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**EFFECTS OF COGNITIVE STYLES, CONTEXTUALISED AND  
DECONTEXTUALISED VOCABULARY TEACHING TECHNIQUES, AND  
LEARNING STRATEGIES ON EFL VOCABULARY**  
(Yüksek Lisans Tezi)

Ayşe Zeynep Kıvanç

**T.C. YÜKSEKÖĞRETİM KURULU  
DOKÜMANTASYON MERKEZİ**

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# GİRİŞ



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## ABSTRACT

Effects of  
Cognitive Styles,  
Contextualised and Decontextualised Vocabulary Teaching Techniques,  
and Learning Strategies on EFL Vocabulary  
by  
Ayşe Zeynep Kıvanç

The present study explores the effect of the cognitive construct of Field Dependence and Independence on vocabulary learning in an L2/FL context together with two distinct vocabulary teaching techniques, namely “word list” as a decontextualised, and “semantic mapping” as a contextualised technique. To further investigate the reasons behind the outcomes of this research, the study also aimed to identify the subjects’ habits, approaches and strategies toward vocabulary learning in English as a foreign language, their perceptual learning style preferences, and the relationship between native language proficiency and success in vocabulary learning.

Forty A (upper-intermediate) level students at Yıldız Technical University, School of Foreign Languages, Basic English Department constituted the participants of the study. Cognitive style was measured by the Group Embedded Figures Test (GEFT) while their level of success in vocabulary learning was assessed by two English cloze tests, labeled Pre-test and Post-test. In order to measure the subjects’ native language proficiency, two Turkish cloze tests were administered. Perceptual learning style preferences were ascertained by the Perceptual Learning Style Preference Questionnaire designed by Richards & Lockhart (1994). The data related to the approaches and strategies that the subjects adopted for vocabulary learning were elicited by means of the Vocabulary Learning and Study Strategies Questionnaire. The two Follow-up Questionnaires explored the extent to which the subjects adhered to the instructions given for two different vocabulary teaching techniques, namely “word list” and “semantic mapping”.

Further to the manual and computerized computations, the data collected were processed by means of the Statistical Package for the Social Sciences (SPSS, version 10.0), which uses descriptive statistics, T-tests and Mann Whitney U-Tests.

The findings of the study revealed that the subjects who were instructed to study vocabulary through the “word list” technique out-performed the subjects who studied vocabulary following the “semantic mapping” technique, which was in clear contrast to the findings reported in previous research. However, the analysis of the relationship between Field Dependency and Independency cognitive construct and the subjects’ achievement level in vocabulary learning demonstrated that field independent subjects benefited from “semantic mapping” more than field dependent counterparts. It was also concluded from the results of this study that native language proficiency was a positive attribute for achieving a higher level of success in vocabulary learning as was the field independence cognitive style. The perceptual learning style preferences of the subjects did not contribute to the achievement level in vocabulary learning, presumably due to the small number of participants in the study.

The data elicited by the two Follow-up Questionnaires and the Vocabulary Learning and Study Strategies Questionnaire revealed strong indications of a lack of awareness of the importance of learning vocabulary and that some of the subjects were not equipped with the appropriate attitude and effective study approaches to apply the “semantic mapping” technique in learning foreign language vocabulary. It was considered that their previously developed study habits throughout their educational life inspired a system of rote learning, which is likely to have hindered the cognitive inclination to make thematic associations among the vocabulary items causing a possible slow-down in learning vocabulary.

In the light of these findings, limitations of the study were mentioned and some suggestions were made for further research.

## KISA ÖZET

Bilişsel yordamların, bağlamlı ve bağlamsız sözcük öğretim tekniklerinin ve öğrenme stratejilerinin yabancı dil olarak İngilizce sözcük öğrenimine etkileri

Bu çalışmada, bağlamlı ve bağlamsız olarak nitelendirilen ve birbirine zıt olan iki sözcük öğretme tekniği olarak “anlam alanları şeması” ile “sözcük listesi” uygulanmasında, bilişsel yordamlar (alana bağımlılık/alandan bağımsızlık) ile sözcük öğrenimi arasındaki ilişki incelenmektedir. Ayrıca elde edilen bulguların sebeplerini araştırabilmek için, çalışmaya katılan öğrencilerin İngilizce sözcük öğrenme alışkanlık ve stratejileri, algısal öğrenme tercihleri ve anadildeki yeterlilikleri ile sözcük öğrenimleri arasındaki ilişkiye de bakılmıştır.

Yıldız Teknik Üniversitesi, Yabancı Diller Yüksek Okulu, Temel İngilizce Bölümü’nde ileri-orta düzeyde İngilizce öğrenmekte olan 40 öğrenci bu araştırmanın denek grubunu oluşturmuştur. Öğrencilerin bilişsel yordamları Saklı Şekiller Grup Testi (GEFT) ile, sözcük öğrenme başarıları ise Ön-test ve Son-test olarak adlandırılan iki İngilizce ‘çıkarmalı test’ (cloze test) ile ölçülmüştür. Deneklerin ana dildeki yeterliliklerini ölçmek için ise yine iki Türkçe ‘çıkarmalı test’ uygulanmıştır. Algısal öğrenme tercihlerinin belirlenmesinde Richards & Lockhart (1994) tarafından geliştirilen sormaca kullanılmıştır. Öğrencilerin sözcük öğrenme alışkanlık ve stratejilerine ilişkin bilgi, “Sözcük Öğrenme ve Çalışma Stratejileri” anketi ile, birbirine zıt iki sözcük öğretme tekniği uygulamasında nasıl bir çalışma yöntemi izlediklerine ilişkin bilgi ise uygulama sonrası verilen iki farklı anket ile toplanmıştır.

Veriler, yapılan hesaplamalardan sonra, SPSS (10.0), T-testleri ve Mann Whitney U-testleri kullanılarak değerlendirilmiştir.

Araştırmanın sonuçları “sözcük listesi” tekniği ile sözcük öğreniminin, “anlam alanları şeması” tekniği ile sözcük öğreniminden daha başarılı olduğunu göstermiştir; ki bu sonuç daha önce bu alanda yapılmış araştırmaların sonuçları ile açık bir zıtlık oluşturmaktadır.

“Sözcük Öğrenme ve Çalışma Stratejileri” anketi ile uygulama sonrası anketlerinin bulguları, öğrencilerin sözcük öğreniminin önemini farkında olmadıklarını, ayrıca bir kısım öğrencinin “anlam alanları şeması” tekniğinin gerektirdiği çalışma yöntemini uygulamadıklarını ortaya koymuştur. Bu durumda, öğrencilerin önceki eğitim yıllarında geliştirdikleri çalışma alışkanlıklarının, büyük olasılıkla sözcükler arasında tematik

ilişkilendirme yapma şeklindeki bilişsel yönlenmeyi engelleyen, böylelikle de sözcük öğreniminde olası bir yavaşlamaya neden olan “ezbere dayalı” öğrenimden kaynaklandığı yorumu getirilmiştir.

Elde edilen diğer bir sonuç ise, ana dildeki yeterlik düzeyinin, yabancı dilde sözcük öğrenimine olumlu yönde katkısı olduğudur. Algısal öğrenme şekli tercihleri ile sözcük öğrenme başarısı arasında ise anlamlı bir ilişki gözlenmemiştir.

Ancak, bilişsel yordam ile sözcük öğrenme başarısı arasındaki ilişki incelendiğinde “alandan bağımsız” olan öğrencilerin “anlam alanları şeması” tekniğinden daha fazla yarar sağladıkları saptanmıştır.

Ayrıca sıralanan bulgular ışığında araştırmadaki sınırlayıcı faktörler belirtilmiş ve daha sonraki araştırmalar için bazı öneriler de sunulmuştur.



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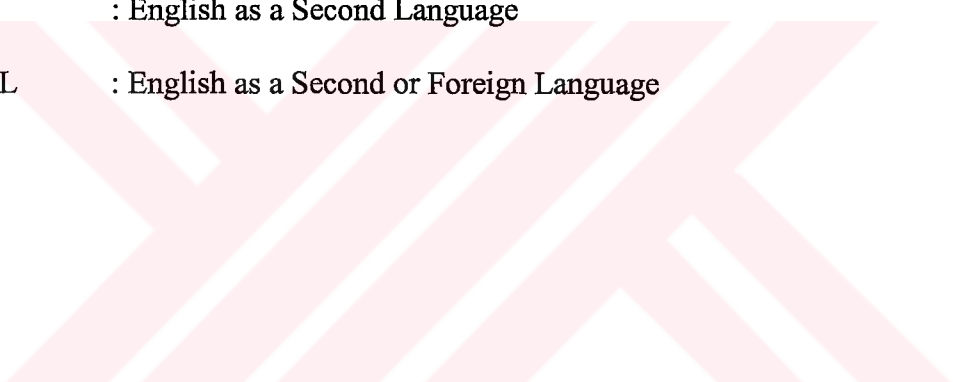
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## ABBREVIATIONS

FD	: Field Dependency
FI	: Field Independency
FD/I	: Field Dependency and Independency
L1	: First language
L2	: Second language
FL	: Foreign Language
L2/FL	: Second and Foreign Language
EFL	: English as a Foreign Language
ESL	: English as a Second Language
ES/FL	: English as a Second or Foreign Language



## I. INTRODUCTION

### 1.1. Introduction

Mounting research supports a wide acceptance of vocabulary being the core element of language which needs to be taken into account when teaching a foreign language. With his rather controversial and thought-provoking ideas, Lewis (1993) highlighted the importance of vocabulary as being the basis of communication. He defends the idea that if learners do not recognise the meaning of words they will be unable to participate in the conversation, even if they know the morphology and syntax.

Research also suggests that our “mental lexicon” is highly organized and efficient, and that semantically related items are stored together. Grouping items of vocabulary in semantic fields, such as topics, is claimed to facilitate the learning process.

On the other hand, different aspects of learning and teaching a foreign language have been investigated from different viewpoints in order to search for the reasons for varying learner performances. The initial studies in the field, which previously focused on the instructional factors such as teaching techniques and classroom materials, have now shifted to the examination of learner factors. Of these individual factors, cognitive processing appears to be an effective dimension that exhibits itself in foreign or second language learning performance. Therefore, the effects of cognitive factors on language learning have gained priority in recent research.

The concern of this study was to investigate the relevance of cognitive dimensions of field dependence and independence (FD/I) to foreign language vocabulary learning.

The tight relationship between “cognitive depth” and retention, as suggested by Carter and McCarthy (1988), was examined by the application of decontextualized and contextualized vocabulary teaching techniques, namely “word list” and “semantic mapping” techniques.

This study aimed to reveal the influences of both FD/I cognitive styles and different vocabulary teaching techniques on vocabulary learning. In addition, two more questions were addressed in the research; one that questions the effect of native language competence on performance in vocabulary learning, and one that investigates the influence of learning style preferences on the outcomes of vocabulary learning. Probing the area also

necessitated the investigation of the impact of individual study habits or methods on vocabulary expansion.

Forty upper-intermediate level students in a state university preparatory class in Istanbul have constituted the sample for this study.

The Group Embedded Figures Test (GEFT) was used to ascertain the learners' cognitive style characteristics of FD/I. To determine whether two different vocabulary teaching methods influence the learners' progress in vocabulary learning and also whether there is a relationship between cognitive styles of FD/I and success in vocabulary learning, the subjects' achievement in learning the target words was measured by two English cloze tests, namely the Pre-test and Post-test.

The other research questions of the study were investigated by using the Perceptual Learning Style Preference Questionnaire, which was designed to determine the learning style preferences of the subjects, and the Personal Background Information Questionnaire, Vocabulary Learning and Study Strategies Questionnaire and two Follow-up Questionnaires, which were designed to elicit the subjects' approaches to vocabulary learning and the methods they adopted to retain words. Additionally, two Turkish cloze tests were used to examine the correlation between the subjects' native language proficiency and their vocabulary learning performance in English as a foreign language.

The data were analysed using the Statistical Package for the Social Sciences (SPSS, version 10,0), descriptive statistics, T-tests and Mann Whitney U-tests to identify the correlation between cognitive style of FD/I and vocabulary learning, and also between the two distinct vocabulary teaching techniques and success in vocabulary learning.

These two distinct vocabulary teaching techniques were addressed in terms of "contextualisation", the "word list" technique as being a "decontextualised" technique and the "semantic mapping" as a "contextualised" one. One point should be noted here that "semantic mapping" was considered to be a "contextualised" one although it was accepted as a "semi-contextualised" technique by Oxford & Crookall (1990). It was assumed that, apart from the excerpts given to the subjects to present the target vocabulary, clustering words into different groups according to a set of criteria would serve the aim of forming a basic "context" or "theme", which would accordingly facilitate the level of success in vocabulary learning.

Although in reality a difference exists between the meaning of "learning" and "acquisition" of a language, this study has used these terms interchangeably since both

refer to the process of internalising knowledge. The distinction between learning as a conscious process and acquisition as a sub-conscious one has not been focussed on as it is assumed that learning and acquisition processes are a result of, to a certain extent, cognitively controlled attempts.

In the review of the literature, it has been noticed that, in the case of L2, some researchers have used the term “acquisition” whereas some preferred the term “learning”. Regardless of its being a second or foreign language, the basics of the process of learning another language other than the native one are assumed to be confined to the similar fundamentals because the learning process of both a second or foreign language involves linking the newly learned forms to already-developed concepts in the learner’s native language.

Similarly, the other two terms of “second language” and “foreign language” have been used interchangeably in some parts of the study. Although it is acknowledged that the difference between a second and a foreign language is obvious, the former having social and communicative functions and the latter having no immediate such function within the community where it is learned, the study has not made a distinction between the two, because as Oxford (1990) demonstrates that most learning strategies can be applied equally well to both second language and foreign language situations. Using the common term of the “target language”, as discovered by Oxford (1990) to refer to both terms, has deliberately been avoided so as not to harm the originality of statements cited from various sources.

The hypothesis which predicted a positive relationship between degrees of field independence as a cognitive construct and success in vocabulary learning was not supported. However, it was found that field independent subjects had a higher achievement level than field dependent subjects when instructed to adopt the “semantic mapping” technique.

In contrast, field dependent subjects performed better in vocabulary learning when instructed to use the “word list” technique.

These results denoted no support for the assumption that the “semantic mapping” technique has more advantages than the “word list” technique in vocabulary learning, which contrasted strikingly with the findings of some previous research.

Due to these unpredicted outcomes, the present study required further data collection to find out to what extent the subjects followed the instructions for studying the target

vocabulary on the basis of contextualised and decontextualised vocabulary teaching techniques.

The outcomes of this follow-up investigation showed that the subjects' metacognitive awareness and learning strategies, unfortunately, are unlikely to have been sufficiently developed to adhere to the study methods recommended.

The hypothesis which assumed a significant relationship between native language proficiency and the achievement level in vocabulary learning in a foreign language was partly supported, presumably due to the small sample size of subjects. However, field independent subjects were found to be more proficient in their native languages according to their level of success in filling the deletions of the Turkish cloze tests.

Similarly, the perceptual learning style preferences were found to bear no relationship with the degree of success in vocabulary learning. This result also seems to stem from the restricted number of subjects.

It can be concluded from the findings of this study that the cognitive construct of field independence is a factor that responds to a particular vocabulary teaching technique, namely the "semantic mapping" technique, as well as to the level of native language proficiency.

On the other hand, a conclusion was drawn that the main characteristics of the educational system that the participants had previously been subjected to, and the metacognitive and learning strategies they had developed in accordance with that system, could well affect the subjects' approaches to vocabulary learning and their study habits in an EFL context, and should be taken into account when deciding the appropriate technique to teach new vocabulary. Finally, in the light of these findings, some suggestions have been made for further research.

## **1.2. Significance of the Study**

In spite of the divergent findings obtained through work on both foreign language learning and the learning of L2/FL vocabulary, the relevant recent studies have focused on numerous issues, such as the effect of learning strategies employed by the learners, comparisons of different vocabulary teaching instructions, the effect of contrasting cognitive styles on learning and metacognitive strategies employed by language learners.

For the researcher, among such a broad range of issues, the question of "what facilitates the learning of foreign language vocabulary" outweighed the others and was

considered to be worth investigating in the hope of reaching conclusions which might lead the language teachers to take new paths to increase learners' success in foreign language vocabulary learning.

Among various factors that influence learning second or foreign language, cognitive constructs have been the most widely researched individual characteristics. Shipman (1990), as cited in Saracho (1990), describes "cognitive styles" as a broad array of behavioural response tendencies in cognition and the processing characteristics underlying these behavioural tendencies. These tendencies and mental strategies vary from individual to individual when they are learning new concepts or skills.

Accounting for how individuals perceive, organize and remember information, cognitive styles denote an approach to cognitive type-tasks, one of which is "language learning". Cognitive styles have been subsumed under many classifications according to individuals' analytical, relational, organisational, and categorical attitudes.

Of these cognitive characteristics, field dependence-independence has been a subject of a great number of studies. Very concisely, field dependent perception is characterised by interpersonal sensitivities and social orientation, whereas field independence dimension refers to being more competent in cognitive restructuring skills (Witkin and Goodenough, 1981 in Saracho, 1990).

Difficulty in learning vocabulary has been alleged by students to be a seriously problematic issue to deal with when learning a foreign language. When asked, the majority of students complain that their language development is hampered by their limited vocabulary and by the difficulty in retaining and recalling new words for the production of meaningful dialogues. Students may appear to believe it is unnecessary to make any special effort or to employ any special strategies to develop their vocabulary, that is, they expect to automatically memorise those items with little or no effort.

Moreover, despite being an indispensable aspect of the successful command of English for communicative purposes, vocabulary has been treated unfairly in teaching English as a foreign language. Most books used at present do little to create a path to guide learners to more effective vocabulary learning. Instead, they are organised with an overemphasis on structural items, vocabulary items appearing to be of secondary importance.

A review of the literature suggests that there has been a lot of effort spent in comparing various techniques to find answers to the question of how to increase learning speed and recall of foreign language vocabulary words.

This study attempts to investigate the relative effect of two opposing vocabulary teaching techniques, “word list” and “semantic mapping”, on vocabulary learning success of field dependent and field independent learners. Additionally, information about learners’ study habits of English language and vocabulary, together with strategies they adopt to improve their performance in vocabulary learning was taken into consideration to explain the reasons behind the outcomes obtained.

To provide a framework for an integrated literature review along with a supportive basis for the study, not only was the impressive range of research associated with the relationship between cognitive style and vocabulary instruction, and the success in foreign language learning examined, but also how the human brain handles the process of linking concepts with symbols, and the storage of this information, was studied prior to those ELT issues. This was done specifically to strengthen the supporting ideas behind one of the instructional conditions, namely “semantic mapping” which was employed for the purpose of this study. This research, therefore, also traces whether the contextualised techniques out-perform the decontextualised ones with regard to achievement in vocabulary learning.

Summarising various procedures and techniques in vocabulary learning in a foreign language, this study gives a detailed account of previous research findings followed by conclusive remarks.

However, one very surprising point should not be neglected as it initially left the researcher with the mystery of why the dramatic benefit of “semantic mapping” did not extend across the subjects’ level of success in this study. Therefore, an unexpected and contradictory finding led the researcher to collect further data to find the possible reasons contributing to such unpredicted findings.

Given the fact that both vocabulary instruction and cognitive style can influence learning, enhancing the quality of teaching vocabulary and improving the learners’ ability to learn are two inseparable issues. It can be asserted that cognitive styles may have a role of determining factor in how learners construct appropriate mechanisms and also how far they become aware of their metacognitive strategies during successful vocabulary learning. As a result, all interfering issues should be taken into consideration when working on the design of vocabulary instruction in foreign language teaching, which still

appears to remain a subject matter for further research. As a final word, it is suggested that the conclusions reached here be viewed as tentative until the findings have been replicated and corroborated.



## II. REVIEW OF THE LITERATURE

### 2.1. Cognition and Language

#### 2.1.1. Human Cognition and Language

Cognition is the intellectual processes through which information is obtained, transformed, stored, retrieved and used. Barsalou's (1992) remark also hints at this impressive characteristic of human intelligence as being the ability to acquire, store, and use tremendous amounts of complex knowledge. People acquire knowledge, manipulate and update it, or construct new knowledge. These active intellectual processes are affected by cognitive abilities.

The basic unit of cognition and thinking is the concept, which can be described as categories of things, events, or qualities that are linked by some common features in spite of their differences. On the other hand, according to Darwin, language, being a product of human cognitive systems, is contended to have been slowly and unconsciously developed in many steps (Pinker, 1994).

Opposing the linguistic determinism, Pinker (1994) asserts that people do not think in a particular language; they think in a language of thought, which presumably has symbols for concepts. In Pinker's (1994) view, the arrangement of these symbols composes "mentalese", which is translated into strings of words in the case of knowing a language. He, then, referring to Chomsky (1965), maintains that a code to translate between words and thoughts is used and that code, or set of rules, is called generative grammar. Thus, the way language works is that each person's brain contains a lexicon of words and the concepts they stand for and a set of rules that combine the words to convey relationships among concepts.

As underlined by Pinker (1994), words have stable meanings, linked to them by arbitrary convention. In this sense, languages all show a duality of patterning in which one rule system is used to order phonemes within morphemes, independent of meaning, and another is used to order morphemes within words and phrases, specifying their meaning.

Inspired by Chomsky's universal grammar, Brown (1991), as cited by Pinker (1994), has tried to characterise the universal people giving a list of instincts or innate

psychological propensities. With the assumption of an infinitely variable human nature, one might consider the assumption of an infinitely acquisitive learning ability.

Establishing new concepts is the basis of learning. Similarly, concept formation is a special kind of thinking in which hypotheses about the defining characteristics of the concept are tested by positive and negative example.

The concept of a multi-purpose learning device, as stated by Pinker (1994), is powered by the generalisation according to similarity, which is alleged to be innate. For language acquisition, this innate computation allows children to analyse parental speech and to generalise to an infinite number of potential sentences using a fixed set of mental categories. So, it is possible to assume that learning either a grammar system or the meanings of words from examples requires a special similarity space.

Deacon (1997), in the pursuit of finding an answer to the question of language knowledge, depicts a few major alternative paradigms as to whether human language is imposed from the outside or it reflects what is already inside. One of the major theoretical paradigms proposed to explain the aspects of human language is based on the notion that word meaning is created when the perception of the sound of a spoken word is associated with an object both as perceived and stored in the mind in the form of a mental image.

Another influential view, which was first explicitly formulated by Noam Chomsky, associates grammatical knowledge to a mechanism already built in the mind prior to language experience. The last view conceives of knowledge of language as an external reflection of the brain called "mentalese". Pinker (1994), as quoted in Deacon (1997), defends this innatist view and explains that knowing a language is knowing how to translate mentalese into strings of words.

Deacon (1997) describes language as a mode of communication based upon symbolic reference and involving combinatorial rules that comprise a system for representing synthetic logical relationships among these symbols.

He asserts that typical learning strategies may not best facilitate language learning. Rather than association, symbolisation may more readily bring to mind the meaning of a word or sign. Words are used to mean something and to refer to something. In view of referential and meaningful relationships, two sets of elements - signifiers (e.g. signs, words) and signified objects - are associated by a conceptual relationship.

Deacon (1997) points out that reference is not intrinsic to a word, sound or gesture; it derives from the process of generating some cognitive action. The most common view of word meaning holds that a word is interpreted when one generates a mental image of something that it refers to.

In his view, symbols, which comprise one of the categories of referential associations, can only be acquired only after a system of relationships is established.

According to Deacon (1997), the process of discovering the new symbolic association is a restructuring event. He describes an "insight learning" as the necessary cognitive step to create symbolic reference.

The symbolic reference depends on the interrelationships between things. Whether symbols can and cannot be combined determines a new level of mapping to "semantic features". New elements can be added either by sharing reference with semantic features that the system already defines, or by identifying new features that somehow can be integrated with existing ones.

Once the relationship between their semantic feature sets is recognised, their unification can create an enormous number of new combinatorial possibilities.

These competing sets of overlapping associative relationships account for semantic categories on the symbolic level. The web of associations explains where the associative link between words and their referents comes from. In the acquisition process, as Deacon (1997) explains, the retrieval of words is based on numerous neuropsychological examinations of semantic field effects.

In regard to word meaning, memorising or using a word can be a source of subsequent recall of other words in overlapping categories. For example, hearing the word "cat" might prime later memory tasks involving "dog" or "animal". All these associative relationships are brought together by the symbolic relationship. The extent of the symbolic overlap appears to correlate with the "shared features", which explain the fact that the brain stores and retrieves symbolic associations.

Symbols, as Deacon (1997) states, cannot be understood as an unstructured collection of tokens that map to a collection of referents because symbols don't just represent things in the world, they also represent each other. The referential powers of symbols are derived by virtue of occupying certain positions in an organised system of other symbols. The structure of the whole system has a definite semantic web in which

symbols modify each other's referential functions. Such a network of connections defines a vast semantic space.

### **2.1.2. The Nature of Cognitive Constructs**

Primarily addressing how the brain processes information, cognitive psychology describes cognitive constructs, which correspond to mechanisms in the brain that pick up, store, retrieve and transform information in memory (Barsalou, 1992). Cognitive constructs have led the way to a tremendous amount of research in an attempt to discover cognitive mechanisms and have produced useful applications in education (Barsalou, 1992).

One of the cognitive abilities is categorisation, which provides the link between perception and cognition. Information is acquired by a perceptual system and is placed into a category by the cognitive system. These categories are representations, which stand for perceived entities in the environment and play a central role in following cognitive processing. Being able to be stored in memory, they are basic units of cognitive processing.

As stated by Barsalou (1992), most categories are learned as people classify entities to form them. Many cognitive psychologists, as pointed out by Barsalou (1992), view categorisation in terms of a spreading activation framework (J.R. Anderson, 1983; McClelland & Rumelhart, 1981; Seidenberg & McClelland, 1989; Ratcliff & McKoon, 1988).

However, no adequate theory of categorisation exists since it is tremendously complex. The reason why the problem is so formidable is that entities are often diverse and lack common characteristics.

Barsalou (1992) describes categories as sets of concepts which include not only the exemplars and rules that determine category membership but also the conceptualisations of categories that underlie comprehension and prediction (p.155).

In this study, the deliberate categorisation of vocabulary to form semantic maps was based on the brain's natural mechanism to divide the world into categories and to process or activate information with various entities under infinite categories. These categories, being the most essential issue in information processing, form groups of entities. Grouping is done on the basis of 'similarity', which brings the entities with common properties together. In the design of maps for this study, the aim was to maximise these

similarities among the entities of a category in order to optimise the discrimination between the categories.

Clustering of similar properties is the heart of category formation. However, Goodman (1955, 1972), as cited in Barsalou (1992), has noted that an infinite number of properties are potentially relevant to a similarity judgement.

Entities are almost always perceived in contexts. As people can restructure their knowledge of a category making it relevant to the current context, the graded structure of a category reflects one's current conceptualisation of the category. Depending on the information retrieved for a category, and depending on the information perceived as important, different conceptualisations are constructed (Barsalou, 1992). Thus, within a particular context, the graded structure of a category varies considerably between individuals. What one person perceives as typical for a category may appear atypical for someone else. These results illustrate the flexibility of graded structure, because individuals conceptualise a category differently.

On the other hand, researchers have shown that in the recognition and recall process of the brain, association plays an important role in terms of the processing of retrieval cues.

People obtain information from a context and using thematic relations they organise it to improve recall because it helps them find information at retrieval. Recalling one word may provide no cues for finding other words and the entire memory system may have to be searched. Additionally, strategies that focus the subjects' attention on relations between items produce higher recall than strategies that focus attention on individual items (Barsalou, 1992).

