50. Partisan
a) person devoted to a party
b)person who organizes the meetings of the party
c) person who supports the party financially
d) person who is responsible for the accounts of the party
e) person who is arrested because of making propaganda

51. Annual
a) dairy
b) happening every year
c) being in one's birthday
d) written manuscript
e) booklet for taking notes

52. Monthly
a) within month
b) valid for a certain day of the month
c) valid for half of the month
d) happening once a month
e) happening at weekends of each month

53. Moral
a) concerning principles of customs
b) concerning with the political principles
c) related to the mood of the human being
d) related to the intellectuality
e) concerning principles of right and wrong

54. Sense
a) scene b) word c) meaning
d) pleasure e) statement

55. Payment
a) wage b) list of currency unit c) tax
d) person who pays e) person who is paid

56. Syllable
a) course of study
b) railway timetable
c) minimum rhythmic unit of spoken language
d) list of the students
e) the dish in the menu

57. Chrome
a) related with time
b) colouring matter used in paints
c) expert in chemistry
d) salary for part-time worker
e) substance made from cocoa

58. Rail
a) road for pedestrians
b) road for motorist
c) sudden visit by police
d) violating the traffic lights
e) road on which trains run

59. War
a) quarrel b) argument c) battle
d) peace e) debate

60. Social
a) one leading an isolated life
b) of people living in communities
c) one having a love for environment
d) person having a life of luxury
e) common ideas of the society

61. Wind
a) animal killed as a religiöus sacrifice
b) prove the truth
c) break a promise
d) air in motion as the result of natural forces
e) staying awake to pray

62. Biography
a) science of the physical life of animals
b) person's life history written by another
c) science of the physical life of human being
d) life history of living organisms
e) critical analysis of mental processes

63. Intoxication
a) alcholic poisoning
b) madness
c) poisoning by the weather
d) being fond of alcohol
e) being affected by particular food

64. Suggestion
a)pleasure b) identification c) attraction
d) recommend e) implication

65. Revolution
a) feeling of horror
b) reward
c) restore a person
d) painful disease
e) complete change

66. Act
a) obtain b) have speed c) carry out
d) check e) control

67. Clockwise
a) person who makes a good guess about the time of the day
b) moving in the same direction taken by the hands of a clock
c) phobia of hearing the strike of the clock
d) moving in the opposite direction taken by the hands of a clock
e) person who is always punctual and caring the time

68. science
a) giving information
b) knowledge concerned with the sounds
c) knowledge obtained by testing of facts
d) study on person's handwriting
e) knowledge of the economic theory

69. Event
a) movement b) behaviour c) date
d) development e) occurance

70. Academic
a) concerning people
b) individual work
c) to do with acknowledgement
d) scholarly
e) around the university

71. Charge
a) lower the price b) ask a price c) cost
d) beg for money e) start an engine

72. Sell
a) refer b) pay in cash c) inflate the price
d) alter e) give in exchange for money

73. Enemy
a) close fried b) absence of blood
c) opponent d) friend e) hero

74. Angel
a) one's relative b) military force
c) woman writer d) messenger from God
e) person full of hope

75. Bishop
a) a kind of water vehicle
b) dead skin in the hair
c) a kind of air vehicle
d) measure of length
e) clergyman who organizes the work of church

76. Estimate
a) value b) make use of c) confuse
d) make fun of e) catch

77. Sleep
a) t-shirt for resting
b) wander around
c) rest regularly every night
d) standing regularly
e) breathe loudly

78. State
a) claim b) appear c) destroy
d) express in words e) simplify

79. Continental
a) belonging to island
b) characteristic of a great land masses of the world
c) concerning with nations
d) to do with countries
e) belonging to the court

80. Plant
a) fly to reach the planet
b) make compliment
c) water flowers
d) show document
e) put trees in the ground to grow

81. Ship
a) grass eating animal
b) give a shape
c) send in a ship
d) get rid of
e) reflect light

82. Danger
a) risk b) honest c) fault
d) penalty e)punishment

83. Large
a) taking little space b) lack of enough space
c) without equal d) taking up much space
e) opening in the ground

84. Force
a) believe b) disgust c) keep
d) praise e) oblige

85. Symmetrical
a) having different parts on either side
b) having a measurement device
c) having exactly similar parts on either side
d) having a combination of separate parts
e) having a combination of completely different parts

86. Educate
a) entertain people b) improve c)make harder
d) instruct and train e) select

87. Secret
a) something everybody knows
b) keep from the knowledge of others
c) separation of people
d) substance that hides odours
e) something sharp