In light of the above, a contextualised method of semantic mapping was deemed appropriate to teach vocabulary to the subjects asserting the similarity of the brain's mechanism for processing information using associations to form categories.

### **2.1.3. Cognitive Styles**

A comprehensive review of research in cognitive psychology has indicated that people exhibit significant individual differences in the cognitive processing styles that they adopt in problem solving and other similar decision-making activities (Liu & Ginther, 2000). As for individual differences, different researchers have different definitions and conduct research from different perspectives accordingly. However, as Riding & Cheema

(1991) point out, findings from both qualitative and quantitative research have indicated several consistent major dimensions of individual differences. Of these dimensions, cognitive style is a major one. The construct of cognitive style was originally proposed by Allport (1937), as cited in Liu & Ginther (2000), to refer to an individual's habitual or typical way of perceiving, remembering, thinking, and problem solving. Since then, especially in the last few decades, there has been considerable additional research in this area. Cognitive style has been broadly investigated by psychologists.

The term cognitive styles represents a broad array of behavioural response tendencies in cognition and the processing characteristics underlying these behavioural tendencies (Shipman, 1990). These tendencies and mental strategies vary from individual to individual when they are learning new concepts or skills. 'Cognitive style' accounts for how individuals perceive, organise and remember information denoting a stability or approach to cognitive type-tasks.

There are many different definitions of cognitive style. Tennant (1988) defined cognitive style as "an individual's characteristic and consistent approach to organising and processing information." (p.89). Riding, Glass, and Douglas (1993) termed cognitive styles as "a fairly fixed characteristic of an individual" (p.268) and "are static and are relatively in-built features of the individual" (p.268). Based on the above definitions, cognitive styles refer to the individual's consistent and characteristic predispositions of perceiving, remembering, organising, processing, thinking, and problem solving.

Kogan (1973), as cited in Kogan & Saarni (1990), has distinguished three classes of cognitive styles which are determined by both ability and strategic preference.

Having been formulated and studied by Witkin and his associates, Type I cognitive styles as field dependence-independence emphasize accuracy of performance on the criterial tasks. Field independence reflects relatively accurate performance whereas field dependence relatively inaccurate performance on a set of criterial special tasks. Type II cognitive styles are characterized by an explicit or implicit evaluation dimension. The conceptualisation construct, proposed by Kogan, Moss, and Sigel (1963), illustrates Type II cognitive styles (Kogan & Saarni, 1990). Type III cognitive styles are value-free and preference-oriented. Pettigrew's (1958) breadth of categorization task is the illustrative of these cognitive styles.

As reported by Renninger and Sigel (1990), another classification of cognitive styles is based on the definition as organisation of cognitive controls by Gardner,

Holtzman Klein, Linton and Spence (1959), field dependence-independence by Witkin and Goodenough (1981), impulsivity-reflectivity by Kagan, Rosman, Day, Albert, Phillips (1964), and analytic, relational, and categorical attitudes by Kagan, Moss, Sigel (1963) and Sigel, Jarman, & Hanesian (1967).

Different researchers emphasise different aspects of cognitive styles. Therefore, there are various terms encountered in the literature related to this area. Liu & Ginther (2000) list these terms as follows: breadth of categorising (Kogan & Wallach, 1964), cognitive complexity vs. cognitive simplicity (Kelly, 1955), deep-elaborative vs. shallow-reiterative (Schmeck, 1983), divergent vs. convergent (Hudson, 1966), field dependence vs. field independence (Witkin, 1962), global vs. analytical (Kirby, 1988), impulsive vs. reflectivity (Kagan, 1965), leveller vs. sharpener (Holzman & Klein, 1954), need for cognition (Tanaka, Panter, and Winborne, 1986, 1987), objective vs. nonobjective (Leithwood & Montgomery, 1982), organiser vs. nonorganiser (Atman, 1988), right- vs. left-brained (Torrance & Rockenstein, 1988), risk-taking vs. cautiousness (Kogan & Wallach, 1964; Kogan, 1971), scanning vs. focusing (Gardner, 1961), sensitisers vs. repressors (Bergouist, Lloyd, & Johansson, 1973), sensory modality preferences (Bartlett, 1932; Galton, 1883), simultaneous vs. successive (Das, 1988), verbaliser vs. imager (Riding & Taylor, 1976), verbaliser vs. visualiser (Richardson, 1977), visual vs. haptic perceptual type (Lewenfeld, 1945); holist vs. analytic (Peters, 1977), holist-analytic vs. verbal-imagery (Riding & Cheema, 1991), holist vs. serialist (Pask, 1972), Kolb's learning style model (Kolb, 1984), and the MBTI learning style model (Lawrence, 1984).

In most situations, cognitive and learning styles are used interchangeably. Generally, cognitive styles are more related to theoretical or academic research, while learning styles are more related to practical applications. A major difference between these two terms is the number of style elements involved. Specifically, cognitive styles are more related to a bipolar dimension while learning styles are not necessarily extremes. Cognitive and learning style measures conventionally lie somewhere between aptitude measures and personality measures. In addition, cognitive and learning styles in the literature have been viewed in three major respects-structure, process, or both structure and process (Riding & Cheema, 1991; Squires, 1981; Tennant, 1988; Wilson, 1981).

According to Schmeck (1988), there are two basic types of cognitive styles. One is global-holist/field dependent/right brained, the other is focused-detailed/field independent/left brained.

Schmeck asserted that, although both styles are equally good for problem solving, each style is likely to be associated with greater efficiency in specific tasks. The most effective problem solvers should exercise strategies connected with both aforementioned styles.

In addition, Ausburn and Ausburn (1978), as cited in Liu & Ginther (2000), argued that cognitive styles were characterised by three important properties. The first important property is the generality and stability across tasks and over time. Therefore, they are resistant to training and change. The second important property is the relative independence of cognitive styles from traditional measures of general ability. The third important property is cognitive styles' relationships with some specific abilities, characteristics, and learning tasks. Cognitive styles have either positive or negative relationships with motivation and academic achievement depending on the nature of the learning task.

The review of literature of this study involves the characteristics of a major dimension of cognitive styles: field-dependence and field-independence.

#### **2.1.4. Field Dependence vs Field Independence**

Ellis (1985) describes cognitive style as a term used to refer to the manner in which people perceive, conceptualise, organise and recall information. Each person is considered to have a more or less consistent mode of cognitive functioning. The cognitive styles of second and foreign language learners, as pointed out by Jamieson (1995), clearly affect the pathways that learners will follow successfully or unsuccessfully reaching their goals.

Various dimensions of cognitive style have been identified. These are usually presented as dichotomies. One of these dichotomies which has received the greatest attention is that of field dependence and independence.

Field dependence-independence is the most widely researched cognitive style construct, which refers to a mode of perceiving part-whole relations (Kogan & Saarni, 1990). In field dependent perception there is relative inability to perceive parts of a field as separable from the whole. Saracho (1990), referring to Witkin, Faterson, Dyk, Goodenough & Karp (1974), states that the individual's degree of FD/I is based on the total frequency they are able to disembed items from an organised context.

There has been a growing body of research in the past decades since the field dependence/independence dimension was first proposed by Witkin (1962). According to Witkin, field dependence independence is characterised as the ability to distinguish key elements from a distracting or confusing background. FD/I has important implications for an individual's cognitive behaviour and for his/her interpersonal behaviour. Specifically, field independent people tend to be more autonomous in relation to the development of cognitive restructuring skills and less autonomous in relation to the development interpersonal skills.

Field independent perception is characterised by analysis of the field into discrete parts. This dimension is a bipolar continuum with field dependents, who are distinguished by interpersonal sensitivities, on one extreme and field independents, who are identified by restructuring skills, on the other extreme.

As stated by Kogan and Saarni (1990), numerous studies have linked FD/I with interpersonal functioning. Field dependents are more sensitive to social cues and perform more accurately than field independents on memory tasks for social words. Being socially-oriented, field dependents also appear to be more influenced by others (Saracho, 1990).

In addition, according to Witkin, Moore, Goodenough, and Cox (1977), field independent persons tend to be intrinsically motivated and enjoy individualised learning, while field dependent ones tend to be extrinsically motivated and enjoy cooperative learning.

The field independence dimension is also related to some other individual characteristics, such as solving analogical problems. According to Antonietti and Gioietta (1995), field independent participants were more likely to be analogical solvers than field dependent ones. Males tended to use analogical solutions more frequently than females. Table 2.1 summarises the characteristics of field dependency and independency (Ellis, 1985, p.115).

Table 2.1

Principal Characteristics of a Field Dependent and a Field Independent Cognitive Style  
(based on Hawkey, 1982).

Field Dependence	Field Independence
1. Personal orientation i.e. reliance on external frame of reference in processing information	1. Impersonal orientation i.e. reliance on internal frame of reference in processing information
2. Holistic i.e. perceives a field as a whole; parts are fused with background	2. Analytic i.e. perceives a field in terms of its component parts; parts are distinguished from background
3. Dependent i.e. the self view is derived from others	3. Independent i.e. sense of separate identity
4. Socially sensitive i.e. greater skill in interpersonal/social relationships	4. Not so socially aware i.e. less skilled in interpersonal/social relationships

The terms take place on a continuum, with individuals leaning towards dependence or independence in various extents. Ellis (1985) discusses the question of which style facilitates learning most and assumes that field dependents perform some tasks more effectively than field independents, the opposite being true for other tasks.

In addition, according to Braune and Wickens (1986), as quoted in Liu & Ginther (2000), there are three important dimensions of individual differences in time-sharing-serial processing, parallel processing, and the internal model. Field independent persons perform better in the parallel processing conditions, while field dependent ones perform better in the serial processing conditions.

The field independence dimension is also related to some task characteristics. According to Bennink (1982), high and low field articulation students show differences in the following two major respects under cognitively demanding conditions: (a) integrating a set of semantically related sentences to answer inference questions and (b) remembering the actual propositions themselves.

One of the standardized tests of cognitive style which are commonly used is the Embedded Figures Test developed by Witkin, Oltman, Raskin & Karp (1971). This test determines an individual's ability to perceive an object, pattern or shape when it is

surrounded by (or embedded in) other visual information – to distinguish a figure from background or from a ‘field’. The field independents are those who are able to perceive the figure as independent from the background. Persons who are less able to make this distinction take their perceptual information from a whole rather than from its individual parts. This mode of perception is labelled ‘field dependent’ (Saracho, 1990). Therefore, a high score on these tests identifies the individual as field independent, whereas a low score identifies the individual as field dependent.

Witkin and Goodenough (1981 in Saracho, 1990) view field dependence as an indicator of psychological differentiation. It is hypothesised that field independents rely more on internal frames of reference, while field dependent individuals rely more on external frames of reference. This issue implies that field dependents are assumed to be more socially oriented while field independents are assumed to be more competent in cognitive restructuring skills.

#### **2.1.5. Properties of FD/I Cognitive Construct**

According to the results of a body of research, field independent individuals are better learners and achievers than field dependent individuals and despite the lack of statistically significant differences, the results are in the direction favouring field independent individuals. As stated by Davis (1991), these results involve a reconsideration of the bipolar and value-free characteristics of these cognitive styles.

Witkin’s theory (Witkin et al., 1977; Witkin & Goodenough, 1981 in Davis, 1991) asserts that field dependence/independence dimension is bipolar with field dependent individuals having greater social competencies at one end, and field independent individuals having greater cognitive competencies at the other.

Treating the two skills as a bipolar dimension implies that field dependence and independence is a value-free construct. In this sense, restructuring skills and interpersonal competencies are regarded as opposite poles of a single dimension, mainly, field dependent and independent cognitive style (Wapner and Demick, 1991). As stated by Witkin and Goodenough (1981 in Wapner & Demick, 1991), people may have access to both cognitive constructs shifting from field dependence to field independence and /or vice versa depending on the demands of the task and the goals. Accordingly, the greater cognitive competencies that field independents have were found to contribute to an advantage in learning.

However, Davis (1991) argues about the controversial issue of whether field dependence is interpreted as ability or a style. Several arguments are in support of an ability interpretation (McKenna, 1984; in Davis 1991).

As investigated by Witkin (1977 in Davis, 1991) stylistic interpretations of field dependence suggest that individuals differ in the way they approach a task, but not in the outcome of the task. In other words, individuals with different cognitive styles prefer different approaches to learning. A central issue here is whether or not these preferences result in better performances in learning. Nevertheless, this issue leads to a number of uncertainties. For instance, no clear evidence was found as to whether the better performance of field dependence in the learning of social information is derived from their socially oriented preference.

Davis (1991) claims that the theory of field dependence overemphasises stylistic considerations since ability differences seem to be operating more than stylistic differences. Field independent learners are more efficient than field dependent learners in implementing appropriate strategies, therefore, they do better on many learning tasks.

Davis summarises the areas in which field independent individuals are more efficient than field dependent ones as follows:

- a) in the allocation of attention, speed of information processing, and visual search strategies,
- b) in encoding and working memory processes,
- c) in implementing rehearsal, elaboration, imagery, and organisational strategies in long term memory,
- d) on more difficult tasks, which involve the use of strategies.

In terms of educational implications, Davis (1991), in the light of learning research, discusses a number of characteristics of field dependent learners. As indicated by research, field dependent learners are less efficient in analysing, organising, encoding, and memory processing. They also need assistance in adopting more successful strategies for overcoming problems related to limited resources in working memory. Having long term memory difficulties, field dependent learners need to be provided with organisational and structural aids. All these ability components of field dependence and independence are to be regarded as prerequisite to choosing an appropriate instrument for the learning process.

Krashen (1988) reports that researchers have attempted to relate field independence and field dependence to second language proficiency. The field independent person is better able to perceive parts of a field as distinct from the ground, while the field dependent person perceives all the parts of the organised field as a total experience (Naiman et al., 1977 in Krashen, 1988). The field independent individuals, having this ability associated with a more analytic cognitive style, tend to be better acquirers and performers in second language learning.

#### **2.1.6. Perceptual Learning Styles**

As stated by Reid (1987), educational research has identified a number of cognitive, affective, and physiological traits that are stable indicators of how learners perceive and respond to the learning environment. Having investigated the concept of cognitive style, educational theorists and researchers have worked with pieces of cognitive profile, an area which involves remarkable complexity.

For example, as cited in Reid (1987), Witkin (1976), Witkin, Moore, Goodenough, and Cox (1977), and Witkin, Moore, Oltman, et al. (1977) have written about field independent (analytic) versus field dependent (global) approaches to processing information. Kogan (1966), and Kogan and Messer (1975) have discussed reflectivity (slower guesses) versus impulsivity (quick guesses) in the responses of learners. Messick and Associates (1976) have listed more than 20 dimensions of cognitive style, including sensory modality preferences. Kolb (1976, 1984) has introduced the terms “accommodator”, “diverger”, “converger”, and “assimilator” to describe particular student approaches to learning (Reid, 1987).

During the mid 1970s, learning styles, which refer to a more persistent quality in the learning behaviour of an individual, were identified in greater depth. “The Learning Style Inventory”, prepared by Dunn, Dunn, & Price (1975), aims to ascertain the learners’ learning style preferences. Dunn & Dunn (1979) have also reported on “perceptual” learning styles, which demonstrate the variations among learners in using senses to understand, organise and retain information (Liu & Ginther, 2000).

Dunn (1983, 1984) and Reinert (1976), as quoted in Reid (1987), have demonstrated that learners have four perceptual learning modalities:

1. Visual learning: reading, studying charts
2. Auditory learning: listening to lectures, audiotapes

3. Kinaesthetic learning: experiential learning, total physical involvement with a learning situation
4. Tactile learning: “hands-on” learning, such as building models or doing laboratory experiments

Research that identifies perceptual learning styles relies on self-reporting questionnaires which verify that most students correctly identify their learning strengths (Dunn, 1984 in Reid, 1987).

Studies on second language learning styles have focused on cognitive styles and on conscious learning strategies. As cited in Reid (1987), much of the research concerns the interaction of cognitive styles and situational demands (Brown, 1974; Ely, 1986; Hatch, 1974; Heyde, 1977; Naiman, Fröhlich, & Todesco, 1975; Tarone, Swain, & Fathman, 1976; Tucker, Hamayan, & Genesee, 1976). There have also been some studies which concentrated on the role of cognitive styles in academic achievement (Abraham, 1983; d’Anglejan, Painchaud, & Renaud, 1986; Bassano, 1986; Bialystok, 1985, Chapelle & Roberts, 1986 in Reid, 1987).

On the other hand, a study by Cohen (1984) have reported that non-native speakers can successfully identify and describe their second language learning strategies. Research in second language learning has also revealed that individuals adopt various strategies because of differences in learning and cognitive styles.

The outcomes of the research conducted by Reid (1987) show that ESL students often differ significantly from native speakers of English in their perceptual learning styles. The data collected through this research also suggest that the variables such as major field and level of education, also differ remarkably in their relationship to learning style preferences.

In the light of these findings, Reid (1987) concludes that the devising of teaching instructions should be based on an awareness that students can adapt to a variety of instructional modes to the extent that their learning style preferences allow them. Focussing on cognitive and perceptual factors, as Reid (1987) indicates, work should proceed toward integrating the complex construct of learning.

Commenting on the relationship between learning style preferences and vocabulary learning, Oxford & Crookall (1990) say that sensory preferences, such as visual, aural, tactile, and kinaesthetic, and both cultural and ethnic differences in learning styles may be very important and should be considered in understanding how L2 vocabulary is handled.

For instance, learners with a visual style are likely to enjoy visual imagery and semantic mapping, while aural learners might prefer aural imagery and the keyword technique, and kinaesthetic-tactile learners are likely to adopt the physical response.

A number of learning style inventories can easily be administered to measure different dimensions of style (Oxford, 1990a; Reid, 1987; Myers, 1962; Ehrman & Oxford, 1988, 1989; Oxford & Ehrman, 1989; Kolb, 1983; Parry, 1984 in Oxford & Crookall, 1990).

An effort towards matching the type of vocabulary instruction to learners' learning style preferences will facilitate learning vocabulary more efficiently. In case of being unable to elicit a learner's learning style preferences, teachers should teach students to use various kinds of techniques, so that they, regardless of preferred style, will be able to expand their vocabulary (Oxford & Crookall, 1990).

#### **2.1.7. Educational Implications of Field Dependence and Field Independence**

Manning (1991) describes field dependence-independence cognitive style as a characteristic mode of perceptual functioning which denotes both perceptual and intellectual activities. It has been demonstrated that cognitive style may provide an index of hemispheric specialisation and of personality type.

Field dependent people experience the camouflaging pattern in the global way, whereas field independent people are more likely to analyse or tease out the camouflaged parts from the whole. Witkin developed some standard embedded figures tests that are commonly used in an attempt to measure global vs analytical ways of cognitive functioning. (Witkin, Oltman, Raskin & Karp, 1971).

According to the field dependence theory, the field dependent and field independent cognitive styles are related more to "how" than to "how much" of cognitive functioning (Davis, 1991). In other words, the theory asserts that the outcome of learning does not differ for the two types of learners, but the manner or procedures they employ in their learning do (Davis, 1991).

Witkin et al. (1977) stated that strengths of the field independent learner were derived from their superior cognitive restructuring skills, whereas the strengths of the field dependent learners were derived from their superior social skills. The characteristics of the field independent learner consists of a greater ability of analysing and structuring, adopting a hypothesis-testing role in learning and being more motivated by intrinsic or

task-oriented forms of motivation. In contrast, the field dependent learner is characterised by making less use of analysing and structuring processes, adopting a passive role in learning, being more influenced by extrinsic goals and forms of motivation and being better at learning and remembering information having a social relevance.

Given the finding that field dependent individuals are more socially oriented than field independent individuals, Witkin et al. (1977) concluded that field dependent individuals are better at learning social information.

Consistently, studies showed that field dependent students did better on the recall and recognition of the incidentally presented social words (Fitzgibbons, Goldberger and Eagle, 1965 in Davis, 1991).

In terms of learning effectiveness, Davis and Frank (1979), as cited in Davis (1991), pointed out that the majority of learning studies report better performance on the part of field independent learners. They also noted that the differences between dependent and independent learners was not due to utilising different processes but was related to more efficient information processing on the part of field independent learners.

Several studies (Adejumo, 1983; Annis, 1979; Brooks, Dansereau, Spurlin & Holley, 1983; Durso, Reardon & Jolly, 1985; Pierce, 1980; Spiro & Tirre, 1980; Strawitz, 1984b in Davis, 1991) indicated that recall of information from long-term memory was generally better for field independent individuals. Findings also reflect that field independent learners are more efficient than field dependent learners, particularly in situations with higher information-processing demands.

With regard to language learning, research consistently demonstrated that field independent individuals are more proficient language learners than field dependent individuals (Abraham, 1985; d'Anglejan & Renaud, 1985; Bialystok & Frohlich, 1978; Carter, 1988, Chapelle & Jamieson, 1986; Chapelle & Roberts, 1986; Hansen, 1984; Hansen & Stansfield, 1981, 1982; Stansfield & Hansen, 1983 in Davis, 1991).

As for the English language learning, findings of recent investigations highlighted a relationship between field dependence and the learning of different English skills. Field independent learners were reported to do better in English courses and on standardised tests of English, to be more efficient writers and to be better spellers than field dependent individuals (Hansen, 1984; McDonald, 1984; Savage, 1983; Roszkowski & Snelbecker, 1987; Wormack, 1979b; Thomas, 1986; Harris, 1985; Swanson, 1980 in Davis, 1991).

### **2.1.8. The Relationship Between FD/I Cognitive Style and Language Learning**

As one of the focuses of this study is to investigate the relationship between the cognitive style of field dependence/independence and success in vocabulary learning in an EFL context, it's assumed to be beneficial to look back at the initial work that was carried out to determine to what extent field dependence/independence is related to second language acquisition. Nevertheless, it is noteworthy that the related previous research was conducted in ESL context, where English was aimed to be taught as a second language, yet this study has aimed to discuss the same issue in a language learning context where English is taught as a foreign language. The hypothesis of this study has asserted the existence of a similar correlation between vocabulary learning and field dependence/independence cognitive style in an EFL context, assuming that the relationship between performance in vocabulary learning and cognitive style will be in line with the relationship between second language proficiency and field dependence/independence cognitive style.

#### **a. Previous Research in L2/FL contexts**

Researchers have investigated the relationships between cognitive variables and performance on language tests in EF/SL contexts. Of these variables, FD/I was suggested as an important one that is relevant in second or foreign language learning. Throughout the 1970s and 1980s, its continual inclusion in research brought about different interpretations. As in the studies of Skehan (1989), much research in second language acquisition has focused on cognitive and personality factors that may relate to good language learning (Johnson, Prior, & Artuso, 2000). Among these factors, as Chapelle & Green (1992) propose, the cognitive style FD/I has been a focus of interest so far.

Jamieson (1995) compiled the outcomes of the relevant previous research in which the cognitive style field dependence/independence has been theorised as being related to second language acquisition.

According to Hansen & Stansfield (1981) and Chapelle & Roberts (1986), as quoted in Chapelle & Green (1992), FD/I should be considered a component of second language aptitude. Hansen & Stansfield (1981), for instance, demonstrate that the field dependent person is more socially oriented whereas the field independent person is more self-reliant. Accordingly, Brown (1987) claims that field dependent individuals will be more inclined to communicate and might do well in second language acquisition by interfacing with

native speakers. On the other hand, the more independent and analytical field independent person will be good at learning rules and activities such as finding patterns or organising data.

Several studies have proved the relationship between field independence and second language acquisition in terms of particular language skills. Selinger (1977), as cited in Chapelle & Green (1992), reported a high correlation between success on a language task and field independence. Bialystok and Fröhlich (1978) found a significant positive correlation between field independence and reading, writing and grammar tests. Hansen & Stansfield (1981) found field independence to be related to better performance in second language acquisition.

Abraham (1981) reported field independence to be significant predictor for performance on composition and grammar tests for ESL students. Another study of ESL students by Chapelle & Roberts (1986) demonstrated that field independence was a significant predictor of success on the TOEFL. Carter (1988), as cited in Chapelle & Green (1992), hypothesised that field independents will perform better in linguistic tasks, and field dependents will perform better in communicative proficiency and his results indicated the expected better performance of field independents.

Naiman et al., (1978 in Ellis, 1985) also found that field independent students scored better on listening comprehension tests.

There are a number of hypotheses about the role of field dependence/independence in both second language acquisition and foreign language learning contexts. One of the suggestions is that field independence will be more facilitative in classroom learning where the ability to analyse the formal rules of the language will be important, whereas field dependence will lead to greater success in naturalistic second language acquisition since naturalistic learning will involve greater social skills such as more contact with native speakers (Ellis, 1985).

Measures of field dependence/independence are obtained using the Group Embedded Figures Test designed by Witkin, Oltman, Raskin & Karp (1971), which requires the subject to perceive a simple geometric figure within a more complex design.

The striking aspect of the FD/I dimension is that it is bipolar, which means that each pole of the dimension “has qualities that are adaptive in particular circumstances” (Witkin and Goodenough, 1981, p.59).

Some researchers in second language learning have made predictions consistent with the bipolar conception of the FD/I dimension (Carter, 1988; Chapelle & Roberts, 1986; Hansen & Stansfield, 1981; Johnson & Rosano, 1993; Skehan, 1989, in Johnson et al., 2000). They claim that superior restructuring ability associated with the FI pole should facilitate linguistic analysis. However, the findings illustrated that the interpersonal orientation of learners at the FD pole could facilitate acquisition of communicative competence in L2. In other words, field independents should perform better on measures of academic language proficiency, and field dependents should perform better on measures of oral communicative competence. However, researchers have not found advantages of FD style although they have found a strong association between FI style and academic language proficiency. Rather, as reported by Johnson et al. (2000), they have found measures of communicative competence either to be unrelated to cognitive style (Genesee & Hamayan, 1980; Hansen-Strain, 1987; Tucker et al., 1976) or to be positively related to FI (Carter, 1988; Chapelle & Roberts, 1986; Hansen & Stansfield, 1981, 1982).

Three studies have produced consistent results with the bipolar conception of FD/I in the context of L1: Abraham (1985), as cited in Johnson (2000), reported a positive correlation between cognitive-style and the type of second language instruction. He found that rule-based instruction was more beneficial when learning for field independent students, whereas example-based instruction was more conducive to learning in field dependent students. Another study conducted by Johnson & Rosano (1993), as cited in Johnson et al. (2000), found that a more FD style was associated with better scores on communicative measures.

The third study has been carried out by Johnson, Prior & Artuso (2000) and supported the claim that field dependents may perform better on L2 tasks that emphasise communicative more than formal aspects of language proficiency, which also provides partial support for the bipolar cognitive style conception of the FD/I dimension.

Better performance of field dependents in communicative tasks may be explained by another aspect of the conversational skill: Pawley and Syder (1983), as quoted in Johnson et al. (2000), argue that nativelike speech consists, to a large extent, of memorised sequences and lexicalised sentence stems. Use of such memorised sequences may lead to better production in an L2 conversation task, whereas it may be of no advantage in academic language measures, which may require more analytical language skills. According to Pascual-Leone's (1989 in Johnson et al., 2000) model of FD/I, field

dependents are good at content learning, which leads them to have a rich repertoire of automatised, content-bound knowledge structures. Field independents, on the contrary, are good at acquiring more abstract, generalised knowledge structures. Thus, field dependent persons, having the advantage for learning L2 lexicalised sentence stems, may have more fluency in a conversational context.

In the case of an L2, there has also been considerable research relating second language performance to FD/I style. As stated by Johnson et al. (2000), recent reviews include those of Chapelle and Green (1992), Bialystok and Hakuta (1994), and Tinajero and Paramo (1998). Evidence has shown a more FI style to be associated with superior performance on measure of second language acquisition.

The Group Embedded Figures Test (GEFT), measuring the FD/I cognitive construct, has been found to correlate positively with L2 performance for students learning English as a foreign/second language in the following studies (Johnson et al., 2000): Alptekin & Atakan (1990); Hansen (1984); Chapelle & Roberts (1986); Hansen-Strain (1987); Jamieson (1992); Abraham (1983); Carter (1988); Elliot (1995a, 1995b); Genesee & Hamayan (1980); Hansen & Stansfield (1981, 1982); Naiman et al. (1978); Stansfield & Hansen (1983); Tucker, Hamayan, & Genesee (1976).

There are considerable data supporting superior performance by field independent participants on tasks involving restructure of an overall organisation into nonsalient component forms (Johnson, et al., 2000).

Some studies, on the other hand, have produced a performance advantage for field dependents in the area of ESL. For instance, Zambito (1998 in Johnson et al., 2000) had ESL students listen to an audiotaped lecture while taking notes either on a structured outline or on a blank sheet of paper (unstructured condition). Field independents scored higher than field dependents in the unstructured condition, but field dependents scored better than field independents in the structured condition. Zambito's results, as indicated by Johnson et al. (2000), suggest that field independents perform best in unstructured situations, but that field dependents may take better advantage of structural cues when they are present (Johnson et al., 2000). Additionally, a social domain appears to provide a field dependent person with more advantages as field dependents tend to be more social and more alert to social cues. Despite a tendency by field independents to situations of a more solitary kind, as Witkin & Goodenough (1981) report, the interpersonal orientation of field dependent people is constituted by a "repertoire of behaviours that will give them

access to external referents when needed” (p.50). In contrast, the orientation of field independents is relatively impersonal.

On the other hand, Skehan’s (1989) and Ellis’s (1986) statements hold the opposite view that FD/I does not appear to be an important factor in second language acquisition. Hansen and Stansfield’s (1981) findings revealed that field independence weakly related to foreign language proficiency.

Other research, which supported Ellis’s argument, was carried out by Bialystok and Fröhlich (1977) forming the conclusion that FD/I had little effect on the reading comprehension of a group of subjects in an ESL context in Canada. Additionally, Hartnett’s (1980) study with ESL students revealed that the subjects who received analytical instruction performed better on a language task regardless of their cognitive styles. This finding led her to conclude that cognitive style may not be a critical factor in second language learning.

As a result, a contrary argument was raised indicating that cognitive style played only a minor role in the development of overall foreign language proficiency (Ellis, 1985). This range of conclusions, therefore, result in disputes about the correlation between FD/I and language measures.

With regard to the relationship between vocabulary and cognitive style, despite the fact that many researchers report an advantage on certain measures of L2 academic proficiency for field independent learners, the study carried out by Chapelle & Green (1992) provided no evidence for such an advantage for the vocabulary and analogy measures used. No association occurred between measured vocabulary and FD/I, which suggests that the amount of information conveyed in the L2 conversations was associated with knowledge of the language and strategic processing factors. Chapelle and Green (1992) argued that knowledge and strategic competence are at work, to some extent, in any language task. The strategies required for a language task may account for the degree of the association with cognitive style.

In sum, although much of the research on FD/I reports that field independents tend to outperform field dependents on cognitive tasks, a deeper analysis suggests that this performance differs depending on the processing demands of the situation. Furthermore, research tends to support the claim that field dependents have a stronger interpersonal orientation than field independents, although this does not necessarily imply that field dependents have greater social skill.

### **b. Previous Research in Native Language Contexts**

As Chapelle & Green (1992) state, a study, conducted by Carroll, Carton, and Wilds (1959) reported that cloze test scores for native speakers were correlated most highly with “reasoning, verbal, theme writing, and expressive fluency factors.” They considered a test method that correlates highly with various factors of cognitive ability to be questionable as a measure of foreign language proficiency. The various factors of cognitive ability, however, were defined by verbal tests, which one would expect to correlate with cloze test performance in one’s native language (Chapelle & Green, 1992).

In regard to the correlations between FD/I measures and measures of verbal IQ, a number of studies have found relationships between FD/I and performance on native-language tasks. Davis (1991) and Tinajero & Paramo (1998), as cited in Johnson et al. (2000), reported that field independents tend to obtain higher school grades and also to perform better than field dependents on reading tasks in their first language.

DeFazio’s (1973) findings revealed that field independents performed better than field dependents on a verbal fluency test and also showed that field independents performed better on a cloze task (Johnson et al., 2000).

## **2.2. Learning**

### **2.2.1. A Cognitive Theory of Learning**

Human cognition, or “thinking” in the broadest sense was not considered to be a relevant field of study to language learning. Wenden (1987), in their brief account of the history of cognitive science, points out that the studies on cognitive abilities were kept out of the scope of language learning until the sixties. Only then did an interest in the study of mental processes re-emerge, mostly as a result of the questions about differences in the reasoning ability of people with and without formal schooling. Chomsky’s explanation of language behaviour in terms of the structures underlying production of language, studies of child development, and finally the invention of the computer led the way to the study of the mind.

The available body of research has demonstrated that second language acquisition can not be understood without addressing the interaction between language and cognition. Therefore, it is crucial to identify second language processes along with the complex

cognitive skills described in cognitive theory. At this point, it is also important to discuss the memory representation that relates to the aspects of cognitive theory.

As stated by Wenden (1987), the most basic assumptions of cognitive science is that humans are processors of information. Information, coming through sense receptors, is identified and moved into the short-term or working memory. After the application of a series of mental operations, this information is modified and stored in long-term memory later.

The mental operations, called processes, involve the organisation of knowledge. The techniques used to manipulate the incoming information and, later, to retrieve what has been stored are referred to as cognitive strategies (Rubin, 1987).

Cognitive processes are concerned with various aspects of cognitive style and other predispositions for learning (Fillmore & Swain 1984 in O'Malley & Chamot, 1990).

Studies and theory that have evolved over the past fifteen years have dealt with information processing, cognitive psychology and the role of cognitive processes in learning. As stated by O'Malley & Chamot, (1990) the role of learning strategies in the acquisition of information generally can be understood by reference to the information processing framework for learning. This framework explains how information is stored in the memory and how new information is acquired. The framework suggests that information is stored either in short-term memory, the active working memory that holds modest amounts of information only for a brief period, or long-term memory, the sustained storage of information, which may be represented as interconnected networks (Lachman and Butterfield 1979; Shvell 1986; Weinstein and Mayer 1986 in O'Malley & Chamot, 1990).

According to cognitive psychology, new information is acquired through a four-stage process involving selection, acquisition, construction, and integration (Weinstein and Mayer, 1986 in O'Malley & Chamot, 1990). Through selection, learners focus on specific information, and transfer this information into short-term memory. In acquisition, learners transfer information from short-term memory into long-term memory for permanent storage. In construction stage, learners build internal connections between ideas contained in short-term memory.

The information from long-term memory can be used to enrich retention of the new ideas by providing related information. In the final process of integration, the learner searches for prior knowledge in long-term memory and transfers this knowledge to short-

term memory. Selection and acquisition determine how much is learned, whereas construction and integration determine what is learned and how it is organised (O'Malley & Chamot, 1990).

The four mental processes described here have been applied to problem solving, vocabulary learning, reading comprehension, and the acquisition of factual knowledge, but not to all the aspects of language.

Anderson's (1983, 1985 in O'Malley & Chamot, 1990) information processing theory views second language acquisition as a complex cognitive skill. Anderson has described cognitive skill acquisition as a "three-stage" process, using a "production system" to specify the dynamics of the system. Despite some limitations, this framework helps to identify specific learning strategies that are appropriate at various stages in the skill acquisition process.

Anderson (1985) distinguished between declarative knowledge, which constitute static information in memory and procedural knowledge, which constitutes dynamic information in memory. Declarative knowledge, which can usually be expressed verbally, is maintained in long-term memory in terms of meaning.

The most significant mode of storing information in memory for the analysis of language is through propositional representations. Anderson indicates that relations in a propositional analysis can be represented by a prepositional network. Connections among the ideas are termed as associations.

Larger units of meaning then can be represented by prepositional networks, or schema, which define a concept. Any of the attributes in a schema may take on different values and networks in schemata are interconnected with other networks.

The valuable function of schemata is to facilitate making inferences about concepts, which may be linked to one another hierarchically. Thus, through schemata, one is able to organise and understand new information. In terms of recall process, recall will be accurate if the inferences match the situation, but will be inaccurate if they fail to match. Thus, schemata may either assist or detract from accurate recall.

Anderson (1980 in O'Malley & Chamot, 1990) argues that language acquisition, an example of procedural knowledge, takes place gradually and only with extensive opportunities for practice. The representation of procedural knowledge in memory is a key issue in cognitive theory and is contained in production systems (Anderson, 1983, 1985 in O'Malley & Chamot, 1990).

Discussions on explaining how complex cognitive skills are represented in human memory have plagued many theorists for a long time. Anderson's (1982 in O'Malley & Chamot, 1990) argument for a common cognitive system for all higher-level mental processes is in striking contrast with the opinion of many theorists, including Chomsky, who assert that the mind has specific faculties associated with language. Anderson argues that all complex cognitive skills can be represented in memory as production systems. Using these systems, computer simulations have been developed for a variety of cognitive skills. Based on condition-action pairs, these productions, through practice, can end up in automatic execution. At this point, Anderson (1983, 1985 in O'Malley & Chamot, 1990) is concerned about how one proceeds from the rule-bound declarative knowledge to the more automatic proceduralised stage. To explain this, he describes three stages of skill acquisition: the cognitive, associative, and autonomous stages.

The cognitive stage is the one during which the learners are instructed how to do the task, or attempt to figure it out and study it themselves. This stage involves acquisition of declarative knowledge. For instance, one can memorise vocabulary and the rules for grammar when learning a second language. This knowledge enables the learner to describe how to communicate in the second language, but it is inadequate for skilled performance.

During the associative stage, both errors in the declarative knowledge are gradually eliminated and the connections among the components of the skill are strengthened. In other words, during this stage the declarative knowledge turns into its procedural form.

During the autonomous stage, the performance of the skill becomes automatic and errors disappear. As we become more proficient in a second language, we are able to comprehend and produce utterances with little difficulty.

Two other important aspects of this three-stage theory are controlled and automatic processing (La Berge & Samuels 1974; Posner & Snyder 1975; Schneider & Shiffrin 1977; Shiffrin & Schneider 1977 in O'Malley & Chamot, 1990).

Cognitive tasks may involve controlled processes, which require the attention of the learner and the use of short-term memory, and automatic processes, which do not require the attention of the learner but the activation of long-term memory. The activation is a learned response that has been built up over a considerable period of time.

Another process to explain the acquisition of cognitive skills is suggested by Rumelhart & Norman (1978 in O'Malley & Chamot, 1990). In Rumelhart & Norman's

view, learning a complex cognitive skill entails restructuring, accretion and tuning. Restructuring involves the development of new structures for reorganising existing knowledge. Accretion process requires new information to be matched to existing schemata, and tuning process refers to the refinement and evolution of existing memory structures, which means sharpening of the performance of cognitive skills.

Restructuring assumes knowledge categories and interconnected schemata with links between the concepts. It entails the creation of new structures and reorganisation of linkages as well as the addition of new ones. Restructuring is the principal mechanism, as stated by Rumelhart & Norman (1978), which is required when existing memory structures can not account for existing knowledge. Similarly, restructuring is assumed in Anderson's theory to be one of the processes involved in acquiring or transferring declarative knowledge (O'Malley & Chamot, 1990). It is noteworthy that complex cognitive skills are acquired in Anderson's theory through proceduralisation whereas they are acquired through tuning in Rumelhart and Norman's theory.

### **2.2.2. Language Comprehension**

Language comprehension is viewed in cognitive theory as consisting of active and complex processes in which individuals construct meaning from aural or written information (Anderson 1985; Byrnes 1984, Call 1985; Howard 1985; Pearson 1985; Richards 1983, in O'Malley & Chamot, 1990).

The basic unit of comprehension is a proposition, a meaning-based representation, retained in long-term memory of the original sequence of words. Linguistic knowledge may be stored as schemata or propositions, but the information stored consists of a lexicon of word meanings and a body of grammatical rules. As stated by Howard (1985 in O'Malley & Chamot, 1990), bottom-up processing involves analysing each word for its meanings and then accumulating the meanings to form propositions. However, this type of processing may lead to some inefficiencies. First, the meaning of any word depends on the context in which it appears. Second, lexical access will be faster if the context can be used to narrow the range of possible meanings. Third, processing words without using context, namely bottom-up processing can be expected to have inefficiencies since learners who make predictions about text meaning tend to have greater comprehension (Palincsar and Brown, 1986 in O'Malley & Chamot, 1990).

In second language acquisition, according to Bialystok and Ryan (1985), as cited in O'Malley & Chamot (1990), difficult tasks require more highly analysed linguistic knowledge. Moreover, it should be added that the difficulty of the task depends on the proficiency of the learner. Less proficient learners will be more inclined to use the bottom-up processing due to the fact that their linkages to long-term memory in the second language have not been fully established. During the early stages of learning the second language, learners build connections between the new language and knowledge about concepts they acquired in their first language.

In sum, language comprehension is viewed in cognitive theory as an active and constructive process. Complex processing and strategic analysis help the individual infer meanings and relate the information to existing knowledge. Existing knowledge, which is stored as either real world knowledge or linguistic knowledge, is used to aid in interpreting the meaning. If individuals rely upon meaning based representations of knowledge to analyse the text, they are using top-down processing. If they rely upon individual word meanings or structural characteristics, they are using bottom-up processing. Cognitive theory suggests that effective processing of text requires the use of both top-down and bottom-up processing (Howard, 1985 in O'Malley & Chamot, 1990).

### **2.2.3. Cognition and Second Language Acquisition: Theoretical Background**

Influence of cognition in second language acquisition has been the focus of many investigations and a number of theorists have included a cognitive component in the second language process. These efforts to identify the role of cognition in second language acquisition stem from the attempt to describe language proficiency and to explain influences on second language acquisition.

Language proficiency has been described by Cummins (1984 in O'Malley & Chamot, 1990) in terms of task difficulty and the context in which language occurs. Difficulty may vary from cognitively demanding to undemanding tasks, whereas the context for language use may vary from contexts that are enriched with cues for meaning to contexts that lack additional cues for meaning.

Cummins' model of language proficiency was extended by Tikunoff (1985 in O'Malley & Chamot, 1990). His model mainly expanded on learner functional proficiency in academic settings.

Another model of language proficiency proposed by Canale and Swain (1980 in O'Malley & Chamot, 1990) had three major components. The first is grammatical competence, which includes vocabulary, pronunciation and grammatical structures. The second is sociolinguistic competence, which involves sociocultural and discourse rules. The third component of the Canale and Swain model is strategic competence, which is made up of verbal and non-verbal communication strategies used to compensate for breakdowns in communication.

Bialystok (1978), another theorist who included a cognitive component, asserted that strategy use depends on the type of knowledge required for a given task discussing three types of knowledge: explicit linguistic knowledge, implicit linguistic knowledge and general knowledge of the world.

On the other hand, Krashen's Monitor Model (1982 in O'Malley & Chamot, 1990) discusses two types of language process: "acquisition" and "learning". Describing "acquisition" as subconscious and naturally occurring spontaneous language contexts, and "learning" as conscious knowledge of the structural rules of language, Krashen defends the idea that conscious use of learning strategies doesn't necessarily result in the development of language proficiency. The "monitor", being the learner's application of grammatical rules to language production, is a deliberate form of processing and prevents "learning" from leading to "acquisition".

Wong Fillmore (1985 in O'Malley & Chamot, 1990) makes a distinction between the principal factors that are responsible for first and second language acquisition. Fillmore links the first language acquisition to inherent language mechanisms and experimental factors, and second language learning to general cognitive processes.

Movement toward a more cognitive view of second language acquisition appeared by the information processing approach suggested by McLaughlin, Rossman, and McLeod (1983 in O'Malley & Chamot, 1990). In this model, the learner is viewed as an organiser of incoming information and the learner's cognitive system is considered to be central to this processing. Learners impose cognitive schemata on incoming data in an effort to organise the information. This cognitive theory involves either a top-down approach (knowledge-governed system) or a bottom-up approach (input-governed system). In either case, the degree of cognitive involvement is set by the interaction between the requirements of the task and the mental processes used by the learner.

More recently, Spolsky (1985 in O'Malley & Chamot, 1990) proposed a model of second language acquisition in which cognitive processes play an important role. Spolsky's model contains two groupings of interrelated conditions. The first grouping contains social context conditions, such as the learning setting and opportunities. The second grouping consists of learner factors, such as capability, prior knowledge and motivation. In Spolsky's model, learning strategies would be part of the capabilities and prior learning experiences that the learner brings to the task.

Although these theories proposed a cognitive component and indicated that cognitive processes influence the level of acquisition, O'Malley & Chamot (1990) assert that the manner in which the influence of cognitive processes operate wasn't described in any of the models in question, which suggests a need for clarification of the role of learning and cognitive strategies in second language acquisition.

Much research exists on good language learning strategies and the characteristics of good language learners. Rubin (1975), as cited in Oxford & Crookall (1990), suggests that a good language learner is an accurate guesser, has a strong drive to communicate, and is willing to make mistakes in order to learn or communicate, monitors his or her own speech and pays attention to meaning. Direct strategies, such as clarification, inductive inferencing, deductive reasoning, practice and memorisation, and indirect strategies like creating as many practice opportunities as possible, contribute to language learning success.

The affective demands of language learning, as also remarked on by Oxford & Crookall (1990), pertain to active involvement of the learner seeing language as a combination of lexis and rule system, and also a communication tool.

#### **2.2.4. Learner Strategies in Language Learning**

Research on learner strategies in the area of second language learning also covers research on mental processes that constitute the field of cognitive science. To date, according to Wenden & Rubin (1987), the research has been guided by the questions of what aspects of second language learning processes learners know and how they manage their efforts.

In this view, the term "learner strategies" refers to language learning behaviours learners engage in and also refers to what learners know about their strategic knowledge. These language learning behaviours have been called "strategies". However, in the

literature, as Bialystok (1983) mentions, there is little consensus concerning the definition of these language learning strategies.

Research on learning also holds the assumption that both explicit and implicit knowledge can contribute to learning (Bialystok, 1978; Smith, 1981; McLaughlin, 1978 in Rubin, 1987). It has been observed that, in learning a second or foreign language, students' approach to the language learning determines their success and some of this success can be attributed to particular cognitive and metacognitive behaviours which learners engage in. These behaviours are derived from sets of operations, steps, plans and routines used by the learner to facilitate the obtaining, storage, retrieval and use of information (O'Malley et al., 1983; Brown et al., 1983 in Wenden 1987).

In addition, Cohen and Apeh (1981 in Wenden 1987) focused on the strategies used in the learning of vocabulary and the role of mnemonic associations in the retention of vocabulary. They found that in most instances students tried to memorise words. They also identified eleven categories of associations utilised by students.

The work of the seventies, which identified strategies contributing directly and indirectly to language learning, was followed by the work of Wenden (1982, 1986 in Rubin 1987) on the importance of metacognitive knowledge in second language learning.

Metacognitive strategies, which refer to the regulation of cognition through planning, monitoring, and evaluation, have been distinguished from cognitive strategies, which refer to the operations that require analysis, transformation, or synthesis in learning.

Metacognitive strategies are used to regulate or self-direct language learning (Rubin, 1987). According to Wenden (1982, in Rubin, 1987), learners regulate their learning by planning, monitoring, and evaluating their learning activities. Among the several planning strategies identified by Wenden (1982) are choosing what to learn, how to use resources, prioritising the aspects of language. They want to learn setting their learning goals and planning their learning strategies.

Rubin (1981 in Rubin, 1987) identified six language learning strategies:

1. Clarification / verification strategies enable learners to verify or clarify their understanding of the new language. Verification allows them to store information for further use.
2. Guessing / inductive inferencing strategies make learners use previously obtained linguistic or conceptual knowledge to infer meaning.

3. Deductive reasoning involves strategies in which learners look for and use as general rules in approaching the foreign or second language. The aim is to find patterns in order to obtain and store information about a language in an organised and retrievable fashion.
4. Practice refers to the strategies which contribute to the storage and retrieval of language while focusing on the accuracy of usage, such as repetition, rehearsal, application of rules, imitation and attention to detail.
5. Memorisation strategies focus on the storage and retrieval of language such as finding association or grouping, using Keyword, and note taking.
6. Monitoring involves strategies in which learners notice errors, observe how a message is addressed and received.

The monitoring process appears to be a combination of cognitive and metacognitive strategies since evaluating the action involves self-management which means evaluating the effect of an action taken.

O'Malley et al. (1983 in Rubin, 1987) draw a conclusion that learners without metacognitive approaches have no direction and ability to review their progress, and future learning directions.

Learning strategies, according to Weinstein and Mayer (1986 in O'Malley & Chamot, 1990) have a goal of learning facilitation. Strategy use, as stated by Weinstein and Mayer, help the learner select, acquire, organise or integrate new knowledge. Strategies may influence the learning of simple tasks, such as learning vocabulary items in a list, or complex tasks, such a language comprehension or language production. (O'Malley & Chamot, 1990)

As Tarone (1981 in O'Malley & Chamot, 1990) notes, learning strategies attempt to develop linguistic and sociolinguistic competence in the target language. Tarone identifies production strategies, which are used to accomplish communication goals and communication strategies, which ensure the realisation of language production goal and negotiation of meaning between individuals.

### **2.2.5. Metacognitive Strategies**

According to Anderson (1983), planning is a key metacognitive strategy for second language acquisition. It is directly involved in language reception and production and

may be influenced by goals which are set to perform a task and which are accomplished by bottom-up or top-down processing.

Other metacognitive processes that are described in Anderson's theory are selective attention and monitoring.

Highly practiced skills may require little attention and involve automatic processing, while less practised skills require full attention and involve controlled processing (O'Malley & Chamot, 1990).

Monitoring, in Anderson's view, is a response to ambiguity in comprehending language. By monitoring an individual makes best guesses to infer meaning based on available information. Monitoring is also involved in control processes and planning, because a learner will analyse task demands to determine the task difficulty and the appropriateness of using top-down or bottom-up processing.

Nisbet and Shucksmith (1986 in O'Malley & Chamot, 1990) also suggest that monitoring is the key process that distinguishes good learners from poor learners. In their view, monitoring is the ability to recognise and manage the learning situation.

Weinstein and Mayer (1986 in O'Malley & Chamot, 1990) add that monitoring involves setting goals for learning and plays the central role in effective learning.

#### **2.2.6. Cognitive Strategies**

The cognitive processes included in Anderson's (1983) theoretical analysis of cognition are imagery, organisation, inferencing, deduction and transfer. To Anderson, images serve to store information in memory and assist in recalling verbal materials in comprehension process.

Anderson (1980 in O'Malley & Chamot, 1990) suggests that verbal-imagery linkages may be useful in learning vocabulary as in the keyword method, which is common in second language vocabulary learning. The strategy of classifying imagery is also supported by Weinstein and Mayer (1986 in O'Malley & Chamot, 1990).

Anderson (1985) reports the effectiveness of using visual mnemonic devices in assisting recall of unconnected verbal materials. These devices might be preferable for storage and retrieval with this type of information. Additionally, grouping as a strategy could begin the process of building schemata that will help later in forming meaningful linkages.

Inferencing strategies can be used to deal with ambiguity as well as to help recall. Sternberg (1985 in O'Malley & Chamot, 1990) notes that vocabulary tests are indirect measures of the ability to acquire new knowledge or to infer meanings of unfamiliar words from context.

Anderson's discussion of elaboration with meaningful texts contributed to cognitive strategy applications a great deal. Elaboration memory structures are powerful aids to recall. Individuals can enhance memory for concepts if they increase the number of related ideas that are present at the time of recall. Anderson indicates that individuals can be encouraged to elaborate on meanings to enhance memory with meaningful information.

Elaborated structures contribute to describing deductive strategies and transfer. Schemata, based on rules, enable deductions to be made about meanings of words. A second type of schema is based on world knowledge and it enables the individuals to transfer information to the present learning environment assisting in comprehension and retrieval.

To conclude, second language acquisition could not be understood without describing the interaction between language and cognition. Second language acquisition is asserted to be a complex cognitive skill in both Anderson's and other theories. Storage of information in memory through memory representation, which is described in terms of declarative and procedural knowledge, is the phase when the so-called interaction takes place.

Cognitive theory views declarative knowledge as being acquired by building up prior knowledge, whereas procedural knowledge is learned through cued practice. The cognitive theories describe language comprehension as a constructive process which involves selection and organisation to express meaning. Learning strategies were also viewed as complex cognitive skills. Different types of strategies were discussed within Anderson's model. As O'Malley & Chamot (1990) point out, this discussion illustrates which strategies correspond to mental processes and clarifies the distinction between metacognitive strategies and cognitive strategies.

### **2.2.7. Descriptions of Strategy Applications**

O'Malley & Chamot (1990) mention the importance of strategy use referring to Brown et al.'s (1983) discussion of a model describing the factors involved in a learning

activity. The model consists of learning strategies, learner characteristics, the nature of the materials and the criterion task.

Brown et al. also highlight the distinction between cognitive and metacognitive strategies (O'Malley & Chamot, 1990). Rehearsal, one of the cognitive strategies, entails active, systematic and elaborative procedures. Summarisation, being the other cognitive strategy, involves elaboration, restatement and revision of the goal of an activity. Brown et al. commend that less sophisticated strategies are resistant to retaining.

Metacognitive strategies involve both knowledge about learning and control or regulation over learning. In other words, metacognitive knowledge can be described as one's knowledge of his own cognitive processes. It is stable, which means that it's retrievable for use with learning tasks, and it develops late since the ability of learners to step back from learning and reflect on their cognitive processes may require prior learning experiences.

Regulation of learning entails the use of metacognitive strategies. These include planning, monitoring and checking the outcomes of learning.

As stated by O'Malley & Chamot (1990), in the literature on learning in psychology, the majority of work focussed on activities that enhanced rote recall of words. Strategies analysed with vocabulary lists included grouping, rehearsal and special mnemonic devices (Atkinson and Raugh, 1975; Levin, 1981, in O'Malley & Chamot, 1990). Brown et al. (1983) identify strategies investigated with reading tasks as note-taking, summarising, outlining, mapping and self-questioning. Strategies analysed with writing tasks included planning, elaboration, restatement and revision of the goals.

The general conclusion drawn through the developmental studies was that learning strategies develop with age and are used with increasing sophistication.

O'Malley & Chamot (1990) note that effective language learners recognise recurring patterns in the language tasks as well as their approach to the problem. Also, more effective language learners know when and how to call up information that is related to the text in order to analyse the intended meaning, which suggests that they have better retrieval of information important for learning.

#### **2.2.8. Research on Learning Strategies**

The literature on learning strategies in second language acquisition emerged from a concern for identifying the characteristics of effective learners. As cited in O'Malley &

Chamot (1990), strategies used by second language learners have been described and classified by Naiman et al. (1978) and Rubin (1981).

For example, Rubin's first category consists of strategies that directly affect learning such as clarification/verification, monitoring, memorisation, guessing, inductive reasoning, deductive reasoning, and practice. The second category, consisting of strategies that contribute indirectly to learning, includes creating practice opportunities and using production tricks such as communication strategies.