88. Demonstrate
a) show how b) know how c) learn how
d) teach how e) tell how

89. Explode
a) examine b) echo c) burst with a loud noise
d) excite e) leave out of question

90. Obscure
a) obvious b) hidden c) ignorant
d) absolute e) obstinate

91. Pure
a) dirty b)pour c) untidy
d) watery e) clear

92. Value
a) what something is done b) share in something
c) what something is worth d) a modest opinion
e) low in rank

93. Explore
a) investigate b) exhibit c) display
d)be still and quiet e) alter

94. Centre
a) position at a different distance from two or more points
b) being away
c) being in reachable position
d) the approximate middle part of something
e) a period of 100 years

95. Hyphen
a) the mark used to end a sentence
b) a period
c) exclamation
d) the mark used to end a question
e) the mark used to join two words together

96. Liberal
a) a communist
b) person having a broad mind
c) person independent of any party
d) person working for himself
e) a reliable person

97. Celebrate
a) to terminate b) to give significance
c) to perform publicly d) to manage badly
e) to have an opportunity

98. Contribute
a) have a share in b) to examine letters
c) use wrongly d) bring or come together
e) produce an undesirable effect

99. Astronaut
a) an idle person b) alien c) unidentified person
d) a space traveler e) person loving stars

100. Poet
a) writer of drama b) writer of poems
c) writer of letters d) writer of short stories
e) writer of long stories

101. Contrary
a) similar in colour b) similar in nature
c) mixed in nature d) different in colour
e) opposite in nature

102. Discipline
a) training of mind and character
b) training in sports
c) training of people who are unable to read and write
d) training in art
e) training of the blind

103. Pupil
a) producer b) nurse c) student
d) seller e) lawyer

104. Owner
a) giver b)taker c) receiver
d) possessor e) sender

105. Cost
a) area reserved for swimming
b) area reserved for picnic
c) sea-side
d) the price decided by buyer
e) the price to be paid for something

106. Clock
a) instrument showing degree
b) instrument showing the time
c) instrument showing pressure
d) instrument showing temparature
e) instrument showing humility

107. Cross
a) walking in a disturbing manner
b) walking straight ahead
c) pass from one side to the other side
d) walk improperly
e) pass away

108. Dark
a) absence of light b) unwilling c) dense
d) absence of colour e) the end of day

109. Trouble
a) luck b) bless c) optimisim
d)graceful e) anxiety

110. Baby
a) old person b) very young child c) matureperson
d) middle aged person e) kid

111. Man
a) well-known trade mark in car industry
b) adult male human being
c) male child
d) adult female human being
e) female child

112. Women
a) married male
b) unmarried male
c) young girl
d) adult female human being
e)young child

113. Marble
a) a sea vehicle smaller than submarine
b) a kind of animal living in desert
c) small ball of glass used in games played by children
d) a kind of stone
e) another name for sea

114. Child
a) young human being
b)married male
c)matureperson
d)cold weather
e)divorced women

115. Life
a) make a statement that one knows to be untrue
b) cover for a container
c) garden plant
d) period of time given to teaching
e) the period of time from birth to the present

116. Queen
a) the wife of a president b) the wife of a king
c) the wife of a sultan d) the wife of a dean
e) the wife of a soldier

117. Star
a) person carriying precios metals
b) a kind of fish
c) a kind of flower with yellow leaves
d) famous person
e) grasses in the balcony

118. Spoil
a) be in good health b) become good
c) become bad d) to be ill e) become old

119. Carry
a) transport b) neutralize c) unite
d) remove e) activate

120. Silver
a) absence of light
b) the right to vote
c) the value of time
d) lack of fact
e) shining white precious metal

121. Civil
a) relating to selected groups
b) relating to a community
c) related to undressed people
d) woman's dress
e) substance like glass

122. Pain
a) pleasant sensation
b) being happy
c) being aware of facts
d) an unpleasant sensation
e) full of power

123. Hate
a) have a love for
b) have a desire fo
c) have a strong dislike for
d) have an opinion for
e) have no idea for

124. Search
a) simulate
b examine
c) study
d) quarentee
e) recognize

125. Nutrition
a) food b)vegetable c) notion
d) meat e) idea

126. Know
a) have partial information
b) have practical ability
c) be unable to recognize
d) be aware of
e) have sharp intention

127. Wonder
a) feel uneasy about b) feel good about
c) feel curiosity about d) feel disturbed
e) feel innocent

128. Chair
a) a style of summer cottage
b) the position of a doctor in a hospital
c) the position of a cook in a restaurant
d) division of a book
e) the position of a professor in a university

129. Money
a) building in which monks live
b) coins given when buying and selling
c) force gained by movement
d) state ruled by a monarch
e) member of a religious community

130. Age
a) lifetime b) point of time c) halftime
d) happy time e) certain time

131. Sick
a) broken b) tired c) ill
d) exhousted e) damaged

132. Fever
a) become hard
b) feel very cold
c) shopkeeper
d) temperature higher than usual
e) deserving respect

133. Mild
a) gentle b) empty c) rich
d) poor e) patient

134. Rude
a) not showing the right
b) popular
c) guilty
d) not showing habit
e) not showing respect

135. Full
a) oil b) great heat c) completely filled
d) hungry e)completely finished

- TEST IS OVER -

APPENDIX 2

AFFIXED VOCABULARY TEST

INSTRUCTION : In this test , you are given isolated words. You are required to choose the appropriate option among the given choices. Circle the correct item on the answer sheet.