Naiman et al. (1978), as cited in O'Malley & Chamot (1990), proposed an alternative classification scheme which includes an active task approach, realisation of language as a system, realisation of language as a means of communication and interaction, management of effective demands and monitoring of second language performance.

Naiman et al. also identified "techniques" for second language learning, among which the most significant one was that associated with vocabulary learning. Some selected examples of these vocabulary learning techniques are as follows (O'Malley & Chamot, 1990):

1. Making up charts and memorising them
2. Learning words in context
3. Learning words that are associated
4. Using new words in phrases
5. Using a dictionary when necessary, and carrying a notebook to note new items.

Research on using learning strategies has especially focused on applications with vocabulary tasks and remarkable improvements have been reported in this field. The main approach in this research has been either to encourage students to develop their own associations for linking a word with its equivalent in the second language (Cohen and Aphek, 1980, 1981 in O'Malley & Chamot, 1990) or to train students to use specific types of linking associations to cue the target word, such as the keyword method (Atkinson and Raugh, 1975; Levin, 1981; Pressley et al., 1980; Pressley et al., 1981 in O'Malley & Chamot, 1990).

Learning strategies have been differentiated into three categories depending on the processing involved (O'Malley et al. 1985a in O'Malley & Chamot, 1990). O'Malley & Chamot (1990) indicate that important outcomes of various studies in cognitive psychology contributed to the formulation of learning strategies in a theoretical model, which contains cognitive, metacognitive and affective strategies.

Cognitive strategies are directly related to individual learning tasks and entail direct transformation of the learning materials (Brown & Palincsar, 1982 in O'Malley & Chamot, 1990). Metacognitive strategies involve thinking about the learning process, planning for learning, and self-evaluation after the learning activity has been completed. Affective/social strategies concern the influence of social and affective processes on learning. Cooperative learning, peer interaction and the exercise of "self-talk" are examples of affective/social strategies (Dansereau et al., 1983; Slavin, 1980 in O'Malley & Chamot, 1990).

Research in metacognitive and cognitive learning strategies suggests that effective use of strategies can be maximised by pairing metacognitive strategies with appropriate cognitive strategies (Brown et al. 1983, in O'Malley & Chamot, 1990). Learners without metacognitive approaches are the ones without direction or opportunity to plan their learning, monitor their progress, or review their future learning directions.

### **2.3. The Mental Lexicon: Vocabulary**

#### **2.3.1. What it means to know a word?**

What words mean and how they can be used in combination depends on the perception and categorisation of the real world around us (Ungerer & Schmid, 1996). Our observations and experiences with the entities of the world are reflected in the nature of language.

We also experience that entities can be collected in convenient categories. As stated by Ungerer & Schmid (1996), the common perceptual network of the entities encourages the formation of basic level categories. This suggests that the meanings of the words are related to our visual perception of the real world. Additionally, the word meanings are both stable and adjustable to the context in which they are used.

Basic level categories make up the core of vocabulary and provide the conceptual basis for other types of categories. On the level of words, basic level categories are usually named by simple words whereas others are often reflected in complex structures like derivations and compounds. Basic level categories also contribute to the conceptualization of abstract categories. Many of these involve a mapping process involving cognitive models which are based on basic level categories (Ungerer & Schmid, 1996).

On the basis of conclusions drawn from a number of studies, knowing a word in a second or foreign language is stated to have the following characteristics (Carter, 1987 p.187):

1. It means knowing how to use it productively and having the ability to recall it for active use.
2. It means knowing the syntactic frames related to the word and the derivations which can be made from it.
3. It means knowing the relationships it possesses with other words in the language and with related words in an L1 as well.
4. It means knowing the different meanings associated with it and also the range of its collocational patterns.

Carter (1987) also emphasises that the purpose of teaching and learning vocabulary is for comprehension and production. Comprehension relies on strategies which help learners to understand lexical items and to store them in memory while production relies on strategies which help them to activate their lexical store, retrieve items from memory and use them appropriately. Different ranges of techniques encourage different skills. In particular, teaching techniques which foster picturable associations across L1 and L2 can be valuable. Another emphasis is given to teaching of words in a network of semantic associations, especially at more advanced levels. In addition, teaching words in discourse encourages appreciation of the syntactic, semantic and pragmatic functions of lexical items.

As stated by Glover, Ronning & Bruning (1990), there are many levels of “knowing a word”, ranging from complete lack of knowledge to a detailed knowledge about a word, its origins and the contexts in which it can be used most appropriately.

According to Nagy & Anderson (1984) and Nagy & Herman (1987), “knowing a word” is not an all-or-none phenomenon (Glover, Ronning & Bruning, 1990).

Beck, McCaslin, & McKeown (1980), as quoted in Glover, Ronning & Bruning (1990), describe a continuum composed of stages: at one end are unknown words that did not establish in semantic memory, at an intermediate level are words with which the learner is familiar, at the upper end are established words, about which the learner has sound knowledge.

Graves (1987), as cited in Glover, Ronning & Bruning (1990), points out that the continuum of “learning a word” is a series of tasks that vary depending on the learner’s

present knowledge and the depth of understanding required by the tasks. For instance, a vocabulary acquisition may arise when the student must learn the multiple meanings of a single word.

Stahl & Fairbanks (1986) distinguish between “definitional and “contextual” word knowledge. “Definitional” knowledge refers to the relationship between a word and other known words and “contextual” knowledge involves the knowledge that develops from exposure to words in context since a word’s status depends on other words in a context. Therefore, vocabulary knowledge is also viewed as organised schema-like structures containing not only the “meaning” of the word, but also a number of temporal, spatial, and grammatical cues.

Thus, as pointed out by Glover, Ronning and Bruning (1990), “knowing a word” extends far beyond word definitions to the knowledge of a word’s meanings and uses in contexts.

As stated by Ellis (1997 in Schmitt & McCarthy, 1997) the property of language being sequential plays an important role in learning second language vocabulary. For a new word to enter into our mental lexicon, we must learn its syntactic properties, its place in lexical structure, i.e. its relations with other words, its semantic properties, and the conceptual underpinnings that determine its place in our conceptual system.

According to Ellis (1997), there are various processes of learning a word which are logically, psychologically, and pedagogically separable. These several aspects of vocabulary learning involve two separable types of learning mechanism:

1. The acquisition of a word’s form, its collocations, and its grammatical class information.
2. The acquisition of a word’s semantic and conceptual properties.

Sequencing and chunking govern learning of language form. The term “chunking” refers to recurring patterns in language and also the main principle of human cognition. Newell (1990), as cited in Ellis (1997), argues that chunking implies the ability to build up structures recursively, thus leading to an organisation of memory.

The process of learning L2 vocabulary involves sequencing the phonological properties of the language and learning discourse involves sequencing the lexical units of the language, namely phrases and collocations (Ellis, 1997).

Ellis (1997) also emphasises the contribution of repetition to vocabulary learning. Being a metacognitive factor, repetitive rehearsal is accepted as a useful strategy in short-

term memory tasks. As demonstrated by Ellis and Beaton (1993a, in Schmitt & McCarthy, 1997), repetition of foreign language forms promotes long-term retention. As L2 vocabulary extends, sequential probabilities of foreign language are implicitly acquired by learners.

Ellis (1997) describes nativelylike competence as the use of idioms and collocations frequently. Nativelylike selection, as he argues, is not a matter of exercising the syntactic rules alone, but use of frequent and familiar collocations and idioms. So, foreign language learning involves learning sequences of words, expressly frequent collocations, phrases and idioms.

Schmitt (2000), giving the examples of various forms of vocabulary such as synonyms, phrasal verbs or idioms, points out that meanings are represented by multiple words, which are called “lexeme” or “lexical item”. Mastery of the complete lexicon of English is beyond not only second language learners but also native speakers. Highlighting the fact that learning language is probably the most cognitively challenging task a person goes through, he explains that the mechanics of vocabulary learning is gradually improved over numerous exposures.

From the standpoint of properties of a word, a word has two components: its referent (what a word refers to) and its meaning. According to Schmitt (2000), to describe the meaning of a word, we need to describe the concept it represents. Aitchison (1987), as quoted in Schmitt (2000), refers to the traditional view, in which words are defined precisely by isolating the attributes essential to the relevant concept. This “fixed meaning” view being on one side, the majority of words do not have one-to-one relationships with a single referent. The semantic features a word has exhibit a certain amount of flexibility (Aitchison, 1987 in Schmitt, 2000).

According to prototype theory, it is proposed that the mind uses a prototypical “best example” of a concept to compare potential members against.

Anderson & Naggy (1989), as cited in Schmitt (2000), agree that word meanings can not usually be contained by either a definition or a series of semantic features. Although these help to give a word’s meaning, context plays a large part in filling in the other information necessary to make use of that word. Anderson & Naggy emphasise the crucial role of context asserting that words cannot always be decoded from only intrinsic meaning properties.

The nature of vocabulary learning manifests itself in a number of ways. For instance, being able to understand a word when listening or reading is known as “receptive knowledge”, whereas being able to produce a word when speaking or writing is considered “productive knowledge” (Schmitt, 2000).

It is widely assumed that vocabulary knowledge consists of two facets—meaning and word form. However, word-knowledge, as stated by Schmitt (2000), entails knowing a variety of knowledge. Nation (1990) proposes the following list of this sort of knowledge that one must master in order to know a word (p. 31):

1. The meaning(s) of the word
2. The written form of the word
3. The spoken form of the word
4. The grammatical behaviour of the word
5. The collocations of the word
6. The register of the word
7. The associations of the word
8. The frequency of the word

From this angle, vocabulary acquisition, as indicated by Schmitt (2000), must be incremental and developed in a gradual manner.

Richard’s (1976) definition of vocabulary knowledge appears to be one of the most fundamental one and it comprises eight assumptions:

1. Knowing the degree of probability of when and where to encounter a given word
2. The limitations imposed on it by register
3. Its appropriate syntactic behaviour
4. Its underlying form and deviations
5. The network of associations it has
6. Its semantic features
7. Its extended or metaphorical meanings

Another definition of vocabulary knowledge is proposed by Taylor (1990), who identified similar categories and also divided each of these categories as “receptive” and “productive”:

1. Frequency of occurrence
2. Word register
3. Word collocation

4. Word morphology
5. Word semantics
6. Word polysemy
7. The knowledge of the equivalent of the word in the mother tongue

Yongqi Gu (2003), citing Nation (2001) and Richards (1976), contends that learning vocabulary in a foreign language is more than simply piling up individual words. He argues that knowing a word means knowing its form, its meaning, and its usage in context receptively and productively. Specifically, a distinction is made between knowing a word and using a word. Quoting McCarthy (1984), Yongqi Gu (2003) states that knowing a word does not necessarily entail using the word automatically in a wide range of contexts. Ellis (1994), as cited in Yongqi Gu (2003), reports some evidence which suggests that the word knowledge requires explicit learning mechanisms while the skill of using words involves implicit learning.

Vocabulary learning strategies, therefore, should include strategies for both knowing and using a word. Knowledge-oriented strategies include those for remembering form and meaning; skill-oriented ones involve the appropriate use of words in contexts and aim to develop automaticity in retrieving and producing those words ( Yongqi Gu, 2003). In other words, learners and teachers should adopt an approach of integrating skill and knowledge.

On the other hand, Oxford and Crookall's (1990) definition of "knowing an L2 word" involves not just the ability to match it with its L1 equivalent, it also involves being able to use the L2 word communicatively in any of the four main language skills.

Rudska et al. (1985), as cited in Carter (1987), introduce a clear assumption that knowing a word involves knowing how to use the word syntactically, semantically, and pragmatically or discursively.

In the light of these views, it is clear that researchers should clarify what aspects of word-knowledge they have studied. In the present study, two aspects of word-knowledge have been investigated: knowing the meaning and knowing the form (spelling). Both aspects involve both receptive and productive issues.

### **2.3.2. Vocabulary: A neglected aspect of L2/FL teaching**

Both language teachers and researchers agree that vocabulary is an overwhelming aspect of language which requires explicit instruction and guidance. However, it is almost

always the case that L2 learners are expected to cope with this issue on their own, just by discovering something miraculous to let “words of a language” into their brains. Oxford and Crookall (1990), and Carter (1987) all emphasise the neglect of vocabulary instruction in L2 classes.

Indeed, vocabulary has been one of the most neglected areas in programs of English as a second language during much of the 20<sup>th</sup> century (Allen, 1983). Especially during the period between 1940 and 1970, little or no emphasis was given to vocabulary in spite of the great interest in pronunciation and grammar. One of the reasons behind this approach is that vocabulary was overemphasised during the years before this period. Learners believed that they could master the language by learning a certain number of English words, along with the meanings of those words in their own language. This belief excluded the need for knowing how the words work together in English sentences.

Some specialists in methodology, therefore, assumed that the meanings of words could not be adequately taught, so there was no point in trying to teach them. Some also believed that learners would make mistakes in sentence construction if too many words were learned before the basic grammar had been mastered.

Inevitable breakdowns in communication due to the lexical problems account for today's concern with the learning and teaching vocabulary. The role of vocabulary knowledge in foreign language learning has been recognized by a majority of researchers, theorists and language learners. Krashen (1989) emphasises the need to have a large vocabulary, which is essential for mastery of a language. He indicates that second language learners usually report that lack of vocabulary is a major problem. On the other hand, there has been considerable debate about the most effective way to develop students' vocabulary in foreign language. Therefore, today's concern is in the direction of discussing ways for more effective vocabulary teaching and for encouraging learners to take more responsibility for their own vocabulary learning.

Judd (1978) says that “no one can deny the assertion that one major aspect of fluency in a language is control over the lexicon” (p. 71). It is generally recognised that the number of syntactic and phonological rules in a language is finite, whereas the number of words in a language is nearly infinite. Lexical fluency is mostly judged on people's ability to communicate effectively in specific circumstances. Stated in another way, a person's vocabulary ability is evaluated in terms of practical communication. Vermeer

(1992) also claims that effective communication relies less upon the mastery of grammatical rules than on the possession of an adequate and appropriate vocabulary.

In looking at the present situation, it is the case that students are first directed to master grammatical patterns and learning vocabulary is often viewed as a hindrance to this task because such involvement distracts the learner from observing and using the syntactic patterns of the language (Judd, 1978).

Most theories of vocabulary instruction, on the other hand, demonstrate the secondary status of vocabulary teaching. The tendency of not teaching vocabulary as a skill stems from many methodologies which favour the indirect teaching of vocabulary as a part of other areas such as reading or listening comprehension (Chastain, 1976; Rivers, 1968; and Michel & Patin, 1972 in Judd, 1978).

Meara (1980) considers vocabulary a “neglected aspect of language learning”. Ellis (1995) shares the same view and adds that this situation, in some respects, has not significantly changed today. Ellis’s (1995) study constitutes a start in examining to what extent and in what ways learners acquire new words from oral input. His findings demonstrate that premodified oral input is more efficient in promoting vocabulary acquisition than interactionally modified input.

### **2.3.3. Process in L2/FL Vocabulary Learning**

Harley (1995) emphasises that the lexicon is central to language use and speech productions being at the heart of both listening and reading comprehension. The importance of the lexicon in language acquisition and use, therefore, caused the past decade to witness considerable growth in lexically oriented second language research (Meara, 1987, 1992 in Harley, 1995). One of these studies investigated whether the second language lexicon is organised in the learner’s mind differently from that of the native speaker. Meara (1984 in Harley, 1995) indicated the loose organisation of learner’s lexical networks pointing to the differences between native speakers and learners of a language in the way they store and handle words.

Laufer (1983 in Harley, 1995) reported that the connections between L2 words are primarily phonological, which is in contrast to the mental lexicon in L1. However, Singleton and Little (1991 in Harley, 1995) claimed that the structure of the L2 lexicon, like that of the L1, is primarily semantic.

Second and foreign language learners encounter L2 words in oral or written form in an L2 discourse context. Written text, providing exposure to more vocabulary than oral conversation, is an important source of vocabulary learning. The growth of vocabulary in L2 is often linked to the development of reading comprehension (Anderson & Freebody, 1981; Nation, 1993; Stanovich, 1986 in Harley, 1995). A remarkable body of research dealt with how L2 learners approach unfamiliar words in a written text and the cues they use to infer word meaning (Paribakht & Wesche, 1995; Huckin & Bloch, 1993; Parry, 1991 in Harley, 1995).

However, learning word meaning from context is a controversial one. Krashen (1989), for example, argues that incidental learning of vocabulary from context happens unconsciously, whereas Ellis (1994a, 1994b in Harley, 1995) asserts that vocabulary learning involves conscious and explicit learning. According to Harley (1995), Ellis's argument implies that success in learning word meaning will depend on the use of mental effort whatever techniques are employed to infer meaning or to remember and use words. This view also implies that instruction which stimulates explicit learning will benefit vocabulary development.

Reading is not the only context in which the learning of word meaning occurs. As pointed by Harley (1995), the investigation by Ellis et al. yielded the result that long-term retention of L2 vocabulary can also be enhanced in classes where learners negotiate meaning.

On the other hand, the benefits of mnemonic techniques, semantic and imagery mediation and the keyword technique are still open to debate. Some studies have shown that imagery-based mnemonic techniques effectively promote vocabulary learning in L2, though researchers noted limitations on such techniques' efficacy in non-laboratory settings (Cohen, 1987; Pressley, Levin & McDaniel, 1987 in Harley, 1995). Also, Ellis & Beaton (1993) found the keyword technique was useful for L2 vocabulary learning only with words that were easily imageable. Another finding by Wang & Thomas (1995) is that no advantage for imagery-based learning over rote learning was elicited, which doubts the value of imagery-based mnemonics.

Furthermore, there is evidence that a combination of techniques for remembering L2 words works better than a single technique. For example, Brown and Perry (1991) found that the keyword mnemonic technique together with a "semantic" approach resulted in greater learning than use of a keyword alone.

In sum, evidence is increasing that the process of learning L2 word meanings is an explicit one. Accordingly, Ellis (1994a, 1994b in Harley, 1995) argues that strategic processing through instruction can be beneficial.

#### **2.3.4. Contextualised and Decontextualised Trends in Vocabulary Learning**

A way to manage the learning of vocabulary is through indirect or incidental learning. An example of this is learning new words in context, which can be best achieved by extensive reading. Other sources of incidental learning include problem solving group work activities and formal classroom activities where vocabulary is not the main focus (Joe, Nation & Newton, 1996 in Schmitt, 1997).

In search of an answer to the question of what should be done to get learners to learn a large amount of vocabulary in a short space of time, researchers focussed on two distinct fashions for vocabulary expansion: contextual and non-contextual. The suggestion that learners should learn vocabulary from word cards or word lists, in a non-contextual fashion, can be seen by some teachers as an out-dated method of learning. On the other hand, a number of studies indicate the effectiveness of such learning in terms of speed of learning (Nation, 1982; Paivio and Desrochers, 1981, Pressley et al., 1982 in Schmitt, 1997). However, as stated by Schmitt (1997), learning from word lists or cards is only an initial stage of learning a particular word and there will always be a need to have extra exposure to the words through reading, listening and speaking, as well as extra formal study of the words, their collocates, associations, different meanings, grammar and so on. This shows a complementary relationship between contextualised learning of new words and the decontextualised learning from word lists and cards.

Brown, Collins and Duguid (1989 in Schmitt, 1997) argue that definitions are ineffective because they are abstract and decontextualised.

On the other hand, definition-based learning involves memorising definitions representing only a single meaning of the word, which leads only a limited level of word knowledge. Additionally, research indicates that instruction relying on definitions alone does not increase comprehension of text (Graves, 1986; Mezynski, 1983; Stahl & Fairbanks, 1986 in Schmitt, 1997).

According to Meara's (1997) L2 vocabulary acquisition model, an acquisition event consists of the building of a connection between a newly encountered word, and a word that already exists in the learner's lexicon. This connection might be a link between the

new L2 word and its L1 equivalent, or it might be a link between the new L2 word and an already known L2 word. This model describes unknown words as the words that have no connections to the learner's lexicon. Known words, on the other hand, are words that are connected in various ways.

Poorly-known words are words with few connections, while better-known words are simply words with many connections. On this model, the frequently encountered word will, in time, develop a rich set of connections with other words. It is noteworthy that this claim about vocabulary uptake holds the assumption that vocabulary structure in L2 is formed and enriched through links identified by the individual. Meara (1996b in Schmitt, 1997) also claims that even acquisition events may involve establishing connections between words, which results in organising networks of words randomly.

### **2.3.5. A Review of Research on L2 Vocabulary Learning Strategies**

Research into the area of language strategies began in the 1970s as interest in how the actions of learners might affect their acquisition of language (Schmitt, 1997). There was a growing awareness that language achievement depended on the individual learner's efforts. This, as indicated by Schmitt (1997), led to an interest in how learners approached their own learning and use of language. As quoted by Schmitt (1997); Rubin (1975), Naiman et al. (1978), Wong & Fillmore (1979) and O'Malley et al. (1985) tried to identify and categorise a variety of strategies.

O'Malley & Chamot (1990) divide language learning strategies into three major types: metacognitive (strategies for overviewing the process of language learning and use), cognitive (strategies which involve the manipulation of information for the purpose of acquiring or retaining this information), and social/affective (strategies dealing with interpersonal relationships). Each of these major categories describes a large number of strategies. Oxford (1990) has attempted one of the most comprehensive classification systems to date. It includes six major strategy categories, including Memory, Cognitive, Compensation, Metacognitive, Affective and Social.

In the process of identifying and categorizing language learning strategies, many studies dealt indirectly with vocabulary learning strategies. Schmitt (1997) draws attention to the inadequate number of vocabulary-specific studies other than guessing from context (Huckin, Haynes, and Coady, 1993) and the Keyword Method (Pressley, Levin, and Miller, 1982; Pressley et al., 1982a).

The results of the research on both general learning and vocabulary learning strategies yielded a number of tentative conclusions about vocabulary learning strategies. Schmitt (1997), quoting Chamot's (1987) study, reports that ESL learners used more strategies for vocabulary learning than for any other language learning activity. He also mentions Horwitz's (1988) finding that a considerable number of the ESL students taking part in her research agreed that the most important part of learning a foreign language is learning vocabulary.

Lawson and Hogben (1996) cite Allen (1983), Laufer (1986), Nation (1990) and Richards (1980), and state that during the past decade, researchers have directed attention to the importance of vocabulary acquisition for second language learners. Judd (1978) discusses the lack of vocabulary instruction which has been traditionally relegated to secondary status in EF/SL contexts.

According to Oxford (1986), as quoted in Brown & Perry (1991), a greater emphasis needs to be placed on identifying effective second language learning strategies and teaching students how to use them. She also prepared a taxonomy of second language learning strategies and listed a number of vocabulary acquisition methods.

Of various L2 vocabulary learning strategies, the main focus has been given to three strategies: keyword, contextual, and semantic processing. Brown & Perry (1991), referring to Pressley, Levin and McDaniel (1987), state that the keyword method has received the most attention and has been proven to be superior to contextual and no-strategy conditions. On the other hand, Sternberg (1987 in Brown & Perry, 1991) claims that context is the core of vocabulary learning.

The third major strategy, the semantic processing, subsumes a number of semantic techniques. To date, various learning strategies have been proposed for a second language environment. However, as Brown & Perry (1991) report, little research has been carried out regarding the effectiveness of various learning strategies for vocabulary learning in EF/SL. The study, conducted by Crow and Quigley (1985), examined semantic processing strategies and found them to be more effective than no-strategy conditions.

Some other studies investigated what vocabulary strategies are most commonly used. Cohen and Apeh (1981) found that most students tried to memorise the words. O'Malley et al. (1985 in Schmitt, 1997) found that repetition was the most commonly mentioned strategy, with strategies as imagery, inferencing, Keyword Method being much less frequent. Schmitt (1997) further indicates that vocabulary learning strategies requiring a

deeper manipulation of information, such as forming associations and using the Keyword Method, promote a higher retention of target words.

On the other hand, Nation's (1982) research into word lists, as quoted in Schmitt (1997), showed that word lists are an effective way for learning vocabulary in a short time. O'Malley and Chamot (1990) suggest that even rote repetition can be effective if learners are accustomed to using it. Naming word lists and rote repetition as shallow strategies, a generalization can be made in a way that shallower activities may be more suitable for beginners, while intermediate or advanced learners can benefit from the context usually included in deeper activities (Cohen and Apehek, 1981).

Ahmed (1989) used a cluster analysis technique to isolate five kinds of learners depending on the strategies they used. The subjects in the "good learner" groups used a variety of strategies, were aware of their learning and were conscious of the semantic relationships between new and previously-learned L2 words. "Poor learner" subjects used few strategies, showed little awareness of how to learn new words or how to connect the new words to old knowledge.

When considering which vocabulary learning strategies to recommend to students, Schmitt (1997) reminds us of Politzer & McGroarty's (1985) warning that strategies are dependent on the context in which they are used. Thus, the effectiveness of the learning strategies to be taught will depend on a number of variables, including proficiency level, task, text, background knowledge, context of learning, language modality, target language, and learner characteristics (Chamot & Rubin, 1994 in Schmitt, 1997).

Schmitt (1997) says that culture is another important learner characteristic for vocabulary. O'Malley & Chamot (1990) demonstrated that Hispanics who had strategy training improved their vocabulary scores compared to the Hispanic control group, but Asians who resisted training in the strategy training groups performed worse than the Asian control group who used their familiar rote repetition strategy.

In addition, a study by Schmitt (1997) showed that learners from different culture groups have different opinions about the usefulness of vocabulary learning strategies. Languages proficiency is another factor playing a role in determining the effectiveness of a vocabulary strategy. For example, Cohen & Apehek (1980) found that more proficient students were better able to use associations in recall tasks.

Craik & Lochart (1972), as quoted in Brown & Perry (1991), suggest that retention becomes more fixed when information processing takes place at a deeper semantic level, where stimuli are analysed for meaning and related to existing cognitive structures.

Craik and Tulving (1975), as also cited in Brown & Perry (1991), assert that retrieval is also enhanced by elaboration, which is further processing at a certain depth of memory. For instance, semantic elaboration would occur if a meaningful response to a question about the meaning of the word was given (Perry, 1982 in Brown & Perry, 1991).

In this respect, Pressley, Levin & Delaney (1982), as cited in Brown & Perry (1991), suggest that the type of processing used with keyword method involves elaboration at the sensory level combined with some attention at the semantic level. Through the acoustical and imagery elaboration, a link is established between the new L2 word and the L1 meaning. The semantic aspect of this method lies in the existence of definition which is meaningfully related to the key word.

Accordingly, it could be argued that elaboration at all levels would enhance memory, and semantic elaboration would fix the semantic association within existing knowledge structures. In this case, it would be reasonable to suggest that the combination of keyword and semantic elaboration methods could produce better results than either on its own (Brown & Perry, 1991).

### **2.3.6. Storage of Words in Network of Associations: Semantic Mapping**

Research in memory suggests that words are stored and remembered in a network of associations (Nattinger, 1988). These associations can be of many types and be linked in a number of ways. Words in our mental lexicon, as mentioned by Nattinger (1988), for example, are tied to each other by meaning, form, sound and by sight. To know the meaning of a word entails knowing its associations with other words. Therefore, as Nattinger (1988) maintains, to teach it effectively, it must be presented in this network of associations.

As Carter (1987) states, words are grouped into lexical sets as semantically related options from which a coherent text can be constructed. The structure of lexicon is based on these lexical sets to compose clusterings of patterns usually related to a single topic. The notion of lexical set, as indicated by Carter (1987), is best illustrated with reference to a specific field.

“Field” refers to a particular set of idea-related lexical items. As exemplified by Carter (1987), air transport, for example, constitutes a field with items such as “flight”, “take-off”, “runway”, “check-in”, etc.

Considering the interdependencies between vocabulary and theories of vocabulary learning, the first step has been taken in the direction of examination of vocabulary acquisition. The findings of Anglin’s (1970) research, as quoted in Carter (1987) contribute to drawing general conclusions concerning the basics of vocabulary development and also the issue of what a word means. Carter (1987) summarises the points noted by Anglin (1970) as follows:

1. Words exist in a kind of semantic space. Knowing a word in a language involves knowing the parts of space it occupies.
2. The first language learner acquires this knowledge by experimenting with words in a large range of contexts. Apparently, providing second language learners with sufficient opportunities to extend words seems to be a dimension to be attended to in teaching more vocabulary.
3. Knowing words in groups of semantically related items might be encouraged as an important stage in L2 learning.

It is known that words are not held in memory in isolation from each other. Aitchison (1994), as quoted in Swan (1997), says that storage of mother-tongue vocabulary involves networks of associations of various kinds, based on membership of semantic, phonological, syntactic and other classes. As for the foreign language vocabulary, Meara (1984), as quoted in Swan (1997), agrees with this view stating that foreign language lexicons, too, involve networks of associations.

Richards (1976) has pondered the question of what it entails to know a word, especially advocating the assumption that word meanings are defined through their relationships with other words. With respect to “meaning” he discusses the rich framework of integrated semantic areas which are reflected in dictionary entries for words: a great variety of different or related meanings for each word is listed in dictionary entries showing how words take their meanings from the context in which they are used. Taking a step further, it is also assumed that words are stored or come to mind according to associative bonds, and that learning may be facilitated when such links are established.

In an attempt to find how second language learners store vocabulary, Henning (1973) demonstrated low-proficiency language learners appear to encode words in memory on the

basis of acoustic similarities, whereas, high-proficiency level learners are more apt to process them using a semantic basis.

Therefore, as Henning (1973) notes, in the earlier stages, learners would benefit from aural discrimination, songs, selective listening or affix drills. In contrast, at a higher level, they might benefit more from synonym, antonym and pair-associate games which show the relationships between lexical items. As a result of these findings, a conclusive remark can be made in a way that deciding on vocabulary teaching instruction should rely on the findings of all related disciplines, such as on the nature of language learning, the dimensions of memorisation process and assumptions concerning the nature of lexical competence, rather than on an intuitive approach to teaching procedures.

Oxford (1990) describes semantic mapping as “making an arrangement of words into a picture, which has a key concept at the centre or at the top, and related words and concepts linked with the key concept by means of lines or arrows” (p.41).

This strategy incorporates meaningful imagery, grouping, and associations. It visually shows how certain groups of words relate to each other. It is also valuable for improving both memory and comprehension of new expressions (Oxford, 1990).

In the design of semantic mapping, as Oxford (1990) states, it should be noted that there can be no single “right answer”, because individuals will have different approaches to clustering ideas and making associational linkages.

Cohen (1984), as quoted in Levine & Reves (1990), states that grouping the words according to concepts (forming conceptual associations) is one of the methods that students reported, when they tried to remember the words. In a study by Levine & Reves (1990), which investigated the effect of the method of vocabulary presentation on vocabulary acquisition, students reported to have used “clustering” as their learning strategy, which might suggest that an organised presentation of words is probably more effective than a random presentation.

Grouping, which means organising material, is obvious as an aid to the storage of information and then the retrieval from long-term memory. A great number of studies carried out so far indicated that classifying words to be learned into categories resulted in better recall (Bousfield, 1953; Cofer, Bruce & Reicher, 1966, Craik & Tulving, 1975 in Thompson, 1987).

Since grouping words in L1 enhances recall, it could be alleged that grouping would also facilitate vocabulary learning in L2. However, Henning (1974, in Thompson, 1987)

indicates that low proficiency ESL learners rely more on sound similarities in recognising vocabulary while high proficiency learners rely more on semantic factors.

In regard to influence of vocabulary instruction methods upon retention, Ellis (1997), referring to Ijaz (1986), asserts that the acquisition of L2 words usually involves a mapping of the new word form onto pre-existing conceptual meanings or onto L1 translation equivalents since second and foreign language learners developed conceptual and semantic systems which are already linked to L1.

Sternberg (1987), on the other hand, argues that reading provides a rich source of L2 vocabulary even though word meanings do not come from mere exposure during reading. He emphasizes the helpfulness of the surrounding context in understanding the meaning of the unknown word and inferencing from context, which makes the vocabulary more memorable. This finding was also reported by Hulstijn (1992 in Ellis, 1997) that inferred word meanings were retained better than those given to the reader through the use of marginal glosses.

Ellis (1997), quotes Beck, McKeown & Omanson (1987) who proposed that learners should focus on the meaning of new words and integrate them into pre-existing semantic systems.

Crow and Quigley (1985), as quoted in Ellis (1997), evaluated the effectiveness for ESL students of several semantic processing strategies, such as the “semantic field” approach and found them to be superior to “traditional methods” over long periods.

Brown & Perry (1991), contrasted keyword, semantic, and keyword-semantic methods of instruction for foreign language vocabulary learning and demonstrated that the combined keyword-semantic strategy increased retention above the other methods.

The effectiveness of vocabulary instruction methods was compared by Stahl & Fairbanks (1986) and the analysis of the various studies reported the following findings:

1. Those methods which involve both definitional and contextual information about each to-be-learned word produced the greatest effects on vocabulary retention and comprehension.
2. Several exposures were more beneficial for drill-and-practice methods.
3. Keyword methods produced consistently strong effects.

According to Ellis (1997), successful learners use sophisticated metacognitive knowledge to choose cognitive strategies appropriate to the task of vocabulary learning. These include inferring word meanings from context, semantic or imagery mediation

between the foreign language word and the L1 translation, and deep processing for elaboration of the new word with existing knowledge. In other words, metacognitively sophisticated language learners are successful language learners because they have cognitive strategies for inferring the meanings of words, for associating them to networks of other words and concepts, and mapping the surface forms to these rich meaning presentations.

### **2.3.7. Contradictory Views on Teaching Vocabulary in Semantically Related Clusters**

Despite the suggestions and justifications made by numerous researchers for presenting words of related meaning together, another group of researchers put forward some opposite findings suggesting that presenting related words in semantic sets directly interferes with the learning of L2 or foreign language vocabulary, especially at initial stages. It is claimed that seeing related words in sets can have a more positive effect only when learners' knowledge becomes more established and enriched.

Nation (2000) indicates that studies in cognitive psychology have already studied "interference" between items as one of the major causes of forgetting. Crystal (1997, in Nation, 2000) addresses the issue of "lexical interference" as the errors that occur between related words when ES/FL learners are acquiring related vocabulary. Memory research associates vocabulary learning in L2 or foreign language with a known, familiar form, i.e. the first language, which is like learning a foreign word and its L1 translation, a common occurrence in language learning.

Tinkham's (1993, 1997) research involved the comparison of teaching words organised in lexical sets and sets of unrelated words. His research showed a clear advantage to learning words that were unrelated as compared to learning the words presented in lexical sets.

Waring (1997 in Nation, 2000) and Tinkham (1997) also compared thematically related words with unrelated words and found that, generally, the thematically related set was easier to learn, though this result was not as strong as the negative effect of the lexical sets.

Another study, conducted by Schneider, Healy and Bourne (1998 in Nation, 2000), reported that, initially, learning related words together was easier than learning a set of unrelated words, though, it was just the opposite when a long term retention was

considered. In other words, learning the unrelated words resulted in relatively better retention.

Tinkham's (1997) study advocated the interference effect on learning as his findings revealed that learning was faster for unrelated words than semantically related lexical sets.

As discussed by Nation (2000), interference largely occurs when items presented together are both unfamiliar, or when one is unfamiliar and the other poorly established. Once items have been reasonably well established, there is good value in deliberately bringing the items together to see how they differ from each other and where the boundaries between them lie.

However, learners seem to be more inclined to decontextualise items and to look at them as language items, which appears to be a contradictory approach to the rationale behind forming semantically related lexical sets to design a context.

At this point, it should be noted that the degree of effect on retention depending on the two ways of presenting lexical items, i.e. contextualised and decontextualised frames, would also be affected by the nature of the design of the presentation and also individual differences such as learning and cognitive styles of learners.

Additionally, Nation (1994), referring to research by Higa (1963), asserts that learning near synonyms, opposites, and free associates at the same time makes learning more difficult. This difficulty, according to him, is caused by the similarity between the two items strengthening their association, and the differences interfering with each other. Tinkham (1993) also demonstrates the negative effect of teaching words in a "lexical set" like days of the week, the names of vegetables, character adjectives because of the interference that occurs between the words in the set.

Another important point is highlighted by Nation (1994) in referring to the "levels of processing" theory of learning ( Craik & Lockhart, 1972; Craik & Tulving, 1975). As suggested by this theory, the quality of mental activity determines the quality of learning. In other words, if an activity gives rise to deep and thoughtful processing, the learning will remain for a long time. To ensure deep processing, Nation (1994) suggests relating the new word to previous knowledge, presenting the word in a context and drawing on a range of clues to recall the word.

### 2.3.8. The Vocabulary Learning Strategies Taxonomy

As stated previously, vocabulary learning strategies can be assumed to be a part of learning strategies. In the compilation of the taxonomy, as reported by Schmitt (1997), some of the strategies have been classified as different strategies since many strategies have the potential to be used for more than a single purpose.

The present taxonomy contains 58 strategies. To classify these strategies as the next step, several systems by different researchers were examined: Stoffer (1995, in Schmitt 1997) clustered the vocabulary strategies into nine groups:

1. Strategies involving authentic language use
2. Strategies involving creative activities
3. Strategies used for self-motivation
4. Strategies to create mental linkages
5. Memory strategies
6. Visual/Auditory strategies
7. Strategies involving physical action
8. Strategies used to overcome anxiety
9. Strategies used to organize words

Another system developed by Oxford (1990) classified vocabulary learning strategies under four main strategy groups: Social, Memory, Cognitive, and Metacognitive. Social Strategies (SOC) use interaction with other people. Memory Strategies (MEM) involve relating new material to existing knowledge. Cognitive Strategies (COG) exhibit the manipulation or transformation of the target language. Finally, Metacognitive Strategies (MET) involve a conscious overview of the learning process. Discussing several inadequacies in Oxford's classification system, Schmitt (1997) created a new category to describe the kind of strategies when faced with discovering a new word's meaning without recourse to another person's expertise: Determination Strategies (DET).

When encountering a word for the first time, learners must use their knowledge of the language or contextual clues to figure out the new meaning (Determination Strategies), or ask someone else who knows (Social Strategies). Once learners have been introduced to a new word, they make some effort to remember it using Consolidation Strategies, which consist of the Social, Memory, Cognitive, or Metacognitive Strategy groups (Schmitt, 1997).

Table 2.2 presents the taxonomy of vocabulary learning strategies. The figures in this table, as stated by Schmitt (1997), summarise the outcomes of a survey research conducted in Japan. The “use” figure refers to the percentage of subjects who indicated they use that particular strategy, while the “helpful” figure indicates the percentage who felt the strategy was useful for learning vocabulary.

Table 2.2  
A Taxonomy of Vocabulary Learning Strategies (source: Schmitt, 1997)

Strategy Group		Use %	Helpful %
Strategies for the discovery of a new word's meaning			
DET	Analyse part of speech	32	75
DET	Analyse affixes and roots	15	69
DET	Check for L1 cognate	11	40
DET	Analyse any available pictures or gestures	47	84
DET	Guess from textual context	74	73
DET	Bilingual dictionary	85	95
DET	Monolingual dictionary	35	77
DET	Word lists	-	-
DET	Flashcards	-	-
SOC	Ask teacher for an L1 translation	45	61
SOC	Ask teacher for paraphrase or synonym of new word	42	86
SOC	Ask teacher for a sentence including the new word	24	78
SOC	Ask classmates for meaning	73	65
SOC	Discover new meaning through group work activity	35	65
Strategies for consolidating a word once it has been encountered			
SOC	Study and practice meaning in a group	30	51
SOC	Teacher checks students' flashcards or word lists for accuracy	3	39
SOC	Interact with native speakers	-	-
MEM	Study word with a pictorial representation of its meaning	-	-
MEM	Image word's meaning	50	38
MEM	Connect word to a personal experience	37	62
MEM	Associate the word with its coordinates	13	54
MEM	Connect the word to its synonyms and antonyms	41	88
MEM	Use semantic maps	9	47
MEM	Use “scales” for gradable adjectives	16	62
MEM	Peg Method	-	-
MEM	Loci Method	-	-
MEM	Group words together to study them	-	-
MEM	Group words together spatially on a page	-	-
MEM	Use new word in sentences	18	82
MEM	Group words together within a story line	-	-
MEM	Study the spelling of a word	74	87

Table 2.2 (continue)

Strategy Group		Use	Helpful
		%	%
MEM	Study the sound of a word	60	81
MEM	Say new word aloud when studying	69	91
MEM	Image word form	32	22
MEM	Underline initial letter of the word	-	-
MEM	Configuration	-	-
MEM	Use Keyword Method	13	31
MEM	Affixes and roots (remembering)	14	61
MEM	Part of speech (remembering)	30	73
MEM	Paraphrase the word's meaning	40	77
MEM	Use cognates in study	10	34
MEM	Learn the words of an idiom together	48	77
MEM	Use physical action when learning a word	13	49
MEM	Use semantic feature grids	-	-
COG	Verbal repetition	76	84
COG	Written repetition	76	91
COG	Word lists	54	67
COG	Flashcards	25	65
COG	Take notes in class	64	84
COG	Use the vocabulary section in your textbook	48	76
COG	Listen to tape of word lists	-	-
COG	Put English labels on physical objects	-	-
COG	Keep a vocabulary notebook	-	-
MET	Use English-language media (songs, movies, newscasts, etc.)	-	-
MET	Testing oneself with word tests	-	-
MET	Use spaced word practice	-	-
MET	Skip or pass new word	41	16
MET	Continue to study word over time	45	87
- = Strategy was not included on the initial list used in the survey			

Schmitt's (1997) classification of vocabulary learning strategies can be summarized as follows:

#### a. Discovery Strategies

Discovery strategies are grouped into determination strategies and social strategies. Determination strategies, as stated by Schmitt (1997), facilitate gaining knowledge of a new word through guessing from their structural knowledge of the language, guessing from an L1 cognate, guessing from context or using reference materials. Among these

strategies, guessing an unknown word's meaning from context has been widely promoted in the last two decades as it is aligned with the communicative approach.

Guessing from context most commonly refers to inferring a word's meaning from the surrounding words in a written text. Schmitt (1997) discusses the prerequisites of textual inferencing stating that the learner must have a certain level of language proficiency, adequate knowledge of the subject, and also the strategic knowledge of how to effectively go through the inferencing process.

Dictionaries, especially bilingual dictionaries and word lists are ways of finding a word's meaning through reference materials. Nation (1982, in Schmitt, 1997) surveyed the research and concluded that the average learner was able to master large numbers of words using "word list" technique, and that the learning did not wear off quickly.

A second way to discover a new meaning entails the social strategy of asking someone who knows. Teachers, classmates or friends can be asked for meaning in a variety of ways, such as giving the L1 translation, giving a synonym, giving a definition by paraphrase or using the new word in a sentence (Schmitt, 1997).

#### **b. Consolidation Strategies**

##### **1. Social Strategies**

Nation (1977 in Schmitt, 1997) suggests that group work can be used to learn vocabulary. A number of benefits have been attributed to cooperative group learning by Dansereau (1988 in Schmitt, 1997): it promotes active processing of information, the social context enhances motivation of the participants, and cooperative learning can prepare the students for "team activities".

Additionally, flash cards, word lists and interacting with native speakers can be a good way to gain vocabulary (Schmitt, 1997).

##### **2. Memory Strategies**

Most memory strategies, traditionally known as mnemonics, involve relating the word to be retained with some previously learned knowledge, using imagery or grouping. Thompson (1987) explains that mnemonics, that is using visual and verbal mental imageries, helps individuals learn faster and recall better because they help the integration of new material into existing cognitive units.

##### **3. Pictures/Imagery**

New words can be learned by studying them with pictures of their meaning instead of definitions. Kopstein and Roshal (1954) and Webber (1978), as quoted in Schmitt (1997),

found that pairing L2 words with pictures has yielded better results than pairing them with their L1 equivalents.

#### 4. Related Words

New words can be linked to L2 words which the student already knows. This usually involves coordination, synonymy or antonymy. As stated by Aitchison (1987 in Schmitt, 1997), word association research has shown that coordinates in particular have very strong connective bonds. Oxford (1990) also suggests that sense relationships can be illustrated with semantic maps in order to consolidate vocabulary.

#### 5. Grouping

As Schmitt (1997) indicates, grouping is an important way to help recall, and people seem to organize words into groups naturally without prompting. According to Cofer, Bruce & Reicher's (1966) L1 studies, as quoted in Schmitt (1997), if words are organized before memorization, recall is improved. Schmitt further says that there is no reason to believe it does not do the same for L2 learners. Words can also be grouped together in a natural way by using the target word in sentences.

#### 6. Word's Orthographical or Phonological Form

Another type of mnemonic strategy, as defined by Schmitt (1997), involves focusing on the target word's orthographical or phonological form to facilitate recall. The options here are studying the spelling or pronunciation of a word, visualizing the orthographical form or making mental representation of the sound of a word.

The Keyword Method, being the most researched mnemonic strategy, combines the phonological forms and meanings of L1 and L2 words. This method entails a learner finding an L1 word which sounds like the target L2 word. Schmitt (1997) cites Atkinson and Raugh (1985); Pressley, Levin & Miller (1982); Pressley et al. (1982a); Pressley, Levin and Delaney (1982) and asserts that the Keyword method is highly effective in enhancing the recall of words.

Nevertheless, this technique appears to have some limitations. Firstly, it is of little use with abstract vocabulary. Secondly, it is less effective in productive vocabulary learning because imagery association allows retrieval of a keyword which is an approximation to the L2 form (Ellis & Beaton, 1993a and b in Schmitt, 1997). Thirdly, the keyword technique does not help spelling or pronunciation.

### **c. Other Memory Strategies**

Cognitive and metacognitive strategies comprises other memory strategies. Cognitive strategies in this taxonomy include written or verbal repetition and using mechanical means to study vocabulary (Schmitt, 1997). Another kind of cognitive strategy is using study aids, such as taking notes in class, making use of special vocabulary sections in textbooks, and making vocabulary notebooks.

Metacognitive strategies are used by students to control and evaluate their own learning, by over-viewing the learning process. To efficiently acquire an L2, it is important to maximize exposure to it by using L2-medium written materials and interacting with native speakers. Schmitt (1997) cites Pimsleur (1967) and Baddeley (1990) and reports that practice time is an important factor in maximizing effectiveness, suggesting that learners should review new material soon after the initial meeting, and then at gradually increasing intervals.

In addition, L2 learners' gaining the awareness that they will never learn all the words, and so they should concentrate on learning the most useful ones, will aid them to make conscious decisions to employ the necessary strategies, such as deciding whether or not to learn a low frequency word (Nation, 1990).

## **2.4. Vocabulary Teaching**

### **2.4.1. Teaching Second Language Vocabulary**

As also stated by many theorists, researchers, language learners and teachers, devoted attention to vocabulary is essential for mastery of a language. Nevertheless, such a joint agreement takes another path causing a considerable debate when it involves determining the most effective way to develop learners' foreign language vocabulary. Accordingly, a number of foreign language vocabulary teaching methods have been extensively researched and empirically tested.

The factors that influenced teaching vocabulary during 1970s and 1980s are touched upon in Sökmen's (1997) discussion on acquisition of second language vocabulary: top-down, naturalistic, and communicative, with an emphasis on implicit and incidental learning of vocabulary. The primary vocabulary skill entailed recognizing clues in context, using monolingual dictionaries and inferring word meaning from context.

The counter arguments for the implicit instruction in second language vocabulary acquisition come from several problems related to inferring words from context. First of all, as asserted by Sökmen (1997), learning vocabulary through guessing words in context is a very slow process. Sternberg (1987), Carter & McCarthy (1988), and Scherfer (1993), as cited in Sökmen (1997), share this criticism and say that inferring is not perhaps the most efficient way to approach the task. Secondly, inferring word meaning is an error-prone process. Students are seldom successful in guessing the correct meanings. Thirdly, even when students are trained to guess words in context, their comprehension may still be low due to insufficient vocabulary knowledge (Haynes & Baker, 1993 in Sökmen, 1997). Fourthly, Sökmen (1997) quotes Hulstijn's (1993) study and expresses that even though being good at inferring meaning could account for acquiring vocabulary more easily, the opposite was not true. In other words, students with large vocabulary were not necessarily good at inferring as they had used other means, such as word lists.

Finally, guessing from context does not necessarily result in long-term retention. Parry (1993), Wit de-Boer (1991) and Paribakht's (1994) studies, as quoted in Sökmen (1997), revealed that acquisition does not automatically result when one has guessed the meaning of an unfamiliar word.

Even if Nagy's (1997) arguments mostly advocated guessing word-meanings from a context, some decontextualised learning may be effective for retention. Chern (1993 in Sökmen, 1997) states that contextual guessing may be especially helpful to students with higher proficiency. However, more research reveals the ineffectiveness of just using implicit vocabulary instruction and shows that it needs to be accompanied by bottom-up approach (Haynes, 1993; Coady, 1993 in Sökmen, 1997). In fact, explicit vocabulary instruction may have an effect on students' overall interest and motivation in learning words. As reported by Sökmen (1997), the current trend now focuses on both implicit and explicit learning.

Stoller and Grabe (1993) also agree with this view and say that explicit vocabulary should be added to the usual inferring activities in the L2 classroom. Sökmen (1997), in her synthesis of the literature, touches upon the following pedagogical themes:

1. Build a large sight vocabulary:

The need to develop a large sight vocabulary raises the question of which words should be focused on: high frequency words or difficult ones? The teaching of the 2000 most frequent words in English through word lists in paired-associates has proven to be a

successful way to learn a large number of words in a short period and retain them over a time (Sökmen, 1997).

As for the difficult words, Levenston (1979 in Sökmen, 1997) suggests that lessons should be designed to tackle the tricky, less-frequent words along with the highly-frequent.

Additionally, Stoller and Grabe (1993) introduce the idea of letting students choose the words they want to learn as another option. This “self-chosen” strategy robs the learners of the motivation which affects intention to read and, consequently, attention to memorise something.

2. Integrate new words with the old:

According to lexico-semantic theory, humans acquire words first and then, as the number of words increases, the mind sets up systems to keep the words well-organised for retrieval (Lado, 1990 in Sökmen, 1997). Aitchison (1987) further states that the human lexicon is believed to be a network of associations, a web-like structure of interconnected links. Accordingly, helping the learners establish effective links to integrate the new with the old will promote learning.

3. Provide a number of encounters with a word:

According to Richards (1976 in Sökmen, 1997), knowing a word means its syntactic and semantic features, its underlying form and derivations and its word associations. Nation (1990) comments on various studies and indicates that a range of 5-16 encounters with a word is needed for a student to truly acquire it. He attributes this to the view that the more the student meets a word in different contexts, the more accurate his understanding of its meaning and use will be.

Additionally, in relation to vocabulary retention, Sökmen (1997) draws attention to encounters with a word in increasingly longer intervals, instead of regular ones.

4. Promote a deep level of processing:

Sökmen (1997) cites Craik and Lockhart (1972) and asserts that better learning will take place when a deeper level of semantic processing is required because the words are encoded with elaboration.

When students are asked to relate the new words to other words and to their own experiences, these word associations are reinforced. Classroom activities which demand deeper processing can be time-consuming and hard work for students, but, as Ellis (1997)

reports, really acquiring a word is facilitated by cognitive effort in an explicit learning process.

5. Facilitate imaging and concreteness:

Sökmen (1997), quoting Clark and Paivio (1991), refers to the dual coding theory of human memory and claims that the mind contains a network of verbal and imaginal representations for words. She expresses that recall is facilitated if verbal representations are accompanied by non-verbal ones, such as illustrations, draw diagrams, pictures and list details.

As Sökmen (1997) explains, another aspect of the dual coding theory is that learning is aided when material is made concrete, which means relating words to current events, comparing them to real life or having students relate the words to their own lives. Sökmen's study of ESL students' word associations revealed that the majority of associations reflected strong memories, attitudes, or feelings.

6. Use a variety of techniques:

Sökmen (1997) classifies a number of instructional ideas under six categories: dictionary work, word unit analysis, mnemonic devices, semantic elaboration, collocations and lexical phrases, and oral production.

A) 'Dictionary work':

'Dictionary work' is useful as an independent vocabulary acquisition strategy. The following examples of 'dictionary work' have been set by Sökmen (1997):

- a) highlighting the word where found and glossing its meaning in the margin
- b) copying the word a number of times while saying it or while visualizing its meaning
- c) copying the word and then looking up the definition
- d) copying the word, looking up the definition, and then paraphrasing it
- e) creating a set of index cards of the words or morphemes and their definitions or words with pictures
- f) matching words with definitions, in conventional exercises or on computer vocabulary programs

#### B) Word unit analysis:

For a foreign language learner, the number of words to be acquired can be plethoric. Systematically teaching the important affixes and word roots in the target language and asking students to analyse words could enhance long-term storage (Sökmen, 1997).

#### C) Mnemonic devices:

Being aids to memory, mnemonic devices have proven to be efficient in storing words (Cohen, 1987 in Sökmen, 1997). They may be verbal, visual, or a combination of both.

Of all the mnemonic devices, as indicated by Sökmen (1997), Atkinson's (1975) keyword method has been the most often studied technique which employs both an acoustic and a visual image. The keyword method has two steps. The student chooses a word in L1 which is acoustically similar to the one to be learned and then creates a visual image of that L1 word along with the L2 meaning. This technique provides an enjoyable way to learn vocabulary, especially for children.

A remarkable body of research has been done on the effectiveness of this strategy. Sökmen (1997) cites Levin et al.'s (1992) and Sternberg's (1987) studies, the former claiming that keyword students performed better than students using sentence-context on recall of word meanings, and the latter arguing that this technique is limited and requires too much effort for a learner to use independently.

#### D) Semantic elaboration:

In spite of the inadequate empirical research on the effectiveness of semantic strategies, the theoretical base for using them appears to be well-based. Hague (1987) and Machalias (1991), as quoted in Sökmen (1997), conclude that meaningful exercises which promote formation of associations and therefore build up semantic networks are effective for long-term retention. In addition, combining semantic elaboration with the keyword approach builds memory traces and retrieval paths stronger than those created by the mnemonic device alone (Brown and Perry, 1991). The techniques for semantic elaboration are "semantic feature analysis" and "semantic mapping".

The semantic feature analysis entails, as stated by Channell (1981 in Sökmen, 1997), analyzing of the meaning components of words. In this sort of analysis, the students are asked to complete a diagram with pluses and minuses as a way to distinguish meaning features.

As Sökmen (1997) indicates, semantic mapping refers to forming associations which a word has and then diagramming the results. Because it is possible to analyse or cluster words in different ways, semantic feature analysis and semantic mapping may promote a great deal of group interaction. The semantic exercises, such as adding new words to maps or charts, will function as visual reminders of links in the lexicon, thus will expand vocabulary. Ellis and Beaton (1993) also claim that the lexical strength of language proficiency involves associative clustering. They state that, within the literature an organisation and memory, highly associated pairs are easy to learn and foreign language vocabulary learning may be promoted by both pre-existing and new semantic links.