1. Coauthor
a) author having a contract at his more productive years with his best-seller books
b) author coordinating signature giving dates for public
c) head author who is very old and skilled among other authors
d) author working together with another author
e) author using a nickname instead of his real name

2. Exwife
a) one's former wife
b) woman overseeing the work of other women
c) wife whose existence is entirely ignored
d) wife wasting extremely much money on useless things
e) wife doing extra works for earning money

3. Extraordinary
a) originally usual
b) beyond what is usual
c) interesting ordinary habits
d) being against ordinary things
e) ordinary things giving excitement

4. Foretell
a) to tell things that is not related to the truth
b) to end a speech by telling the last crucial idea
c) to announce before it happens
d) to tell the truth in the court for the accused
e) to swear that somebody will tell the truth forever

5. Hypersensitive
a) being emotionally careful for the future
b) much more sensitive than usual
c) being physically sensitive from unidentifiable sources
d) one full of many sensations
e) less sensitive for diseases

6. Indiscipline
a) being in the discipline
b) having careful and exact discipline
c) getting partial discipline
d) having a balanced discipline
e) absence of discipline

7. Intermarry
a) to get married with a woman by force
b) to become connected by marriage between members of different families
c) to get married secretly without permission of parents
d) to have many wives in different nations
e) to become connected by marriage under legal procedures

8. Malpractice
a) performing in a desirable level
b) performing in a partly acceptable level
c) doing something regularly
d) doing something wrong
e) doing something in a normal manner

9. Misbehave
a) to have proper manners in one's behaviour
b) to behave somebody well who is missed very much
c) to behave in a bad way
d) to have sincere emotions in one's behaviour
e) to behave people in a mysterious way

10. Multipurpose
a) having accidentally different purposes
b) the state of including confusing purposes
c) having a common purpose for the society
d) the state of having mutual purposes
e) having many purposes

11. Semiconscious
a) person consciously studying semiotics which is a branch of linguistics
b) not fully conscious
c) very conscious
d) to be exactly conscious
e) to be incredibly conscious

12. Subnormal
a) not normal
b) between normal and abnormal
c) below normal
d) above normal
e) equally normal

13. Proslavery
a) public relations officer collecting slaves together
b) favouring the condition of slavery
c) professional review organization studying on the rights of slaves
d) tending to live like the property of another
e) being very slow in announcing the rights of slaves

14. Refill
a) to feel unwilling to do something
b) to remove the feelings
c) to repeat the same feelings
d) to fill again
e) to filter protesting ideas in a newspaper article

15. Disorder
a) over order
b) absence of order
c) too much order
d) in place of order
e) devalue of order

16. Prepay
a) paying the given amount equally
b) paying after receiving something
c) paying under pressure
d) being prepared to pay
e) paying in advance

17. Postdate
a) date stamped by the postmen in the post office
b) the date determined to post a letter
c) give a date later than its actual date
d) date on which postal workers were given private rights
e) postpone a date before it comes

18. Bimonthly
a) temporary for half of the month
b) permanent for a certain day of the month
c) appearing once a month
d) appearing twice a month
e) appearing three times a month

19. Nonpayment
a) noone's payment
b) failure to pay a sum of money
c) having less payment
d) having no idea about payment
e) payment for noel

20. Monorail
a) system for monitoring railway constantly
b) have always fixed ideas on a subject
c) man living monotonously on railway station
d) man going and coming monotonously between his home and work
e) railway system for vehicles using single rail

21. Antiwind
a) wind often blows in the Arctic Ocean
b) wind that blows after the ship
c) wind that blows in the opposite direction
d) wind that blows unexpectedly
e) wind that blows and bring good luck for the sailors in mythology

22. Autobiography
a) biography of famous people written by an authoritative writer
b) story of a person's life written by himself
c) graphic showing the ratio of car production all over the world
d) graphic having the statistical information of traffic accidents
e) life story of famous people written by autocrats

23. Counterrevolution
a) revolution done without thinking its consequences
b) revolution done in a whole country
c) revolution done in voluntary areas
d) movement supporting the revolution
e) movement directed against a revolution

24. Pseudoscience
a) the science of drugs which affect mind
b) the study which is not really scientific
c) the science of outer space
d) the study of mythological creatures
e) the study and treatment of mental illnes

25. Undersell
a) sell under difficult circumstances
b) sell at a reasonable price
c) sell through travelling
d) sell at a lower price
e) sell under the control of authority

26. Archangel
a) angel of high rank
b) angel writing people's sins
c) angel writing people' good deeds
d) a guardian angel observing people
e) angel sent for all mankind

27. Oversleep
a) sleep for a short time
b) sleep uncomfortably
c) sleep too long
d) favoring to sleep everyday
e) sleep with open eyes

28. Transplant
a) plant many flowers together
b) leave a certain distance between two plants
c) put plants in parks open to public
d) a trained gardener responsible for cutting plants
e) take up plants in another place

29. Endanger
a) put in danger
b) visible danger to everyone
c) table warning people in advance for danger
d) caution taken for a very dangerous situation
e) person becoming dangerous

30. Secretive
a) person responsible for dealing with records of an organi-
zation
b) doing the secretarial training
c) fond of having secrets
d) having the habits of telling people's secrets to others
e) hating to have secrets

31. Explosivity
a) state of being explosive
b) tending to explode
c) capable of exploding
d) sudden and violent bursting
e) showing violent explosion

32. Valuation
a) to reduce the value of something
b) a spoiled person given much value
c) to hide the worth of something
d) an estimation of a thing's worth
e) to increase the value of something

33. Centrate
a) signal leading to the city centre
b) bring to the centre
c) person who is always the focus of interest
d) attractive woman getting men around her
e) finishing the period of a hundred years

34. Contributory
a) require contributions from
b) person who contributes
c) person who receives contributions
d) helping to bring about
e) something contributed

35. Poetic
a) being close to the friends of a poet
b) the state of writing poem similar to a poet
c) imitating the style of a poet
d) signature signed at the end of a poem
e) having qualities associated with poetry

36. Disciplinarian
a) people exposed to discipline
b) person able to maintain discipline
c) branch of knowledge
d) self-training in throwing disc
e) rules put forward to maintain discipline

37. Pupilship
a) ship reserved only for pupils in the Europe
b) free summer course for pupils
c) the period of being a pupil
d) exchanging pupils between two countries
e) pupil assigned to the job of looking after babies

38. Clockwise
a) person who makes a good guess about the time of the day
b) moving in the same direction taken by the hands of a clock
c) fear of hearing the strike of the clock
d) moving in the opposite direction taken by the hands of a clock
e) person who is always punctual and caring the time

39. Darksome
a) causing dark
b) having dark hair, eyes and skin
c) being courageous enough to walk at night
d) one kept in ignorance
e) phobia of staying in the dark

40. Manhood
a) the doctrine teaching principles of being a man
b) ideas belonging to only men
c) having behaviours similar to man
d) a group of middle aged men coming together
e) the state of being a man

41. Lifelike
a) one who is addicted to pleasures of life
b) loving the beauties of life
c) like real life
d) having excessive love for mankind
e) leading an artificial life under difficulties

42. Stardom
a) guest house for stars
b) party to honor the stars
c) club admitting only stars
d) status of being a star
e) principles of being a star

43. Carriage
a) a place where vehicles are restored to good condition
b) keeping aged vehicles in a garage
c) vehicle with four wheels for carrying people
d) warehouse for keeping movable properties
e) person competent in repairing second-hand vehicles

44. Silverize
a) habit of collecting metals like silver
b) a kind of infectious disease seen in people living around silver mines
c) making somebody clear in front of public
d) to become silver
e) people working in a silver mine

45. Hateful
a) make people hate something
b) cause someone have dislike
c) someone extremely unpleasant
d) make people fully nervous
e) make somebody have pleasant sensation

46. Nutritionist
a) a substance serving as a food
b) a home where special care is provided for old people
c) an excessive desire for food
d) person who makes a special study of the science of food values
e) the belief in, and practice of living naked

47. Wonderfully
a) something amazing and impressive
b) something done extremely well
c) something that makes people very happy
d) something full of wonder
e) something kept wondering about

48. Moneyless
a) person who is called money-maniac
b) having no money
c) one spending less money
d) the state of giving no importance to money
e) producing less money than needed to prevent inflation in a country

49. Childish
a) an unwanted child
b) money paid regularly for parents with children
c) the state of having no child
d) behaving like a child
e) something very easily done

50. Fullness
a) something not full
b) one who is fully experienced
c) the state of being full
d) one fully bored because of being too much busy
e) causing something to be full

- TEST IS OVER -

APPENDIX 3
NEW WORD STRATEGY QUESTIONNAIRE

Age:.....

Sex:.....