Another important point is highlighted by Nation (1994) by referring to the “levels of processing” theory of learning. As suggested by this theory, the quality of mental activity determines the quality of learning. In other words, if an activity gives rise to deep and thoughtful processing, the learning will remain for a long time. To ensure deep processing, Nation (1994) suggests relating the new word to previous knowledge, presenting the word in a context and drawing on a range of clues to recall the word.

1. Ordering:

Ordering or classifying words is another technique which aids students to distinguish differences in meaning and organize words to promote retention (Sökmen, 1997). In this way, organization of words will lead to integrating new information with the old and therefore, establish memory links.

2. Pictorial schemata:

Pictorial schemata involves creating grids or diagrams. Lindstromberg (1985 in Sökmen, 1997) found that lexical ordering is encouraged by using different types of grids, which help students set up memory traces and distinguish the differences between similar words. Scales or clines, Venn diagrams, and tree diagrams are especially useful for group work when teachers present words for these pictorial schemata in scrambled order.

All these semantic techniques, as Sökmen (1997) reports, involved processing words deeply by organizing them and making their meanings visual and more concrete. Nation (1990), however, suggests using these techniques cautiously for the reason that when words are initially presented in semantically-related groups, interference can occur and thus can make the words difficult to learn. Therefore, he proposed that semantic techniques should be used as review activities.

#### a) Collocations and Lexical Phrases

Aitchison (1987) emphasizes the power of learning collocational relationships as they appear to have very long-lasting links in the lexicon. Collocation activities, such as finding the words which are in the company of the target words or making combinations by matching, may mean increasing awareness of the students in learning “chunks” of the language. In his lexical approach, Lewis (1993) further discusses the nature of language as being composed of “chunks”.

#### b) Oral Production

Oral activities aiming at to-be-learned words provide the students with the opportunity of experiencing words in a variety of ways with aural and oral reinforcement. For example, according to Nation (1990), dialogues and role-playing activities help the learners practise productive vocabulary. Moreover, oral translation, a more traditional activity, may involve communicative activities as pair work, information gaps and group discussing (Heltai, 1989 in Sökmen, 1997).

### **2.4.2. Overview of Contextualised and Decontextualised Vocabulary Teaching Techniques**

A number of techniques handle vocabulary instruction in L2 context in a different way. These techniques can be classified under four groups: decontextualising, semi-contextualising, fully contextualising and adaptable. The first three techniques are based on a continuum of contextuality. The fourth group, adaptable, refers to a technique that can reinforce other techniques at any part of the contextuality continuum.

Some techniques may also overlap with each other as they share common underlying theoretical assumptions and practical utility.

#### 1. Decontextualising Techniques:

The most decontextualising techniques are word lists, flash cards and conventional dictionary use.

##### a) Word lists

Oxford & Crookall (1990) describe the use of word lists as a very common technique that do not involve any direct instruction by the teacher. In general, such lists are removed from any communicative context with the assumption that learners do not need much context to learn vocabulary and rote memorisation is perfectly adequate. L2 word lists are offered either alone, without any native language (L1) equivalents, or with

their meanings in L1. The former can be termed an unpaired list, while the latter can be called paired or paired-associate word list.

Paired or unpaired L2 word lists can be offered with or without the provision of any context. Oxford & Crookall (1990) indicate that the small amount of context does not make students bother to look back at the slim context and students usually focus on rote memorising the paired list instead.

As for the utility of word lists, researchers seem to adopt two distinct views. Many researchers, such as Carrell (1984); Hudson (1982) and Swaffar (1988) state that paired lists are inadequate for vocabulary learning even if the vocabulary items are offered with definitions appropriate to their use in a particular text (Oxford & Crookall, 1990).

On the other hand, Carter (1987) and Cohen & Aphek (1980) take a different stand, suggesting that paired lists might be helpful for lower level language learners. Especially in the initial stages of foreign or second language learning, as claimed by Carter (1987), words can not effectively be learned in context and must be assimilated as single (or paired) items. Relevant research by Kellogg & Howe (1971), as cited in Carter (1987), suggests that teaching single words in lists of “paired words” or “paired associates” is usually complementary. Similarly, Nation (1983) reports that large quantities of vocabulary can be learned efficiently and quickly and, given sufficient repetition, can be retained.

No empirical data has been found so far that memorising the L2-L1 pairs in a list might allow learners to use them in a communicative way without any assistance.

#### b) Flashcards

Flashcards, another widely used decontextualising technique, involve three components: writing down the L2 word on the front of a card, writing the word’s L1 meaning on the back, and then using the card to present learners with the new word in both L2 and L1 forms. When used alone, the flashcard approach is limited in value for most students. To raise its effectiveness, as Oxford & Crookall (1990) suggest, some contextualising embellishments can be added to the ordinary flashcard, such as getting learners to sort flashcards into piles representing different groups of words, taping them to particular objects to provide a visual context, or arranging them in a kind of semantic map.

#### c) Dictionary use

Underlying this decontextualising technique is the idea that a dictionary helps the learner who would otherwise have no way of knowing what words meant. Trying to

memorise the entire L2 dictionary is unlikely different from memorising infinitely long word lists.

In spite of the contrary beliefs, Swaffar (1988 in Oxford & Crookall, 1990) indicates that access to dictionaries while reading fails to improve the ability to make inferences based on context. Hague (1987) and Stahl (1983), as quoted in Oxford & Crookall (1990), make similar points that relying on a dictionary in the process of comprehending text does not work as a way of developing vocabulary.

Another drawback of use of bilingual dictionaries (L1-L2) is asserted to inhibit development of proficiency in the new language (Baxter, 1980 in Oxford & Crookall, 1990).

The monolingual dictionaries (L2-L2), which are typically designed for native language users can be used as an alternative the bilingual dictionaries especially by advanced learners. However, some new bilingual dictionaries provide simpler definitions for beginning and intermediate learners and also a greater degree of context to be helpful for remembering vocabulary.

## 2. Semi-Contextualising Techniques

Word grouping, word or concept association, visual imagery, aural imagery, keyword, physical response, physical sensation, and semantic mapping are considered as semi-contextualised techniques.

### a) Word Grouping

Word grouping involves dividing a longer word list into shorter lists by classifying the words according to one or more important attributes. This technique establishes new sets of words which hang together because of some common theme or characteristic, which means the creation of some degree of context (Oxford & Crookall, 1990).

Word grouping is based on the theory that grouping makes vocabulary learning easier by reducing the number of discrete elements. Groups can be made in terms of type of word, grammatical form, topic, language function, similarity or opposition.

In a recent study, the “semantic fields” approach, involving grouping words according to their semantic relationships, adopted by advanced ESL students, developed receptive control of twice as many words as they did using list-learning techniques. (Crow & Quigley, 1985).

A technique known as “semantic features analysis”, “semantic grids”, or “componential analysis” (Hague, 1987; Carter, 1987; Harvey, 1983; Stieglitz, 1983; Van Buren, 1975), is a special kind of word grouping (Oxford & Crookall, 1990).

This technique requires learners to list both a set of words and a set of attributes. Then, students rate each word (with a + or a -) according to the presence or absence of each attribute inside a grid. These grids, which are alleged to be very useful for upper intermediate and advanced learners, are also criticised for not being natural but being a static and prescriptive model (Oxford & Crookall, 1990).

#### b) Word or Concept Association

Word and concept association, also known as “elaboration”, involve making associations between the new word or concept and the word or concepts already in the learner’s memory. The theory is that as long as these associations are meaningful to the learner, they will strengthen the learner’s existing schemata. Based on certain associative attributes, a group or list of items can be rearranged making links among them (Oxford & Crookall, 1990).

#### c) Visual Imagery

Being a very useful semi-contextualising aid for learning L2 vocabulary, the use of visual imagery is based on making associations between a picture and a word. At the heart of this technique lies the assumption that visual images make learning more efficient. Therefore, new information is associated to concepts in memory through meaningful visual images. The pictorial-verbal combination, as indicated by Oxford & Crookall, (1990), involves greater cognitive power.

Visual imagery also facilitates the learning of abstract words by means of associating such words with a picture of a concrete object.

#### d) Aural Imagery

Aural imagery also provides a form of semi-context for the learner. The theory on which this technique is founded is that aural imagery makes learning more efficient through associating new sounds with existing, sound-related schemata.

For instance, learners can link an L2 word with the familiar L1 word. Not only do all these sound similar, but they have similar meanings.

#### e) Keyword

The Keyword technique is a combination two semi-contextualising modes, aural imagery and visual imagery. The theory of this technique is that remembering an L2 word

can be facilitated by using auditory and visual links together, which means a stronger linkage between the new word and existing schemata.

The auditory link, as the first step, is formed by identifying a familiar word in one's own language that sounds like the new word. The second step is taken as the formation of the visual link by generating a visual image of some relationship between the new word and a familiar one. The point is that both links must be meaningful to the learner. One caution, as stated by Oxford & Crookall (1990), is that the new word in the target language might not sound exactly like the familiar word in one's own language.

This technique, as stressed by most researchers, should not be deployed as the only one among other learning techniques. It is obviously difficult to illustrate in this way words which are not readily representable by objects. Carter (1987) describes this technique also as time-consuming and raises the question as to whether the associations should be created by a teacher or left to the creativity of learners.

#### f) Physical Response

Physical response involves physically acting out a new L2 expression. The theory that undergirds this technique is that language can best be learned when words are linked with physical movement, thus stimulating the learner's schemata in multiple ways (Oxford and Crookall, 1990).

This technique the teacher to give commands, which the students must follow by acting them out. Two drawbacks of physical response are that first it does not handle abstract nouns well, and second, commands cannot include the full range of language functions necessary for intermediate or advanced L2 proficiency.

#### g) Semantic Mapping

Being a valuable tool for learning L2 vocabulary, semantic mapping can be conceived as a combination of three techniques: word grouping, word association, and visual imagery. Oxford & Crookall (1990) consider it to be the most sophisticated of the semi-contextualising techniques. This technique is based on a graphic arrangement of words in terms of their semantic relationships, a process which offers a degree of context. The key concept is highlighted or centralised, and it is linked with subsidiary concepts or attributes by means of lines or arrows showing relationships.

Quoting Hague (1987) and Carrell (1984), Oxford & Crookall (1990) indicate that one possible theory behind semantic mapping might be that the map visually represents the ways in which new words fit into a learner's existing schemata and most certainly, the

map can be a useful visual display of the ways in which ideas are related to each other within a text.

Unlike word grouping, semantic mapping not only puts words into groups but also shows the conceptual links among the words. In a semantic map, only the L2 words need be shown, however, as Oxford and Crookall (1990) exemplify, the L1 equivalents may also be given.

Novak & Govin (1984 in Oxford and Crookall, 1990) have used the technique of semantic mapping for decades as the basis of an instructional system which focuses on "learning how to learn." Wright (1987, in Oxford and Crookall, 1990) demonstrates that semantic mapping can be used for taking notes on a reading passage. On the other hand, the usefulness of semantic mapping, has been shown for memorising foreign language vocabulary by Brown-Azarowicz, Stannard, & Goldin (1986 in Oxford and Crookall, 1990).

Given all its promise, semantic mapping could easily be included in a language curriculum as a part of the general program of vocabulary development (Carrell, 1984).

### 3. Fully Contextualising Techniques

The notion with these techniques is that practicing the four language skills of reading, listening, speaking, and writing can provide full context for vocabulary learning, which is sufficient for vocabulary growth. In other words, the underlying theory presumes that such a naturalistic practice is automatically equivalent to vocabulary learning.

For instance, some theorists believe that through reading practice students will absorb vocabulary by reading words in context without any special training in vocabulary. Krashen (1982) shares this view and claims that reading for pleasure will automatically increase the learners' vocabulary. However, Carrell (1984) and Carter (1987) take the opposite stand and assert that receptive comprehension of new words is improved by reading but this does not guarantee the ability to produce these words. Even encountering a word numerous times in reading might not allow use of the word in later production.

Similarly, L2 listening practice alone is not likely to be sufficient for building vocabulary knowledge. Recognising a new L2 word in speech, and even repeated exposure to the word in various contexts, does not mean that the student has indeed learned the word and is able to put it into practice (Oxford & Crookall, 1990).

As for the role of speaking and writing practice in vocabulary growth, a good number of researchers report that sufficient exposure to the target language word in

communicative, oral or written contexts is essential, for these activities will no doubt improve the ability to productively use new vocabulary (Jones, 1982; Crookall & Saunders, 1989; Saunders & Crookall, 1985 in Oxford & Crookall, 1990).

Although, as Oxford & Crookall (1990) express, production practice does not relate to techniques for getting new L2 words into memory and for recalling them, such practice provides many opportunities for feedback about whether the learner is using the new word correctly, thus helping to shape and reshape the learner's existing schemata related to the new word.

#### 4. Adaptable Technique: Structured Reviewing

Structured reviewing is an adaptable technique that can be used to reinforce any of the other techniques mentioned above. In a structured schedule for reviewing new words, this technique entails going back over L2 vocabulary at different intervals (Oxford & Crookall, 1990). In this way, the learner keeps encountering particular words until they become automatic. Naturally, as Oxford & Crookall (1990) say, the duration needed to make the words automatic depends on the difficulty of the words, the degree of context, and some other factors.

Stevic (1976 in Oxford & Crookall, 1990) notes that structured reviewing is based on memory principles, which highlight the importance of primacy, recency, duration, spacing, pacing, and linking.

Oxford & Crookall's (1990) discussion hints at the fact that L2 textbooks, unfortunately, neglect to present L2 words in a consciously spiralled way that would lead learners to use structured reviewing, a powerful and important vocabulary learning technique.

### 2.4.3. Impact of Vocabulary Teaching Techniques on Retention

In spite of the increasing amount of research on vocabulary acquisition, as Lawson & Hogben (1996) state, there does not seem to be a consensus over issues such as the process by which foreign language vocabulary acquisition occurs, the importance of the context use for acquiring vocabulary, and the extent to which students develop specific strategies for vocabulary learning during their language studies.

Lawson & Hogben (1996) report that a technique that links form, meaning, and structure, facilitate a combination of productive and receptive senses, and appear to have

advantages over rote learning. Accordingly, the strategies involving more elaboration would be associated with better retention.

Another concern lies in students' strategies for vocabulary learning. Related to this, Willerman & Melvin (1979), as cited in Lawson & Hogben (1996), claim that L2 learners develop conscious or unconscious learning strategies to master the material.

According to a study by Hogben & Lawson (1993), as quoted in Hogben & Lawson (1996), the subjects, advanced level L2 learners, mostly focused on some form of repetition of the target word and its meaning. Very few strategies that involve elaboration of the word meaning were reported. Wang et al.'s (1993) research, as quoted in Lawson & Hogben (1996), supports this finding in that the use of repetition procedure is of major importance for vocabulary acquisition.

Concerning the use of context in L2 vocabulary acquisition, despite a considerable emphasis on the value of context in the learning of word meanings, Lawson & Hogben (1996) distinguish between the use of context for generation of meaning of a new word and the use of context for acquisition of the meaning for subsequent recall. Processing a context for comprehension purpose may entail long-term retention ( Craik & Lockhart, 1972 in Lawson & Hogben, 1996). Conversely, a purpose for vocabulary acquisition may not employ procedures that are not effective for long-term retention.

Most research on vocabulary learning strategies has examined various methods of vocabulary teaching and their effectiveness on retention. In this respect, memory strategies have mostly been studied as one of the aspects of vocabulary learning strategies.

Some earlier research studied rehearsal strategies, number of repetitions to learn a list, timing repetitions or rote repetition (Gu and Johnson, 1996). Research in the last two decades has focused on mnemonics, especially the Keyword Method, which many researchers have claimed to be superior to any other strategies. However, as Meara (1980) points out, these techniques hold the assumption that vocabulary learning largely means list learning, which entails ignoring the complex patterns of meaning relationships that form a proper lexicon.

Ellis (1997), referring to Ijaz (1986), asserts that the acquisition of L2 words usually involves a mapping of the new word form onto pre-existing conceptual meanings or onto L1 translation equivalents since second and foreign language learners developed conceptual and semantic systems which are already linked to L1.

Ellis (1997) quotes Beck, McKeown & Omanson (1987) who proposed that learners should focus on the meaning of new words and integrate them into pre-existing semantic systems.

Crow & Quigley (1985), evaluated the effectiveness for ESL students of several semantic processing strategies, such as the “semantic field” approach and found them to be superior to “traditional methods” over long periods.

Brown and Perry (1991), contrasted keyword, semantic, and keyword-semantic methods of instruction for foreign language vocabulary learning and demonstrated that the combined keyword-semantic strategy increased retention above the other methods.

In terms of language learning, the Keyword technique has received much attention with respect to its influence upon second-language learning (Wang and Thomas, 1995).

Imagery-based mnemonic devices such as the Keyword technique, as indicated by Wang and Thomas (1995), produce strong positive results when acquisition and immediate recall are concerned. However, it is quite interesting that while these devices are beneficial for learning and immediate recall, there is no evidence indicating that they confer long-term advantages where forgetting is concerned. In a study by Wang and Thomas (1995), it was found that imagery-based memories can be prone to long-term forgetting, compared to a non mnemonic strategy such as rote rehearsal, which runs counter to many prevailing models of memory.

According to Ellis (1997), successful learners use sophisticated metacognitive knowledge to choose cognitive strategies appropriate to the task of vocabulary learning. These include inferring word meanings from context, Semantic or Imagery Mediation between the foreign language word and the L1 translation, and deep processing for elaboration of the new word with existing knowledge. In other words, metacognitively sophisticated language learners are successful language learners because they have cognitive strategies for inferring the meanings of words and associating them with networks of other words and concepts.

As Gu & Johnson (1996) state, developments in lexical semantics and studies on the mental lexicon form a more recent focus on vocabulary learning. Componential analysis and the “paradigmatic versus syntagmatic” conceptions of the mental lexicon have prompted the development of the semantic field, semantic maps or semantic grid strategies, which present and organise new words in terms of maps of interrelated lexical meanings (Crow & Quigley, 1985). On the other hand, other studies have drawn attention

to the danger of presenting closely related new words at the same time (Higa, 1963; Nation, 1994; Tinkham, 1993 in Gu & Johnson, 1996). Also researchers do not have sufficient evidence that these strategies make vocabulary retention easier.

On the other hand, another way to gain second language vocabulary has been demonstrated to be “learning through reading”, a direction which recent research has investigated extensively (Huckin, Haynes, & Coady, 1993).

Studies now have profoundly investigated and showed that one efficient way of learning L2 vocabulary is through reading (Oxford and Scarcella, 1994; Krashen, 1989; Parry, 1991). Reading provides the opportunity to retain not only the word’s referential meaning but also the syntactic and pragmatic information for the learner.

At this point, Gu & Johnson (1996) caution two aspects of contextual vocabulary acquisition. Firstly, vocabulary acquisition through reading presumes a basic reading ability in the L2, which is unlikely to exist for beginners. Secondly, instruction should not overemphasise the incidental acquisition of words ignoring intentional and direct studying of vocabulary, which has proven so effective among EFL learners.

Not only has research sought the best way to enhance vocabulary retention, but also strategies and beliefs adopted by learners to learn vocabulary in L2 as well as cognitive factors that contribute to vocabulary acquisition. Although each strategy, investigated broadly, contributes considerably to success or failure, consistent employment of certain individual strategies by learners influences the outcomes of L2 learning (Sanaoui, 1995 in Gu & Johnson, 1996). Therefore, researchers may take a stand on the side of “individual strategies” to find out how these affect L2 vocabulary retention.

The final theme in current trends in vocabulary learning is to help students learn how to continue to acquire vocabulary on their own. In the course of vocabulary acquisition in a second or foreign language, learners realize that vocabulary acquisition requires their active participation, their collaboration with classmates and personal, self-reflective periods (Rubin et al., 1994, in Sökmen, 1997).

Recognising one’s own style of learning and, as Graves (1987, in Sökmen, 1997) states, developing a personal vocabulary acquisition plan is an important step in being independent.

In conclusion, the importance of vocabulary instruction in L2 will continue to be a concern to researchers. It is important to note that more research on the effectiveness of methods of vocabulary instruction, especially for semantic elaboration, is necessary.

### **III. THE STUDY**

#### **3.1. The Aim of the Study**

##### **3.1.1. Aim**

The goal of the present study is threefold: In the first place, the effect of the cognitive construct of field dependence and field independence on vocabulary learning is examined. In the second place, the level of vocabulary learning is investigated in terms of contextualised and decontextualised vocabulary learning strategies, namely, semantic mapping and word lists. Lastly, an investigation is made as to whether the cognitive style of field dependence and field independence has a relationship with either of the vocabulary teaching techniques employed in this study.

To enhance the supportive resources behind the findings, the study also ascertains the extent to which the subjects' native language competence and their learning style preferences affect their performance in learning foreign language vocabulary.

To interpret the relationships between the variables, the data about the history and habits of the subjects' English learning and also about their approaches to different vocabulary learning strategies and vocabulary teaching techniques are analysed parallel to statistical calculations in order to draw conclusions.

##### **3.1.2. Research Questions**

1. To what extent do the different cognitive style characteristics, field dependence and field independence, influence vocabulary learning in an EFL context?
2. Do contextualised and decontextualised vocabulary teaching techniques, namely semantic mapping and word lists, have an influence on vocabulary learning?
3. Is one or other of the vocabulary teaching techniques adopted in this study more beneficial for the subjects with the cognitive resources of field dependency or field independency?
4. To what extent does the subjects' native language competence affect their performance in vocabulary learning?
5. Do perceptual learning style preferences of the subjects have an influence on the degree of success in vocabulary learning?

### 3.1.3. Hypotheses

1. Due to the vast amount of findings relating to a positive correlation between foreign language proficiency and cognitive style of field independence, the field independent subjects will have a greater level of success in vocabulary learning.
2. Semantic mapping, as a contextualised vocabulary teaching technique, will aid the subjects in learning more vocabulary.
3. Due to the similar analytical abilities required by both field independence cognitive construct and an ability to gain greater benefit from semantic networks in vocabulary learning, it is assumed that semantic mapping will function to promote the vocabulary learning of field independent subjects.
4. A higher degree of native language competence will lead to greater success in vocabulary learning.
5. Certain learning style preferences will affect the degree of vocabulary gain in a positive way.

## 3.2. Method

### 3.2.1. Participants

The two randomly selected classes totalling forty students at Yıldız Technical University, School of Foreign Languages, Basic English Department constituted the target population of this study. School of Foreign Languages, Basic English Department is a preparatory language school whose EFL proficiency test, which is prepared by the testing office of the department, is compulsory for all Yıldız Technical University students before commencing their degree studies. In order to bypass the preparatory year, students must achieve a minimum of 60% in the proficiency test. The students who do not meet this required level of English have to complete a preparatory year dedicated to intensive training in English, where students are placed in C-Level as beginner, B-Level as pre-intermediate and A-Level as intermediate classes depending on the scores they obtained from the EFL proficiency test. C-Level is made up of the students who achieved marks below 40%, B-Level between 40% and 49% and A-Level between 50% and 59%, two classes of which participated in the study. The aim of the English preparatory classes is to increase the students' proficiency in four skills in English and to furnish all students with a

proficiency at upper intermediate level by the end of the academic year. To achieve this, 6 visa examinations must be taken followed by a mid-year and a final examination, all of which test the components of reading, writing, listening, use of English and vocabulary. The visa examinations are calculated together in percentile values toward a final grade. Each visa comprises 5% of the final grade, the mid-year exam, 15%, and the final exam, 40%. The remaining 15% is made up of a final writing exam, a portfolio and a teacher assessment, each comprising 5%. Their success at the end of the year is measured by a proficiency test prepared by the testing office.

The students of two 20-pupil classes who achieved below 60 in the proficiency exam prepared by School of Foreign Languages, Basic English Department at the beginning of the year, and were graded and streamed into groups of similar proficiency level, namely as “A” Level students, were determined to form the sample of the study. Having been exposed to a minimum of 3 and a maximum of 7 years of regular English instruction at secondary school level, the selected 40 students were some of the top achievers within the A Level gaining proficiency scores of between 55 and 59%.

Due to the language level of authentic texts used in the study, the pre- and post-tests of the study were implemented at the end of the first term to ensure that the selected A level students had improved their English proficiency to a level where they could follow books and materials at upper intermediate level.

Since one of the aims of this study was to ascertain the degree of the students’ vocabulary learning after their exposure to two different vocabulary teaching techniques, one of the classes of students was randomly chosen as the control group, and the other as the experimental group, to be exposed to different vocabulary teaching techniques, namely the “word list” technique and the “semantic mapping” technique.

### **3.2.2. Variables and Measurement**

The cognitive styles of Field Dependence (FD) and Field Independence (FI), perceptual learning style preferences and students’ proficiency in their native language of Turkish and the two vocabulary teaching techniques used were the independent variables, and the students’ achievement in the vocabulary tests was the dependent variable of the study.

The instruments used to measure these variables were a Personal Background Information Questionnaire to collect data about the subjects’ background education,

approaches to foreign language learning, hobbies, etc., the Group Embedded Figures Test (GEFT) to measure the cognitive constructs of field dependency and independency, the Perceptual Learning Style Preference Questionnaire to ascertain the subjects' learning style preferences, a Vocabulary Learning and Study Strategies Questionnaire to find out the strategies that the learners adopted for foreign language vocabulary learning, two Follow-up Questionnaires to determine the students' vocabulary learning strategies applied prior to taking the pre- and post-tests, two Turkish cloze tests to measure the students' native language proficiency, and a Pre-test and Post-test to measure students' vocabulary retention.

### **3.2.3. Data Collection Instruments**

#### **a. Personal Background Information Questionnaire**

This questionnaire with multiple choice answers was designed to gather information about the participants' families, educational backgrounds, foreign languages that members of their families speak, the length of time they have been learning English and their pastime activities. This data pertaining to personal information ensured that the sample was homogenous with regard to nationality, language background, education level and age. Hence, the assumption of equality across the groups appears to have been justified.

This questionnaire, as seen in Appendix I, consisted of 49 questions and aimed at providing the study with any sort of data which might later be needed to explain and interpret any findings of the study of which the researcher was initially unaware. This questionnaire was given in Turkish to the students with a wide range of content in order to provide the researcher with as much personal information about the subjects as possible. It was also translated into English to be attached as Appendix II. The English and Turkish versions were checked by a bilingual instructor at Yıldız Technical University, School of Foreign Languages for consistency in meaning.

#### **b. GEFT**

The Group Embedded Figures Test (GEFT) was administered to the 40 subjects in an attempt to identify field dependent and independent individuals. The GEFT was developed by Oltman, Raskin, and Witkin (1971). In this study, the Turkish version of this test, translated into Turkish by Associate Professor Dr. Güler Fişek from Bosphorus University, was used.

As one of the questions of this research was concerned with the relationship between field dependency and independency and vocabulary learning, the GEFT was used not only because it was a valid tool to measure the cognitive styles but also because it was found to correlate with cloze test performance.

Abraham and Chapelle (1992) suggest that item performance is also affected by examinees' strategies for completing items. These strategies refer to "fluid abilities" which are required to perform both verbal and non-verbal tasks. One fluid ability whose relationship with cloze performance has been researched is field independence, as measured by the GEFT. Research shows that the GEFT correlates with cloze performance.

The GEFT consists of a booklet containing 18 "complex figures" within which subjects are asked to find a given "simple figure". Their ability to outline the simple figures indicate the extent of their field independence.