Instruction : This questionnaire is given with the aim of determining your attitutes when you encounter new words. That's why, while answering the following questions please be honest to reflect the reality of your present attitutes. You are just required to put a cross (**X**) on one of the choices which is appropriate to you.

1. When you are reading, how many of the words don't you know ?

[ ] about one in every sentence
[ ] a few in every paragraph
[ ] two or three on a page
[ ] one or two a day
[ ] I know almost every word I read

2. When you come across a word you don't know, how often do you use **prefixes** to figure out what the word means?

[ ]ALWAYS [ ]SOMETIMES [ ]NEVER

3. When you come across a word you don't know, how often do you use **suffixes** to figure out what the word means?

[ ]ALWAYS [ ]SOMETIMES [ ]NEVER

4. When you come across a word you don't know, how often do you use a **dictionary or glossary** to find out what the word means?

[ ]ALWAYS [ ]SOMETIMES [ ]NEVER

5. When you come across a word you don't know, how often do you just **skip** the word?

[ ]ALWAYS [ ]SOMETIMES [ ]NEVER

6. When you come across a word you don't know, how often do you **use the context** to figure out what the word means?

[ ]ALWAYS [ ]SOMETIMES [ ]NEVER

7. When you come across a word you don't know, how often do you **ask someone** what the word means?

[ ]ALWAYS [ ]SOMETIMES [ ]NEVER

8. When you come across a word you don't know, how often do you **sound out the word to see if you know what it means?**

[ ]ALWAYS [ ]SOMETIMES [ ]NEVER

9. When you come across a word you don't know, how often do you use a **dictionary or glossary** to find out **how to pronounce the word**?

[ ]ALWAYS [ ]SOMETIMES [ ]NEVER

10. When you come across a word you don't know, how often do you try to **break the word into syllables or parts** to find out **how to pronounce** the word?

[ ]ALWAYS [ ]SOMETIMES [ ]NEVER

APPENDIX 4
THE RESULTS OF THE WORD DETERMINING VOCABULARY TEST

WORDS	GROUP 1			GROUP 2		
	Incorrect/Correct/Proportion of			Incorrect/Correct/Proportion of		
	-	+	Correct Answers %	-	+	Correct Answers %
1.Author	-	20	100	-	21	100
2.Exist	7	13	65	4	17	80.95
3.Star	-	20	100	-	21	100
4.Member	7	13	65	1	20	95.23
5.President	1	19	95	1	20	95.23
6.Wife	-	20	100	-	21	100
7.Ordinary	-	20	100	1	20	95.23
8.Marital	13	7	35	7	14	66.66
9.Curricular	18	2	10	4	17	80.95
10.Arm	1	19	65	-	21	100
11.Warn	4	16	80	9	12	57.14
12.Tell	1	19	95	1	20	95.23
13.Sensitive	4	16	80	2	19	90.47
14.Active	13	7	35	11	10	47.61
15.Critical	10	10	50	13	8	38.09
16.Sufficient	10	10	50	8	13	61.90
17.Discipline	5	15	75	5	16	76.19
18.Secure	16	4	20	18	3	14.28
19.Marry	1	19	95	3	18	85.71
20.Planetary	14	6	30	18	3	14.28
21.State	14	6	30	16	5	23.80
22.Function	14	6	30	7	14	66.66
23.Practice	5	15	75	4	17	80.95
24.Nutrition	7	13	65	5	16	76.19
25.Behave	-	20	100	-	21	100
26.Apply	14	6	30	7	14	66.66
27.Guide	13	7	35	6	15	71.42
28.Purpose	-	20	100	-	21	100

29.National	7	13	65	8	13	61.90
30.Racial	16	4	20	11	10	47.61
31.Conscious	5	15	75	3	18	85.71
32.Circular	8	12	60	13	8	38.09
33.Soil	13	7	35	9	12	57.14
34.Standard	18	2	10	16	5	23.80
35.Normal	6	14	70	4	17	80.95
36.Administration	15	5	25	8	13	61.90
37.Slavery	5	15	75	5	16	76.19
38.Liberal	15	5	25	13	8	38.09
39.Fill	1	19	95	4	17	80.95
40.Discover	2	18	90	-	21	100
41.Point	10	10	50	1	20	95.23
42.Obey	16	4	20	9	12	57.14
43.Approve	13	7	35	7	14	66.66
44.Order	7	13	65	3	18	85.71
45.Arrange	2	18	90	1	21	100
46.Determine	14	6	30	7	14	66.66
47.Pay	1	19	95	-	21	100
48.Date	-	20	100	-	21	100
49.Graduate	6	14	70	4	17	80.95
50.Partisan	13	7	35	9	12	57.14
51.Annual	11	9	45	4	17	80.95
52.Monthly	3	17	85	4	17	80.95
53.Moral	14	6	30	15	6	28.57
54.Sense	11	9	45	13	8	38.09
55.Payment	5	15	75	4	17	80.95
56.Syllable	13	7	35	11	10	47.61
57.Chrome	16	4	20	13	8	38.09
58.Rail	2	18	90	2	19	90.47
59.War	14	6	30	1	20	95.23
60.Social	9	11	55	6	15	71.42
61.Wind	-	20	100	1	20	95.23
62.Biography	1	19	95	1	20	95.23

63.Intoxication	19	1	5	13	8	38.09
64.Suggestion	1	19	95	4	17	80.95
65.Revolution	3	17	85	-	21	100
66.Act	12	8	40	6	15	71.42
67.Clockwise	18	2	10	16	5	23.80
68.Science	1	19	95	1	20	95.23
69.Event	2	18	90	3	18	85.71
70.Academic	19	1	5	13	8	38.09
71.Charge	19	1	5	15	6	28.57
72.Sell	5	15	75	2	19	90.47
73.Enemy	5	15	75	1	20	95.23
74.Angel	1	19	95	-	21	100
75.Bishop	18	2	10	4	17	80.95
76.Estimate	17	3	15	13	8	38.09
77.Sleep	-	20	100	1	20	95.23
78.State	12	8	40	4	17	80.95
79.Continental	15	5	25	10	11	52.38
80.Plant	5	15	75	2	19	90.47
81.Ship	14	6	30	10	11	52.38
82.Danger	1	19	95	-	21	100
83.Large	5	15	75	-	21	100
84.Force	6	14	70	3	18	85.71
85.Symmetrical	13	7	35	1	20	95.23
86.Educate	3	17	85	2	19	90.47
87.Secret	1	19	95	-	21	100
88.Demonstrate	5	15	75	2	19	90.47
89.Explode	5	15	75	3	18	85.71
90.Obscure	14	6	30	17	4	19.04
91.Pure	11	9	45	5	16	76.19
92.Value	3	17	85	-	21	100
93.Explore	15	5	25	7	14	66.66
94.Centre	3	17	85	4	17	80.95
95.Hyphen	18	2	10	13	8	38.09
96.Liberal	16	4	20	14	7	33.33
97.Celebrate	18	2	10	17	4	19.04
98.Contribute	3	17	85	6	15	71.42
99.Astronaut	3	17	85	-	21	100
100.Poet	1	19	95	-	21	100
101.Contrary	2	18	90	-	21	100
102.Discipline	2	18	90	2	19	90.47
103.Pupil	3	17	85	1	21	100
104.Owner	7	13	65	-	21	100
105.Cost	3	17	85	6	15	71.42

106.Clock	1	19	95	-	21	100
107.Cross	-	20	100	2	19	90.47
108.Dark	-	20	100	-	21	100
109.Trouble	9	11	55	4	17	80.95
110.Baby	3	17	85	2	19	90.47
111.Man	-	20	100	1	20	95.23
112.Women	1	19	95	1	20	95.23
113.Marble	19	1	5	18	3	14.28
114.Child	1	19	95	-	21	100
115.Life	-	20	100	-	21	100
116.Queen	4	16	80	-	21	100
117.Star	-	20	100	-	21	100
118.Spoil	5	15	75	5	16	76.19
119.Carry	6	14	70	4	17	80.95
120.Silver	1	19	95	1	20	95.23
121.Civil	15	5	25	5	16	76.19
122.Pain	2	18	90	1	20	95.23
123.Hate	1	19	95	-	21	100
124.Search	10	10	50	5	16	76.19
125.Nutrition	6	14	70	5	16	76.19
126.Know	12	8	40	15	6	28.57
127.Wonder	-	20	100	-	21	100
128.Chair	9	11	55	9	12	57.14
129.Money	-	20	100	-	21	100
130.Age	3	17	85	-	21	100
131.Sick	1	19	95	-	21	100
132.Fever	5	15	75	7	14	66.66
133.Mild	14	6	30	10	11	52.38
134.Rude	4	16	80	1	20	95.23
135.Full	-	20	100	1	20	95.23