The cognitive processes involved in finding camouflaged targets have been studied by paper-and-pencil tests that require solution of embedded figures problems. The target is a simple geometrical form shown to subjects who must find it in a larger, more complex pattern (Goodenough, Oltman, Snow, Cox and Markowitz, 1991 in Wapner and Demick, 1991).

As stated by the above mentioned researchers, embedded figures problems were introduced by Gottschaldt in 1926. Then Thurstone (1944) worked on disembedding ability and found embedded figures tests to be useful in defining a cognitive dimension which he called, "Freedom from Gestaltbindung".

The GEFT is a test that is used in an attempt to measure global versus analytical ways of cognitive functioning. In this view, field-dependent people experience the camouflaging pattern in a global way, whereas field-independent people are more likely to analyse the camouflaged parts from the whole.

In this pencil-and-paper test, the subjects were required to see the eight simple figures that were placed on the back cover of the booklet and then find them in the given complex figures within a limited time period. The complex figures in the booklet consisted of three sections: The first section, which includes seven easy items, was for practice purposes only and was two minutes long. The task was to outline a geometric figure which was embedded in a larger, more complex design. The implementation of this test in the study was carried out in consistency with the implementation of the same test in the research

conducted by Jamieson (1994, in Brown and Gonzo, 1994). The second and third sections consisted of nine items each and were both five minutes long. The first section was not considered in assessing the subjects' scores and the scores were the number of correct answers, ranging from zero to eighteen. A high score indicated FI, a low score, FD.

Due to the fact that the majority of studies have shown the GEFT to be a valid test in the area, it was used as the measure of cognitive styles FD/FI in this study.

One necessary comment that should be made about the independent variable of FD/FI is as follows: The cognitive styles of FD/FI refer to an individual's habitual use of one style more than the other notwithstanding the cognitive demands of the task at hand.

The concept of field dependence and independence has been proposed that field dependent individuals have limited disembedding ability and interpersonal orientation, whereas people who are field independent have competent disembedding ability and impersonal orientation (Witkin & Goodenough, 1981 in Wapner and Demick, 1991). These two skills are regarded as opposite poles of a single dimension, namely Field Dependence and Independence cognitive style; and individuals, depending on life circumstances and education, might exhibit changeable behaviour. This implies that individuals may shift from field dependence to field independence and/or vice versa depending on the demands of the task (Wapner & Demick, 1991).

Subjects are graded within a range of tendency towards Field Dependency or Field Independency rather than definite categorisation into one or other field. That is to say that there is not a definite cut-off between dependency and independency. Meng & Patty (1991) also note the following: "a continuum of psychological differentiation was believed to exist wherein field-dependent learners were at one extreme and field-independent learners were at the other" (p.188).

The categorisation of the subjects as FI or FD was done on the basis of the GEFT mean for the sample which was 14.36. Therefore, those with a score of 15 or above were considered FI and those with a score of 14 and below were considered FD.

Components of the cognitive style construct of field dependence and independence are described by Goodenough (1976) and Witkin, Moore, Goodenough and Cox (1977) as a cognitive factor that affects hypothesis testing, inferencing and restructuring behaviour. As described in the literature of psychology, field dependence/independence is associated with individual differences in perceiving, organising, analysing and recalling information. Field dependence indicates a tendency to make less use of surrounding information and to

have more difficulty analysing that information (Readance et al. 1980, in Stansfield and Hansen, 1983). Field independence, on the other hand, refers to an aptitude to analyse the elements of a perceptual field and to exploit all information sources maximally. The ability to use maximally all available information sources accounts for the skill of inferencing, which is identified as the actual process involved in cloze tasks (Bialystok and Howard, 1979 in Stansfield and Hansen, 1983). Thus, inferring or predicting the appropriate word to fill in the gaps in a cloze task could be related to the cognitive ability of field independence, whereas field dependent persons have a relatively poorer performance on cloze tests since they are not likely to use the strategies required for the solution of cloze tests.

### **c. Perceptual Learning Style Preference Questionnaire**

To determine the perceptual learning style preferences of the subjects, the Perceptual Learning Style Preference Questionnaire designed by Richards & Lockhart was used (Richards & Lockhart, 1994, pp76). With this questionnaire (Appendix III), the determination was made as to the subjects' predisposition towards visual, auditory, kinaesthetic and/or tactile modalities (Reid, 1985 in Wenden & Rubin, 1987). For this study, this questionnaire was translated into Turkish (Appendix IV) since such questionnaires should be given in the language that students are most proficient in. After the translation had been completed, it was given to two Turkish fluent speakers of English, who are teachers of English at Yıldız Technical University, School of Foreign Languages to do the reverse translation. The purpose of following such a procedure was to check whether or not the Turkish translation was accurate. The reverse translation and the original questionnaire were compared and the items whose meanings differed from the original version were revised. The Turkish translation, then, was also checked with two other Turkish instructors of English for both meaning and form.

This questionnaire provided the students with a number of statements and required them to respond to each statement according to a Likert-type scale in order to identify the way or ways they learn best.

Each statement in the questionnaire is rated on a Likert-type scale ranging for 1 to 5. "1" means that the statement is "never" or "almost never true" of the learner, and with increasing degrees of frequency "5" means that the statement is "always" or "almost always true" of the learner.

When all the answers were completed, numerical values which were given to each statement were added and scores for each of four learning style categories of visual, auditory, kinaesthetic, and tactile were calculated.

Finally, according to a scale, the subjects' major and minor learning styles were determined, which gave each subject a profile.

The students obtained scores between 50 and 24 for the 4 types of learning styles and only those between 36 and 50 were taken into consideration as indicators of major learning styles to reveal the characterised learning style preferences of the subjects. Accordingly, for each subject, a profile, which depicts the preference groups the subject employs, was determined.

#### **d. Vocabulary Learning and Study Strategies Questionnaire**

Another questionnaire, as seen in Appendix V, consisting of 47 items, was designed to elicit the students' approaches to vocabulary learning in English as a Foreign Language (EFL), the history and habits of students' English learning, and the methods they adopted to learn vocabulary. This questionnaire aimed to reveal the extent to which the students give importance to vocabulary learning during their exposure to English. In the implementation and English translation of this questionnaire, the same procedure was followed as in that of the "Personal Background Information Questionnaire". Its Turkish translation is as seen in Appendix VI.

#### **e. Follow-up Questionnaires**

Horwitz (1988) and Wenden (1987), as quoted in Schmitt (1997), state that the important thing we must consider is our learners' feelings and what they think of the various learning strategies. Therefore, to continue research into whether the subjects used the suggested vocabulary learning strategies or not, post-test questionnaires were designed, which also attempted to answer the question of how helpful the subjects perceived the indicated techniques to be.

After the Post-test the Follow-up Questionnaires were distributed to both groups to ascertain the vocabulary learning strategies they had employed during the study. Two different questionnaires were constructed, one for the control group, who studied the target only through the "word list" technique; and the other for the experimental group, who studied the target vocabulary using both "semantic mapping" and "word list" techniques.

These questionnaires were designed in both Turkish and English. However, as in the implementations of all other questionnaires used in this study, the Turkish versions were

used. The English and Turkish versions of Follow-up Questionnaire for the control group are as seen in Appendix VII and Appendix VIII. Similarly, the English and Turkish versions of Follow-up Questionnaire for the experimental group are as seen in Appendix IX and Appendix X.

Both questionnaires aimed at revealing the time the students devoted to learning the target vocabulary and whether they followed the correct steps as required in the “word list” and “semantic mapping” techniques for vocabulary teaching and learning.

The crucial question was whether the students followed the necessary steps of these specific vocabulary learning techniques as instructed or whether they employed mainly their own techniques in studying the target vocabulary regardless of how they had been instructed to study.

A composite score for each item in the questionnaire was obtained by averaging the item option scores (0, 1, 2 or 3) for all the items. Therefore, to enable the computerised calculation of the results of the questionnaires, each multiple-choice item was allocated a numerical value ranging from 0 to 3 according to its proximity to adherence to the suggested method of study, 3 being the most and 0 being the least preferred selection. Accordingly, the achievement of high scores on the questionnaire revealed the fact that the subjects had followed the method of study recommended in the introductory session and benefited from the vocabulary teaching techniques in question.

#### **f. Turkish Cloze Tests**

Due to the fact that one of the aims of this study was to ascertain the extent the learners’ native language competence effects their performance in learning vocabulary in English as a Foreign Language, two Turkish cloze tests were designed to assess the Turkish competence of the subjects on the strength of their linguistic competence, and the subjects were asked to restore two mutilated texts with acceptable responses. For the purpose of consistency between procedural components of the tests, again fixed ratio deletion procedure was followed in these Turkish cloze tests. The design of the tests incorporated the principle of the deletion of every 5<sup>th</sup> word following an initial intact sentence. One Turkish cloze test was extracted from a Turkish newspaper (Appendix XI) whereas the other one was a professional Turkish translation of a book synopsis (Appendix XII). These extracts were made into two cloze tests, one with 47 deletions and the other with 40 deletions. These fluctuations with regard to the length and number of deletions are attributed to random sampling variations. Both Turkish cloze tests, which

were common to all subjects, were scored using the “contextually appropriate word” method. According to this method, any word that is semantically and grammatically appropriate is considered correct (Oller, 1979 in Laesch and Kleeck, 1984). For each deletion, a list of syntactically and semantically acceptable alternatives was prepared. The lists were based on the responses of a sample of native Turkish speakers on whom the tests were pre-tested, as well as the judgement of the test development team at Yıldız Technical University, School of Foreign Languages, Basic English Department.

In this study the reason why exact scoring was not used is that, in terms of language proficiency, linguistic competence is not the only determinant of successful performance for supplying the missing elements correctly in a text. As noted by Sciarone & Schoorl (1989), exact responses are not only a matter of general proficiency in the language but also a close stylistic affinity with the author of the text. In this regard, there is no reason to expect randomly selected native speakers to have exactly the same sense of style as the author of the text. Therefore, the best that can be expected is a production of acceptable responses to be a clear sign of general language proficiency.

#### **g. Pre-test and Post-test**

The English Pre-test (Appendix XIII) and Post-test (Appendix XIV), which aimed to determine the level of vocabulary learning, were constructed in cloze test format, as the cloze tests, employing an ability to use both linguistic and contextual cues in the text, were postulated to measure the language proficiency. Oller (1979), as cited in Laesch & Kleeck, (1984), points out that the cloze tests are the most common integrative tests, which assess a learner’s ability to use several language components simultaneously. Completion of a cloze test sets a task of close examination of the verbal context. The cloze procedure involves the deletion of every  $n^{\text{th}}$  word from a passage, which forces the examinee to rely upon his or her knowledge of underlying linguistic rules and also to maintain the meaning of the passage to fill in the blanks. The reader is expected to fill in the deletions, which usually occur at every  $5^{\text{th}}$  to  $10^{\text{th}}$  word. The first and last sentences of the passage are generally left intact and scoring is done according to either the exact word or any semantically acceptable word.

Read (2000) describes a standard cloze test as a test consisting of one or more reading passages from which words are deleted according to a fixed ratio.

The name “cloze test” stems from the concept of closure in Gestalt psychology, which entails, in learning, an understanding of the whole first and then grasping the details.

Stansfield (1980), as quoted in Stansfield & Hansen (1983), reports this similarity by pointing out that the cloze procedure requires the student to perceive the whole by filling in the missing words.

Oller and Conrad (1971), as cited in Sciarone & Schoorl (1989), discussed the main aspects of cloze procedure claiming that this mechanical method of selecting blanks reflects the frequency of occurrence of lexical and grammatical forms in the language.

A basic presupposition of the cloze procedure is that restoring the deletions entails a sensitivity to both linguistic expectations and the contextual constraints created by the text. The redundancy of the message, as stated by Carter (1987), should be such as to allow accurate insertions into the blanks. The theory underlying this “redundancy” is also referred to as the “grammar expectancy theory”, which is best interpreted as involving syntactic, semantic and contextual uses (Oller, 1979 in Carter, 1987).

Citing Darnell (1968), Stubbs and Tucker (1974), Oller and Hinofotis (1980), Swain, Lapkin & Barik (1976), and Ojerinde (1980); Laesch & Kleeck (1984) state that previous research has revealed the cloze test to be a valid and reliable measure of overall second language proficiency in both adults and children. In order to complete the passage the examinee must rely upon organisational constraints and infer meaning. Thus the cloze test appears to be an integrated method of assessment measuring the integration of linguistic rules with contextual knowledge.

A survey of the literature shows that, as also revealed by Alderson’s (1979) study, in spite of some problems regarding the utility of cloze tests as actual measures of second language and also some disputes as to whether the cloze procedure measures different language skills depending on some factors such as test difficulty, scoring procedures and word deletion frequency, the cloze test has been used widely as a measure of general second language proficiency. Stansfield and Hansen (1983), referring to the studies by Oller (1976), Aitken (1977), Darnell (1968,1970), Swain, Lapkin and Barik (1976), and Lapkin and Swain (1977), allege that the cloze procedure offers an easily constructed, reliable and valid test of general second language proficiency.

In Read’s (2000) brief history of cloze tests, it has been indicated that cloze tests, after having been initially used by Wilson Taylor (1953) as a means of evaluating readability of texts, later, have been used to measure L1 reading comprehension ability.

Also Carter (1988), quoting Soudek and Souded (1983), points out that cloze procedure has widely been used in testing language competence.

Oller (1973, 1979), as cited in Read (2000), took one step further and promoted the use of cloze tests as an effective way of testing learners' overall second language proficiency.

However, what a cloze test measures has been questioned in various studies. Chapelle and Abraham (1990), as quoted in Read (2000), carried out one of these studies comparing scores on four different types of cloze test with the results of various components of a placement test battery. The findings of this study illustrated that the fixed-ratio cloze had the strongest correlation with the writing test, relatively weaker relationships with the reading and vocabulary tests and the lowest correlation with the listening test.

This correlational approach, as Read (2000) states, shows that vocabulary makes a substantial contribution, but it is difficult to determine precisely how large it is because various components of language ability are interrelated.

However, as indicated in the literature, reliability can pose problems when using cloze procedures. Alderson (1983, in Laesch and 1984) demonstrated that deletion of words at different intervals gives substantially different cloze scores with the same group of students. Therefore, because of the possible reliability and validity ambiguities resulting from the way of constructing cloze tests, the results of this procedure should be interpreted noting the fact that the same research might yield different results depending on the deletion rate used in the cloze tests.

In this study, although the statistical technique used was the non-parametric one, for which the reliability is not a must to seek as a fundamental step in such research, an additional calculation was made. The issue noted in the literature regarding the concurrent validity of cloze tests was addressed in this study by the statistical process of correlation. Concurrent validity was investigated through correlation of the cloze tests scores with the scores on the proficiency exam.

In order to obtain findings that will support the cloze procedure used as a valid assessment of successful vocabulary learning, the relationship between the subjects' cloze tests scores and the scores they obtained from the proficiency exam they had taken at the beginning of the year was sought by using Pearson Correlation Coefficient technique. The results revealed a correlation of confidence level of  $p = 0,05$ . Tables 3.1, 3.2, 3.3, and 3.4 show these findings, which suggest that the cloze tests prepared are valid as a measure of success in vocabulary learning of the preparatory year students in a state university.

Table 3.1  
Results of descriptive statistics (proficiency exam and pre-test)

	Mean	SD	N
<b>Proficiency exam</b>	52.0500	2.5914	40
<b>Pre-test (cloze test 1)</b>	49.3750	25.5661	40

Table 3.2  
Correlations between proficiency exam and pre-test

		Proficiency exam	Pre-test (cloze test 1)
<b>Proficiency exam</b>	Pearson correlation	1.000	0.112
	Sig. (2-tailed)	-	0.04
	N	40	40
<b>Pre-test (cloze test 1)</b>	Pearson correlation	0.112	1.000
	Sig. (2-tailed)	0.04	-
	N	40	40

Table 3.3  
Results of descriptive statistics (proficiency exam and post-test)

	Mean	SD	N
<b>Proficiency exam</b>	52.0500	2.5914	40
<b>Post-test (cloze test 2)</b>	41.0000	21.0981	40

Table 3.4  
Correlations between proficiency exam and post-test

		Proficiency exam	Post-test (cloze test 2)
<b>Proficiency exam</b>	Pearson correlation	1.000	0.310
	Sig. (2-tailed)	-	0.05
	N	40	40
<b>Post-test (cloze test 2)</b>	Pearson correlation	0.310	1.000
	Sig. (2-tailed)	0.05	-
	N	40	40

In this study, being a test to employ a large number of interrelated skills that comprise lexical, grammatical and contextual components of a language system, the cloze procedure was chosen to determine the degree of the subjects' vocabulary learning in terms of two dissimilar vocabulary teaching techniques. This choice was also reinforced by the assumption that vocabulary learning stands as one of the main aspects of learning a foreign language.

Both control group and experimental group were initially exposed to the "word list" technique as vocabulary instruction. For this purpose, both groups, in other words all the subjects, were given six authentic texts (Appendix XV) along with a separate word list for each text. The underlying reason for working with authentic texts was that, based on the sampling theory, the passages chosen can be said to be representative samples of real written language. The subjects were informed that the Turkish meanings given in the word lists were contextual. Having been instructed to study only the meanings in the given texts, the subjects were assigned to study both the texts and word lists within a period of three weeks. The Pre-test was given at the end of this three-week period to measure the level of their vocabulary learning. This was in the form of a cloze test, which was designed including a selection of words taken from the six word lists from these authentic texts. The cloze tests were prepared on the basis of the fixed ratio deletion ( $n^{\text{th}}$  word) method, deleting every 5<sup>th</sup> word following an initial intact sentence. Deyes (1984), as cited in Carter (1987), mentions that, in traditional cloze tests, the first sentence is left complete, because it includes a number of clues to the understanding of the subsequent sentences.

This deletion rate was chosen based on the choice restriction of a range between 5 and 10 as reported by Alderson (1978). The first cloze test included 28 deletions. In order to be able to employ the target words, a parallel text with similar content to one of the six authentic texts was prepared at an appropriate level for use as a cloze test.

As examined in a study regarding different deletion procedures for constructing cloze tests by Bachman (1985), scores on the fixed ratio cloze tests were found to be comparable in both reliability and concurrent validity to those on the cloze tests with rationally selected deletions. In the light of these results demonstrating that both test types have similar qualities, the cloze tests developed for this research were based on the notion of a random selection in redundancy, not a selective reduction in redundancy.

Following the construction of the Pre-test, it was examined in consultation with a group of native speaking English teachers who screened the text for suitability for the level. Words to be inserted into blanks were given with the cloze test with no extra distracters. Abraham & Chapelle (1992) propose that the nature of the required response affects item difficulty since Shohamy's (1984) work, as referred to in Abraham & Chapelle (1992), supports the prediction that constructed cloze responses are predicted to be more difficult than multiple choice responses. For this reason, in this study, to alleviate the difficulty, correct cloze responses were given as a mixed list and the subjects were asked to find the correct words for the cloze gaps. Deviation from the usual format of cloze tests was employed due to the fact that specific vocabulary was being tested rather than general vocabulary knowledge where other "acceptable" terms could have been inserted by subjects instead of the words from the lists. Care was taken that the target vocabulary was not interchangeable. In order to maintain the natural flow of the cloze items to be tested, the functional words that correspond with deletions based on every 5<sup>th</sup> word were not excepted and were left to be restored together with the other target words.

As indicated by Abraham & Chapelle (1992), researchers have observed the extent to which item difficulty in cloze tests can be explained by the processes underlying completion of semantic or syntactic information, that is, the restoration of content versus function words. Taylor, Aborn et al., Tannenbaum et al. and Klein-Braley (1981), as cited in Abraham & Chapelle (1992), found function words to be easier to restore than content words. This characteristic of function words has been attributed to their greater restoration predictability. Studies make it apparent that cloze item performance depends on a number of item characteristics, one of which is the word's status as content or function.

Also a pilot implementation of this cloze test was done at Marmara University in an Upper Intermediate level class in English courses. For this pilot study, the same procedure as in the research was followed.

As the second step of the research, which aimed to determine the relationship between vocabulary learning and vocabulary teaching instruction, another six texts (Appendix XVI) from authentic sources were chosen and the same procedure was followed as in the preparation and implementation of the first six texts. In this second step, a different vocabulary teaching technique, namely "semantic mapping", was

employed for the experimental group while the control group continued with the initial “word list” technique. Following a two-hour demonstration as to how they should study the target vocabulary from the diagrams given to them attached to each text, the experimental group was instructed to study and learn the target words again in a three-week period. At the end of this second self-study period, the Post-test was administered to both control and experimental groups.

The Post-test was the second cloze test, which was prepared on the same basis of the deletion of every 5<sup>th</sup> word and consisted of 20 deletions. The pilot implementation of the second cloze test was administered to the same upper intermediate level class in English course at Marmara University.

The Pre- and Post-tests developed in this research contained 28 and 20 deletions respectively with a fixed ratio of 1:5. As stated in Bachman’s (1985) study, Rand’s (1978) finding demonstrated that maximum reliability for cloze tests is achieved with about 25 deletions. Therefore, to be consistent with this finding in the literature, the deletion procedure here of a fixed ratio of every 5<sup>th</sup> word, was chosen to construct a cloze test with around 25 deletions.

For the Pre-test with 28 deletions, the administration time was 30 minutes whereas the Post-test with 20 deletions was allocated 20 minutes, as this amount of time had been sufficient in the pilot administrations.

Both tests were incorporated into the students’ visa exams as an additional question in order to encourage the students to apply themselves to the study of the vocabulary in a diligent manner.

Given the differing levels of reliability reported for cloze tests in the literature, it was of interest to determine whether there were any differences in the reliability obtained with the Pre- and Post-tests of this study.

### **3.3. Procedure**

The GEFT was given to both groups of students, i.e. the control group and the experimental group, in one session in their classrooms. The test, which is composed of three sections was completed in 3, 5, and 5 minutes consecutively in accordance with the specifications put forward by Witkin et al. (1971). The GEFT was administered according to the procedures given in the test manual and every attempt was made to

ensure that the test was given under the correct conditions as indicated in the instruction manual.

For this purpose, Consulting Psychologists Press Inc Davies-Black Publishing in California was contacted via e-mail to enquire about a detailed manual. Upon being informed about the study carried out to determine the hypothesised relationship between cognitive styles of FD/FI and vocabulary retention of a group of students at Yıldız Technical University, the Institution provided the testees with a sample GEFT item booklet, a score key and a manual. This invaluable contribution by Consulting Psychologists Press Inc. to the study made it available to compare the original test to the Turkish version of it. However, in research in related areas, for it is commonly agreed upon that tests or inventories should be given in the students' own language, the translated version of the GEFT was used. The test was colour-photocopied as it was in the original version to be distributed to the subjects. One instructor from Yıldız Technical University was trained beforehand to administer the test following the rules indicated in the instruction manual.

The students were also provided with colour pencils to trace and draw on the simple figures embedded into complex figures. The participants were asked to find out the simple figures, which were placed on the back cover of the booklet, in the embedded complex figures. Clear step-by-step directions were read aloud and clarified by the test supervisor as necessary. The booklet is divided into three sections. As instructed in the manual, the first section, including seven easy items, was not taken into consideration in assessing the subjects' scores and was used for practice purpose only. In the second and third sections, each of which contains nine items, every correct answer was given one point. Since an ability to differentiate a simple figure from its complex background is associated with a FI cognitive style, a high score indicated a high level of characteristics of FI. For this study, the differentiation of FD/FI was made based on the mean of the GEFT scores of two the groups.

The final form of the Turkish version of the "Perceptual Learning Style Preference Questionnaire" was delivered to the students in one session in their classrooms. Approximately 20 minutes were allocated for the completion of this questionnaire. The answer sheets were collected and then scored to determine the main learning styles of the students. The participants' major and minor learning preferences were revealed depending on a scoring scale; the scores between 36 and 50 being the indicator of a

“major” learning style and, between 25 and 35, being the indicator of a “minor” learning style and between 0 and 24, showing a negligible learning preference. This questionnaire is restricted to the learning styles of visual, auditory, kinaesthetic and tactile. Only the highest scores between 36 and 50 were considered for entry into the computer to determine the subjects’ learning styles for the hypotheses of the study which asserted a relationship between the students’ success in vocabulary retention and their “major” learning style preferences.

The four questionnaires, constructed to provide explanatory data to support the conclusions to be drawn from findings of the research, were delivered to all subjects in their classrooms. The two separate questionnaires designed to elicit the personal details and studying and learning habits of the students were completed by all the subjects in one teaching block in the classrooms before they were exposed to two different vocabulary teaching methods. The data collected through the questionnaire ascertaining the study habits of the subjects was analysed and entered into the computer giving numerical values to the options of each multiple-choice item.

For the data analysis, only the questions numbered 20, 21, 22, 24, 27, 28, 29, 31, 32, 34, 35, and 43 were taken into consideration for the study.

The Follow-up Questionnaires, which were designed to ascertain the methods and strategies adopted by the subjects when they studied vocabulary through two different techniques, i.e. “word list” and “semantic mapping”, were delivered after the administration of the Post-test. Approximately 15 minutes were devoted to the completion of these questionnaires. The control group was given the questionnaire prepared for the subjects who were exposed only to the “word list” technique whereas the experimental group was required to complete the questionnaire prepared for the subjects who studied the second group of target vocabulary through the “semantic mapping” technique.

The two Turkish cloze tests, one of which consisted of 46 blanks and the other with 40 blanks, were designed on the principle of the deletion of every 5<sup>th</sup> word and administered in consecutive single sessions. The pilot study of these cloze tests was done prior to the actual cloze test delivery in the classrooms. The pilot study was done with a group of 10 instructors at Yıldız Technical University. It was assumed that the subjects of the pilot study did not need to be selected from the student group having the same or similar profiles as the subjects of the study since the variable to be measured was the

Turkish competence of the subjects. Having the same native language, subjects did not necessarily have to possess similar profiles in terms of their competence in their own language.

In analysing the data, any semantically appropriate answers were accepted as correct when assessing these Turkish cloze tests. Each cloze test was allocated 20 minutes to be completed as this amount of time had been proven to be sufficient in the pilot study.

In this study, based on the empirical support by Rott, Williams and Cameron (2002), use of contexts was accepted to be a promising avenue for both providing lexical input and promoting lexical retention. A study conducted by Rott et al. (2002) investigated how lexical acquisition and text comprehension process might be jointly facilitated, and their findings reconfirmed the value of reading for L2 learners' lexical development. In fact, empirical data regarding word gain via context is not limited to this study mentioned above.

Schmitt & McCarthy (1997) argue that lexical acquisition in L1 mostly involves such an astronomical amount of information that vocabulary instruction can only account for a minute part of it. This argument raises the question of the importance of context in vocabulary acquisition. Beck and McKeown (1991), as cited in Schmitt & McCarthy (1997), comment that first language learners must pick up most vocabulary from context and relatively little of their vocabulary growth can be attributed to vocabulary instruction, especially the traditional definition-based instruction.

As for the role of context in the acquisition of vocabulary by second language learners, they point out two controversial issues. For one thing, second language learners will be less effective than native speakers at using context until they achieve a fairly high level of L2 proficiency. Therefore, explicit instruction, such as definitions, will play a greater role in their vocabulary growth. However, second language learners may also have a greater need to use context to learn words. The survey of "book flood" studies by Elley (1991), as quoted in Schmitt & McCarthy (1997), provides evidence that a good proportion of second language learners' vocabulary growth is likely to reflect incidental learning from context.

Considering these assumptions, it seems plausible that mental lexicon of L2 learners should rely heavily on encountering words in a context.