APPENDIX 5
THE RESULTS OF THE SELECTED WORDS FROM WORD DETERMINING VOCABULARY TEST FOR THE AFFIXED VOCABULARY TEST

WORDS	GROUP 1 İncorrect/Correct/Proportion of			GROUP 2 İncorrect/Correct/Proportion of		
	-	+	Correct Answers %	-	+	Correct Answers %
1.Author	-	20	100	-	21	100
2.Wife	-	20	100	-	21	100
3.Ordinary	-	20	100	1	20	95.23
4.Tell	1	19	95	1	20	95.23
5.Sensitive	4	16	80	2	19	90.47
6.Discipline	5	15	75	5	16	76.19
7.Marry	1	19	95	3	18	85.71
8.Practice	5	15	75	4	17	80.95
9.Behave	-	20	100	-	21	100
10.Purpose	-	20	100	-	21	100
11.Conscious	5	15	75	3	18	85.71
12.Normal	6	14	70	4	17	80.95
13.Slavery	5	15	75	5	16	76.19
14.Fill	1	19	95	4	17	80.95
15.Order	6	14	70	3	18	85.71
16.Pay	1	19	95	-	21	100
17.Date	-	20	100	-	21	100
18.Monthly	3	17	85	4	17	80.95
19.Payment	5	15	75	4	17	80.95
20.Rail	2	18	90	2	19	90.47
21.Wind	-	20	100	1	20	95.23
22.Biography	1	19	95	1	20	95.23
23.Revolution	3	17	85	-	21	100
24.Science	1	19	95	1	20	95.23
25.Sell	5	15	75	2	19	90.47
26.Angel	1	19	95	-	21	100

27.Sleep	-	20	100	1	20	95.23
28.Plant	5	15	75	2	19	90.47
29.Danger	1	19	95	-	21	100
30.Secret	1	19	95	-	21	100
31.Explode	5	15	75	3	18	85.71
32.Value	3	17	85	-	21	100
33.Centre	3	17	85	4	17	80.95
34.Contribute	3	17	85	6	15	71.42
35.Poet	1	19	95	-	21	100
36.Discipline	2	18	90	2	19	90.47
37.Pupil	3	17	85	1	21	100
38.Clock	1	19	95	-	21	100
39.Dark	-	20	100	-	21	100
40.Man	-	20	100	1	20	95.23
41.Life	-	20	100	-	21	100
42.Star	-	20	100	-	21	100
43.Carry	6	14	70	4	17	80.95
44.Silver	1	19	95	1	20	95.23
45.Hate	1	19	95	-	21	100
46.Nutrition	6	14	70	5	16	76.19
47.Wonder	-	20	100	-	21	100
48.Money	-	20	100	-	21	100
49.Child	1	19	95	-	21	100
50.Full	-	20	100	1	20	95.23

APPENDIX 6
THE RESULTS OF THE AFFIXED VOCABULARY TEST

PREFIXED WORDS	GROUP 1			GROUP 2		
	Incorrect / -	Correct / +	Proportion of Correct Answers %	Incorrect / -	Correct/ +	Proportion of Correct Answers %
1-Time or order						
Exwife	9	11	55	9	12	57.14
Foretell	14	6	30	7	14	66.66
Refill	1	19	95	4	17	80.95
Prepay	16	4	20	9	12	57.14
Postdate	12	8	40	8	13	61.90
2-Place						
Intermarry	11	9	45	9	12	57.14
Subnormal	13	7	35	17	4	19.04
Transplant	9	11	55	7	14	66.66
3-Degree or size						
Extraordinary	13	7	35	9	12	57.14
Hypersensitive	2	18	90	2	19	90.47
Undersell	5	15	75	5	16	76.19
Archangel	13	7	35	13	8	38.09
Oversleep	6	14	70	5	16	76.19
4-Negation						
Indiscipline	4	16	80	6	15	71.42
Disorder	5	15	75	2	19	90.47
Nonpayment	15	5	25	12	9	42.85
5-Criticism						
Malpractice	17	3	15	16	5	23.80
Misbehave	8	12	60	2	19	90.47
Pseudoscience	18	2	10	6	15	71.42
6-Attitude						
Coauthor	12	8	40	5	16	76.19
Proslavery	19	1	5	14	7	33.33
Antiwind	5	15	75	4	17	80.95
Counterrevolution	16	4	20	14	7	33.33
Autobiography	4	16	80	6	15	71.42
7-Number						
Multipurpose	10	10	50	1	20	95.23
Semiconscious	12	8	40	5	16	76.19
Bimonthly	17	3	15	7	14	66.66
Monorail	10	10	50	8	13	61.90
8-Verb forming prefix						
Endanger	17	3	15	11	10	47.61

SUFFIXED WORDS	GROUP 1 Incorrect / -	Correct / +	Proportion of Correct Answers %	GROUP 2 Incorrect / -	Correct / +	Proportion of Correct Answers %
1-Nonneutral high-frequency suffixes						
Secretive	6	14	70	13	8	38.09
Explosivity	13	7	35	12	9	42.85
Valuation	10	10	50	13	8	38.09
Centrate	18	2	10	10	11	52.38
Contributory	18	2	10	20	1	4.76
Poetic	9	11	55	8	13	61.90
Disciplinarian	10	10	50	12	9	42.85
2-Neutral low-frequency suffixes						
Pupilship	9	11	55	9	12	57.14
Clockwise	17	3	15	15	6	28.57
Darksome	17	3	15	17	4	19.04
Manhood	8	12	60	10	11	52.38
Lifelike	15	5	25	10	11	52.38
Stardom	6	14	70	10	11	52.38
Carriage	10	10	50	8	13	61.90
3-Neutral high-frequency suffixes						
Silverize	14	6	30	13	8	38.09
Hateful	11	9	45	7	14	66.66
Nutritionist	4	16	80	8	13	61.90
Wonderfully	11	9	45	10	11	52.38
Moneyless	3	17	85	-	21	100
Childish	1	19	95	-	21	100
Fullness	9	11	55	7	14	66.66

APPENDIX 7
RESULTS OF THE NEW WORD STRATEGY QUESTIONNAIRE

1. When you are reading, how many of the words don't you know ?

	GROUP 1	GROUP 2
[ ] about one in every sentence	10%	28.57%
[ ] two or three on a page	15%	19.04%
[ ] I know almost every word I read	---	---
[ ] a few in every paragraph	75%	52.38%
[ ] one or two a day	---	---

2. When you come across a word you don't know, how often do you use **prefixes** to figure out what the word means?

	[ ] ALWAYS	[ ] SOMETIMES	[ ] NEVER
GROUP 1	10%	90%	---
GROUP 2	14.28%	76.19%	9.52%

3. When you come across a word you don't know, how often do you use **suffixes** to figure out what the word means?

	[ ] ALWAYS	[ ] SOMETIMES	[ ] NEVER
GROUP 1	15%	80%	5%
GROUP 2	19.04%	71.42%	9.52%

4. When you come across a word you don't know, how often do you use a **dictionary or glossary** to find out what the word means?

	[ ] ALWAYS	[ ] SOMETIMES	[ ] NEVER
GROUP 1	15%	85%	---
GROUP 2	42.85%	52.38%	4.76%

5. When you come across a word you don't know, how often do you just **skip** the word?

	[ ] ALWAYS	[ ] SOMETIMES	[ ] NEVER
GROUP 1	15%	75%	10%
GROUP 2	9.52%	85.71%	4.76%

6. When you come across a word you don't know, how often do you **use the context** to figure out what the word means?

	[ ] ALWAYS	[ ] SOMETIMES	[ ] NEVER
GROUP 1	40%	60%	—
GROUP 2	33.33%	61.90%	4.76%

7. When you come across a word you don't know, how often do you **ask someone** what the word means?

	[ ] ALWAYS	[ ] SOMETIMES	[ ] NEVER
GROUP 1	15%	60%	25%
GROUP 2	9.52%	76.19%	14.28%

8. When you come across a word you don't know, how often do you **sound out the word to see if you know what it means?**

	[ ] ALWAYS	[ ] SOMETIMES	[ ] NEVER
GROUP 1	25%	45%	30%
GROUP 2	9.52%	42.85%	47.61%

9. When you come across a word you don't know, how often do you use a **dictionary or glossary** to find out **how to pronounce the word**?

	[ ] ALWAYS	[ ] SOMETIMES	[ ] NEVER
GROUP 1	30%	45%	25%
GROUP 2	—	71.42%	28.57%

10. When you come across a word you don't know, how often do you try to **break the word into syllables or parts** to find out **how to pronounce** the word?

	[ ] ALWAYS	[ ] SOMETIMES	[ ] NEVER
GROUP 1	15%	80%	5%
GROUP 2	9.52%	33.33%	57.14%

APPENDIX 8
GROUPS OF PREFIXES

1-Time or order
Exwife
Foretell
Refill
Prepay
Postdate

2-Place
Intermarry
Subnormal
Transplant

3-Degree or size
Extraordinary
Hypersensitive
Undersell
Archangel
Oversleep

4-Negation
Indiscipline
Disorder
Nonpayment

5-Criticism
Malpractice
Misbehave
Pseudoscience

6-Attitude
Coauthor
Proslavery
Antiwind
Counterrevolution
Autobiography

7-Number
Multipurpose
Semiconscious
Bimonthly
Monorail

8-Verb forming prefix
Endanger

APPENDIX 9
GROUPS OF SUFFIXES

1 -Nonneutral high-frequency suffixes

Secretive
Explosivity
Valuation
Centrate
Contributory
Poetic
Disciplinarian

2 -Neutral low-frequency suffixes

Pupilship
Clockwise
Darksome
Manhood
Lifelike
Stardom
Carriage

3 -Neutral high-frequency suffixes

Silverize
Hateful
Nutritionist
Wonderfully
Moneyless
Childish
Fullness