Prior to the Pre- and Post-tests given to measure the degree of the subjects' vocabulary learning after their exposure to two specific vocabulary teaching techniques, a

study was done to determine the texts to be used to teach vocabulary. For this purpose, 12 authentic non-literary texts were selected from a variety of original sources, such as “Time Magazine”, “The Times”, “Readers’ Digest”, an original tourist information book on Egypt and “The Herald-Sun” (Australian newspaper) whose subject matters were familiar to the students being tested. The subject matter for these texts was determined from information gathered from the Personal Background Information Questionnaire completed by the subjects at the commencement of the project, in which the subjects listed their interests and pastime activities in order of preference. As the nature of this part of the study was mainly based on self-study for vocabulary learning, the choice of material was specifically geared to maintain students’ interest in the subject matter in order to enhance their enjoyment of the tasks by increasing their extrinsic motivation.

The subjects of the texts were selected on the basis of relevance to the students’ general experiences and interests so that the contextual framework could be consistent with their accumulated knowledge otherwise known as schemata. Therefore the choice of familiar subject matters was to prevent the subjects’ performance on the test from being influenced by the non-linguistic factor of “schemata” which affects textual comprehension. Schemata, as explained by Carrell (1984), is a totality of information, knowledge emotion, experience and culture that the reader brings to the printed word. As this study mainly aimed at determining the relationship between vocabulary learning and certain cognitive strategies, utmost attention was paid to inhibit the subjects’ being affected, especially by a lack of background information, which is an important factor in constructing meaning. This important issue has been noted also by Sciarone & Schoorl (1989) as they mentioned that cloze tests must be based on texts whose subject matter is sufficiently familiar to the population being tested.

For the sake of authenticity, all the texts were chosen from original written materials. However, close attention and consideration was given to the selection of these extracts to minimise the risk of structural complexity and to provide the students with an appropriate level of material which was within the limits of their English proficiency. The texts were chosen by backing up to the nearest logical starting point for a complete semantic unit. Some passages were longer because the end point was also determined by semantic completeness. The texts ranged in length from 280 words to 937 words with a mean length of 598 words.

One central issue in this study was the degree to which randomisation was employed during the entire passage selection process. Data gathering accomplished via the Personal Information Questionnaire made it possible to learn about the subjects' interests and the reading matter they prefer. These findings were taken into consideration when selecting the authentic texts to be used for vocabulary teaching. The twelve authentic texts were divided into 2 groups of 6. To determine the target vocabulary to be taught to the subjects, prior to the administration of the Pre-test, the first 6 texts were distributed to subjects to underline vocabulary unknown to them. The texts were then collected and the most frequently underlined unknown vocabulary was included in the word lists created for each text. In these word lists only the contextual meanings were given in Turkish. The subjects were instructed to concentrate only on these specific meanings. These lists, as can be seen in Appendix XVII, were attached to the original texts and given to the students of both the control and experimental group.

The two groups, each consisting of 20 students, were assigned to study six texts and attached word lists at home within the specified time of three weeks at the end of which they were to take a cloze test to measure the level of their success in vocabulary learning.

In order to encourage the full co-operation of the students, they were informed in advance that the results of the Pre- and Post-tests would be incorporated into their visa exam grades. A cloze test whose subject matter was parallel to one of the original texts was constructed employing a selection of appropriate words taken from the six combined word lists. The cloze test was designed on the basis of the fixed ratio deletion ( $n^{\text{th}}$  word) method, deleting every 5<sup>th</sup> word.

The first group of target vocabulary consisted of 246 words, all given in a word list with Turkish equivalents for their contextual meanings. The correct answers were counted and subsequently recalculated into percentages.

In pairing the words of the two languages by composing word lists, the foreign language words adopt the meanings of the corresponding native language words. The match between the meanings of two words in a word list, composed of paired-associates, appears to be good for the beginner level foreign language learners. However, the two words in a translation pair, as pointed out by Groot & Keijzer (2000), do not generally share meaning completely and there is more to learning foreign language words than simply attaching new labels to the meanings of corresponding native language words. Therefore, the meaning assigned to the foreign language word will have to be refined in

foreign language contexts, and that was the rationale behind giving only the contextual meanings of the target words in the word lists.

For the administration of the Post-test, the same procedure was followed in regard to the selection of target vocabulary from the texts. A word list was constructed to cover the target vocabulary for this second group of texts. To test the hypothesis asserted, a different vocabulary teaching technique was employed for the experimental group while the control group continued with the initial “word list” technique.

To prepare the semantic maps for each text (Appendix XVIII), the target vocabulary from each text was grouped conceptually and thematically. Two types of relationships were considered in the design of semantic maps. One of the bases underlying the word groupings in this study was the classifications identified in Higa’s (1963) research, as cited in Nation (2000), which involved seven sets of meaning relationships between pairs of words. However, in this study, the set which combines the words with no meaning connection was not included. The following chart depicts these relationships that were also used in this study.

Table 3.5  
Meaning Relationships Between Word Pairs

Effect of the set	Relationship	Explanation	Example
Most interfering	Near synonyms	The words in the set have rather similar meanings.	fast rapid
	Free associates	One word is a free associate of the other	bed sleep
	Opposites	The words have opposite meanings	dark light
Neutral	Connotation	The two words were not synonyms but close in meaning to each other.	see vision
	Partial response identity	The words have similar free associates (e.g., light).	dark lamp
Most helpful	Coordinates	The words occur under a headword, such as fruit.	apple pear

The second basis was compiling the words into networks according to a central theme. Morin & Goebel, Jr. (2001), citing Tinkham’s (1997) “thematic clustering” and grouped words according to a shared thematic concept in one of their studies, in which

they investigated the effect of semantic mapping as being a vocabulary learning strategy on L2 vocabulary acquisition. Tinkham's (1997) "thematic clustering", as cited in Morin & Goebel, Jr. (2001), involves psychological associations between clustered words and a shared thematic concept, rather than semantic clustering based on semantic and syntactic similarities. As such, any parts of speech relating to a particular schema were included in clusterings to form semantic mappings.

In designing these maps using the above mentioned rationales, a key concept was centralised and linked to a variety of other attributes by arrows. For the benefit of the students, the Turkish equivalents of the central words and those with only a distant relationship to the central word were given. In order to link the meanings in the most appropriate conceptual web, the final semantic maps were formed after a number of checks by a group of native teachers of English at Yıldız Technical University. Prior to the implementation of the Post-test, the experimental group was given a two-hour demonstration as to how they should study the maps. In this respect the purpose of grouping was explained to the students in detail showing the words connected to one another in the semantic map. The subjects in the experimental group were instructed to seek out the meanings of the target words independently.

Working on one of the texts for demonstration purposes in two teaching blocks, the instructor guided the subjects to enable them to carry on further study on the remaining five texts at home. Following another three-week self-study period, the Post-test was administered to both the control and experimental groups. The subjects' answers were scored and the results were again converted into percentages on the basis of correct answers given.

### **3.4. Data Analysis**

Because of the limited number of students, 40, participating in the study, a parametric data analysis could not be performed and therefore nonparametric tests were applied to the data. The data entered into the computer are as follows:

The GEFT scores, the Pre-test and Post-test scores, the two Turkish cloze test scores, the Perceptual Learning Style Preference Questionnaire scores, and the numerical values given for each choice on the selected items of the Vocabulary Learning and Study Strategies Questionnaire and the two Follow-up Questionnaires. Table 3.6 illustrates a summary of the flow of the research process.

Table 3.6  
Flow of research process

<b>Steps and Implementations in the study</b>	<b>Rationale behind the Implementation</b>
Selection of experiment and target group	Research requirement
Personal Background Information Questionnaire	Data collection
Vocabulary Learning and Study Strategies Questionnaire	Data collection
Selection of Authentic texts to be used in vocabulary teaching	Research requirement
Implementation of Group Embedded Figures Test (GEFT)	To measure cognitive styles of subjects
Implementation of Perceptual Learning Style Preference Questionnaire	To determine subjects' perceptual learning styles
Selection of Turkish texts to convert to cloze tests	Research requirement
Implementation of Turkish cloze tests	To measure subjects' native language proficiency
Vocabulary teaching through Word list Technique	Research Aim
Implementation of Pre-test (first English cloze test)	To measure subjects' success in vocabulary learning
Vocabulary teaching through Semantic Mapping Technique	Research Aim
Implementation of Post-test (second English cloze test)	To measure subjects' success in vocabulary learning
Evaluation of Pre and Post-test results	Research Aim
Two Follow-up Questionnaires	To interpret and evaluate research outcomes

The data were analysed by means of the Statistical Package for the Social Sciences (SPSS, version 10.0). The responses to the items in questionnaires were entered in the data analysis program. All the scores from the GEFT, Pre-test, Post-test and two Turkish cloze tests were converted into percentages in order to obtain the equated scores. Descriptive statistics (mean, median, standard deviation), T-tests and Mann Whitney U-Tests were used in accordance with the objectives of the study. The level of significance was accepted as 0.05.

### **3.5. Results**

#### **3.5.1. Statistical Calculations Used**

Forty Upper Intermediate students attending English Preparation classes at Yıldız Technical University participated in the study. Twenty of these students comprised the experimental group and the other twenty students the control group.

Both of the groups were exposed to the “word list” technique as a vocabulary teaching technique, and took the Turkish cloze tests to determine their Turkish proficiency level, the Pre- and Post-tests to measure the level of their vocabulary retention, the GEFT to determine their cognitive styles in terms of two cognitive constructs - field dependency and field independency, the “Perceptual Learning Style Preference Questionnaire” to ascertain their learning styles in terms of being a visual, auditory, tactile or kinaesthetic learner and also “Background Information Questionnaire”, “Vocabulary Learning and Study Strategies Questionnaire” and finally the Follow-up questionnaires to elicit the facts as to whether the students studied the assigned vocabulary as instructed.

What the experimental group was exposed to was another vocabulary teaching technique namely “semantic mapping” for the second part of the target vocabulary. A questionnaire followed to elicit the study methods the students had adopted for this assigned vocabulary.

The following components of SPSS (version 10.0) were used to obtain statistical values to be interpreted in an attempt to verify the hypotheses entertained.

To compare the scores of the experimental group to those of the control group, the Mann Whitney U-Test was used. Since the distribution of the scores did not give a normal curve and the number of subjects was less than 30 ( $N < 30$ ), non-parametric calculations were applied.

To determine the relationships between dependent and independent variables, for groups of two variables “Independent Group T-test” was used and for groups of three or more variables, “Variance Analysis Technique” was applied.

To determine the relationships between two dependent variables, “Pearson Correlation Coefficient Technique” was used.

In order to compare the pre-test scores of the experimental group with the post-test scores of the same group, “Wilcoxon Signed Rank Test for Paired Samples” was used.

### 3.5.2. Findings Related to the Pre-test and Post-test Results of Control and Experimental Groups

The mean score for both the control group and the experimental group on the pre-test indicated that the experimental group achieved better results with both groups applying the same vocabulary teaching technique of “word list”. No significant relationship between the pre-test scores of the two groups was highlighted when using the Mann Whitney U-Test. The findings can be seen from Table 3.7.

Table 3.7  
Pre-Test Results of Mann Whitney U-Test for Experimental and Control Groups

Variables	N	X	$\Sigma X$	U-Value	P
Experimental Group	20	22.25	451.00	159	---
Control Group	20	18.45	369.00		

The second step of the study was to investigate the relationship between the scores of the control and experimental groups for the post-test.

The control group used the “word list” technique to study vocabulary whereas the experimental was assigned to use the “semantic mapping” technique.

The results depicted in Table 3.8 represent the findings using the Mann Whitney U-Test.

Table 3.8  
Post-test Results of Mann Whitney U-Test for Experimental and Control Groups

Variables	N	X	$\Sigma X$	U-Value	P
Experimental Group	20	19.27	385.50	175.50	---
Control Group	20	21.73	434.50		

As can be deduced from Table 3.8, the control group achieved higher scores than the experimental group on the post-test.

However, the results denoted no significant relationship between the scores of the two groups.

In order to find out whether there was a significant difference between the pre-test and post-test scores of the experimental group subjects, Wilcoxon Signed Rank Test was applied. As can be seen in Table 3.9, there is a significant drop in the scores from the pre-test to the post-test. This finding clearly implies that subjects achieved better results when applying the “word list” technique, which is quite opposite to previous research findings in related areas. The probable reasons for this finding have been dealt with in the discussion section.

Table 3.9  
Wilcoxon Signed Rank Test Results of Pre-Test and Post-Test for Experimental Group

Variables	X	SD	N	U-Value	P
Pre-Test	54.15	25.24	20	-2.070	P<0.05
Post-Test	39.00	21.25	20		

### 3.5.3. Findings Related to the Relationship between GEFT Scores and Pre- and Post-Test Scores

Another objective in this research was to discover a relationship between the scores of the Pre-Test, for which both groups studied the target vocabulary using the “word list” technique only, and GEFT scores. To ascertain this relationship, the “Independent Group T-Test” was applied and it was found that there was no significant relationship but field dependent subjects achieved higher scores than field independent subjects, as indicated in Table 3.10.

Table 3.10  
Independent Group T-Test Results for Pre-Test and GEFT Scores

Variables	N	X	SD	sd	T-Value	P
Independent	26	47.11	26.17	38	-0.739	---
Dependent	14	53.443	24.93			

Using the Pearson Correlation Coefficient Technique, the relationship between GEFT scores and pre-test scores of all the subjects was examined and it was determined that there was a positive relationship but it was not significant. This finding can be observed in Table 3.11.

Table 3.11  
Pearson Correlation Coefficient Test Results for Pre-Test and GEFT Scores

Variables	N	X	SD	T-Value	P
GEFT	40	81.42	20.98	0.96	---
Pre-Test	40	49.32	25.60		

A significant and positive relationship was exposed between post-test and GEFT scores of the experimental group according to the Pearson Correlation Coefficient Test. High GEFT scores indicated greater achievement in learning vocabulary using the “semantic mapping” technique for vocabulary learning. It can be inferred from these results that field independent subjects performed better when learning and using vocabulary through “semantic mapping” technique. Table 3.12 shows this finding.

Table 3.12  
Pearson Correlation Coefficient Test Results for Post-Test and GEFT Scores of Experimental Group

Variables	N	X	SD	R-Value	P
Post-Test	20	39.00	21.25	0.57	P<0.01
GEFT	20	87.10	10.04		

The Post-Test and GEFT scores of the control group were computed according to the Pearson Correlation Coefficient Test and showed a negative relationship but it was not

significant. This finding implies that the more field independent subjects achieved lower scores using the “word list” technique, as shown in Table 3.13.

Table 3.13  
Pearson Correlation Coefficient Test Results for Post-Test and GEFT Scores of Control Group

Variables	N	X	SD	R-Value	P
GEFT	20	87.10	10.04	-0.223	---
Post-Test	20	54.15	25.34		

#### 3.5.4. Findings Related to the Relationship between Turkish Cloze Test Scores and GEFT and Pre-Test Scores

In order to verify one of the hypotheses of this research as to what extent the learner’s native language competence effects their performance in learning vocabulary in English as a foreign language, the Pearson Correlation Coefficient Test was employed revealing a positive but not significant relationship between the subjects’ Turkish Cloze Test scores and their scores on the Pre-Test, for which they studied by means of the “word list” technique. Table 3.14 illustrates this finding.

Of the two Turkish Cloze tests used, one was authentic and the other a translation. The results used for the calculation below represent the scores of the original version as the subjects’ results were considerably higher in the authentic text in comparison to the translated one.

Table 3.14  
Pearson Correlation Coefficient Test Results for Pre-Test and Turkish Cloze Test (Authentic) Results For All Subjects

Variables	N	X	SD	R-Value	P
Pre-Test	40	49.33	25.60	0.141	---
Turkish Cloze Test (Authentic)	40	67.33	15.40		

Additionally the study sought to view any relationship between GEFT scores and the two Turkish Cloze Test scores. No significant relationship was revealed between GEFT

scores and the Translated Turkish Cloze Test. On the other hand, a significant and positive correlation was found between GEFT scores and the Authentic Turkish Cloze Test. The results can be seen in Tables 3.15 and 3.16.

Table 3.15  
Pearson Correlation Coefficient Test Results for GEFT and Turkish Cloze Test  
(Translation) Results for All Subjects

Variables	N	X	SD	R-Value	P
GEFT	40	81.42	20.57	0.130	---
Turkish Cloze Test (translation)	40	51.42	10.14		

Table 3.16  
Pearson Correlation Coefficient Test Results for GEFT and Turkish Cloze Test  
(Authentic) Results for All Subjects

Variables	N	X	SD	T-Value	P
GEFT	40	81.42	20.37	0.264	0.05
Turkish Cloze Test (Authentic)	40	67.32	15.39		

Independent Group T-Test was used to find out whether the subjects' Turkish Cloze Test scores differ according to their GEFT scores. As can be seen in Tables 3.17 and 3.18, better results were observed in the field independent subject group than in the field dependent subject group which suggests that the field independent subjects display a greater ability to develop discourse coherence.

Table 3.17  
Independent T-Test Results for GEFT and Turkish Cloze Test (Authentic) Results for All  
Subjects

Variables	N	X	SD	sd	T-Value	P
Independent	26	69.54	12.21	38	1.248	---
Dependent	14	63.21	19.91			

Table 3.18  
Independent T-Test Results for GEFT and the Turkish Cloze Test (Translation) Results  
for All Subjects

Variables	N	X	SD	sd	T-Value	P
Independent	26	52.54	9.34	38	0.945	---
Dependent	14	49.36	11.56			

### 3.5.5. Findings Related to the Relationship between Learning Styles and Pre-Test Scores for All Subjects

Subjects' learning styles were identified using the Perceptual Learning Style Preference Questionnaire and they were streamed into five groups according to their two dominant learning styles. Table 3.19 represents these five groups, the first group being Auditory and Tactile subjects, the second being Kinaesthetic and Tactile subjects, the third Auditory and Kinaesthetic, the fourth Visual and Auditory, and the fifth Visual and Tactile.

Table 3.19  
Mean and Standard Deviations of the Pre-Test Scores for All Subjects According to  
Learning Styles

Variables	N	X	SD
First Group	7	38.57	23.40
Second Group	15	46.67	21.26
Third Group	5	28.00	14.83
Fourth Group	4	45.00	26.40
Fifth Group	9	38.89	20.28

As can be seen from Table 3.20, there is no significant relationship between the pre-test scores and major learning styles of the subjects. The reason for this finding could be related to the small number of subjects in the research and may well differ with a larger number of participants.

Table 3.20  
Variance Analysis Results for Learning Styles and Pre-Test Scores of All Subjects

Variance	SD	X	$\Sigma$	F-Value	P
Between Groups	4	368.01	1472.06	0.811	---
Within Groups	35	453.94	15887.93		
Total	39	---	17360.00		

Upon the application of Kruskal-Wallis Test, no significant relationship was found between the achievement of Experimental Group subjects on the Post-Test and their major learning styles. This finding is clearly depicted in Table 3.21.

Table 3.21  
Kruskal-Wallis Test Results for Learning Styles and Post-Test Scores of Experimental Group

Variables	N	X	SD	$X^2$	P
First Group	3	5.00		4.107	---
Second Group	15	11.97	2		
Third Group	2	7.75			

### 3.5.6. Findings Related to the Subjects' Replies to the Follow-up Questionnaires and the Correlation Between These Replies and Their Achievements on Vocabulary Learning

The Follow-up Questionnaires were administered to both groups in different versions, one for the subjects who were taught vocabulary through the "word list" technique and one for the subjects who studied vocabulary using the "semantic mapping" technique. It aimed to discover how strictly the subjects adhered to the strategies suggested in the introductory session of the research after semantic maps and word lists had been distributed.

For the evaluation of these questionnaires, all the options in each question were allocated a numerical value in line with the assumptions and expectations. For example, the option which best supports the assumption was given the greatest number, and the option which negates the assumption was allocated the lowest value.

After following this process the numerical values of all questions were aggregated to determine the level of use made by the subjects of the suggested strategies. These numerical values were entered into the computer in order to find out if there was a correlation between the subjects' use of the suggested strategies and the results of the Pre-test and Post-test designed to measure their success in vocabulary learning.

The Pearson Correlation Coefficient Test was applied to find this relationship and resulted in a positive and significant relationship between the Pre-test and Follow-up Questionnaire scores of the control group, which can be seen in Table 3.22.

Table 3.22  
Pearson Correlation Coefficient Test Results for Pre-Test and Follow-up Questionnaire Scores of Control Group

Variables	X	SD	N	R-Value	P
Follow-up Questionnaire Scores	14.20	4.86	20	0.467	0.03
Pre-Test Scores	43.00	21.29			

Again the same non-parametric test was applied to find out a possible relationship between the post-test scores and the scores attained from Follow-up Questionnaire of the Experimental group. As can be deduced from Table 3.23, there is again a positive and significant relationship between these variables, which means that the more the subjects adhered to the vocabulary studying strategies as suggested by the vocabulary teaching technique used, the better the achievement level.

Table 3.23  
Pearson Correlation Coefficient Test Results for Post-Test and Follow-up Questionnaire Scores of Experimental Group

Variables	X	SD	N	R-Value	P
Follow-up Questionnaire Scores	14.35	5.62	20	0.549	0.01
Post-Test Scores	39.00	21.25			

### 3.5.7. Findings Related to the Subjects' Replies to "Vocabulary Learning and Study Strategies Questionnaire"

The data collected through "Vocabulary Learning and Study Strategies Questionnaire" were entered into the computer in order to analyse the responses to the items in the questionnaire. This questionnaire utilised 47 questions regarding the strategies and methods the subjects employ in relation to foreign language vocabulary learning, their vocabulary study habits in general and also their beliefs about vocabulary learning. A set of questions was considered essential to interpret the results of the study. The replies given to these items are as follows:

a) Item No. 20: The distribution of the replies given by all subjects participating in the study to the question "When you are reading English text, do you immediately look up unknown words in the dictionary?" is as shown in Table 3.24.

Table 3.24  
Replies to item number 20

Variables	Frequency (f)	Percent (%)
Yes	18	45.0
Only some of them	21	52.5
No	1	2.5
Total	40	100.0

As can be seen from Table 3.24, 45% of the subjects can be labelled as dictionary users for all the unknown words that they encounter and 52.5% of them as dictionary users for only some of the unknown words they come across.

b) Item No 21: The replies given to the question "Would you try to learn vocabulary if there were no exams?" by all the subjects is as shown in Table 3.25:

Table 3.25  
Replies to item number 21

Variables	Frequency (f)	Percent (%)
Yes	33	82.5
No	7	17.5
Total	40	100.0

As can be seen in Table 3.25, 82.5% of the subjects indicated that they would study vocabulary irrespective of the existence of exams. The rest of the subjects, who represent 17.5% of all the subjects, admitted to having no desire to or interest in trying to learn vocabulary if they were not obliged to take exams.

c) Item No 22: The distribution of the answers given to the question “Do you keep a notebook for newly learned words?” by all the subjects is as shown in Table 3.26:

Table 3.26  
Replies to item number 22

Variables	Frequency (f)	Percent (%)
Yes	29	72.5
No	11	27.5
Total	40	100.0

As can be seen in Table 3.26, 72.5% of the subjects reported keeping a notebook for the new vocabulary whereas 27.5% of them said that they do not use a separate notebook to keep a record of new words.

d) Item No 27: In this question, the subjects were asked to number the language skills of reading, writing, speaking, listening, and also the knowledge of pronunciation, vocabulary and grammar in order of their success, “1” being their most successful area.

Of all the subjects, 15% of them put “vocabulary” learning in first place as the area in which they find themselves most successful. 85% of the subjects, on the other hand, ranked “vocabulary” learning as their second most successful area. Table 3.27 depicts these results:

Table 3.27  
Replies to item number 27

Variables	Frequency (f)	Percent (%)
Vocabulary learning nominated as most successful area	6	15.0
Vocabulary learning nominated as second most successful area	34	85.0
Total	40	100.0

e) Item No 28: The distribution of the replies given to the question, “What percentage of your study time do you devote to vocabulary learning?” by all the subjects is as shown in Table 3.28:

Table 3.28  
Replies to item number 28

Variables	Frequency (f)	Percent (%)
Approximately 25%	21	52.5
Approximately 50%	12	30.0
More than 50%	5	12.5
Almost all	1	2.5
None	1	2.5
Total	40	100.0

As can be seen in Table 3.28, 52.5% of the subjects reported devoting approximately a quarter of their study time to vocabulary learning, 30% of them approximately half of their study time, and 12.5% of them more than half of their study time to vocabulary learning.

f) Item No 29: This item aims to elicit the subjects tendency to make sentences with newly learned vocabulary. 62.5% of the subjects replied to the question, “Do you use newly learned vocabulary in written or oral sentences?” as “yes”, whereas the rest answered “no”. The results are shown in Table 3.29:

Table 3.29  
Replies to item number 29

Variables	Frequency (f)	Percent (%)
Yes	25	62.5
No	15	37.5
Total	40	100.0

g) Item No 34: This item raises the question “Do you think your method of learning vocabulary is successful?” and 62.5% of the subjects reported that they believe their method of learning vocabulary is successful while 37% of them do not think that their vocabulary learning methods are fruitful. Table 3.30 shows these results as follows:

Table 3.30  
Replies to item number 34

Variables	Frequency (f)	Percent (%)
Yes	25	62.5
No	15	37.5
Total	40	100.0

h) Item No 35: The distribution of answers to the question, “Which of the following ways best helps you remember new words?” by all the subjects is as shown in Table 3.31:

Table 3.31  
Replies to item number 35

Variables	Frequency (f)	Percent (%)
In class	24	60.0
Independently	16	40.0
Total	40	100.0

60% of the participants reported that when they learn new words in class they remember them best, while the others claim to have maximum vocabulary learning when

they study them independently. None of the subjects mentioned learning vocabulary from someone else as an effective means of learning.

i) Item No 24: The replies to the question, “Which of the following methods do you employ when reading English texts?” by all the participants have been analysed as shown in Table 3.32:

Table 3.32  
Replies to item number 24

Question 24 a) scanning-	Frequency	Percent (%)
First choice	14	35.0
Second choice	26	65.0
Third choice	--	--
Total	40	100.0
Question 24 b) reading for the meaning of every word	Frequency	Percent (%)
First choice	21	52.5
Second choice	19	47.5
Third choice	--	--
Total	40	100.0
Question 24 c) translation	Frequency	Percent (%)
First choice	20	50.0
Second choice	20	50.0
Third choice	--	--
Total	40	100.0
Question 24 d) asking friends to understand	Frequency	Percent (%)
First choice	9	22.5
Second choice	31	77.5
Third choice	--	--
Total	40	100.0

Table 3.32 (continued)

Question 24 e) dictionary use before reading	Frequency	Percent (%)
First choice	8	20.0
Second choice	32	80.0
Third choice	--	--
Total	40	100.0
Question 24 f) learning the subject before reading	Frequency	Percent (%)
First choice	14	35.0
Second choice	26	65.0
Third choice	--	--
Total	40	100.0
Question 24 g) making inferences	Frequency	Percent (%)
First choice	6	15.0
Second choice	34	85.5
Third choice	--	--
Total	40	100.0
Question 24 h) getting stuck on unknown words	Frequency	Percent (%)
First choice	1	2.5
Second choice	39	97.5
Third choice	--	--
Total	40	100.0
Question 24 i) memorising sentences	Frequency	Percent (%)
First choice	5	12.5
Second choice	35	87.5
Third choice	--	--
Total	40	100.0
Question 24 j) schemata activation	Frequency	Percent (%)
First choice	8	20.0
Second choice	32	80.0
Third choice	--	--
Total	40	100.0

Table 3.32 (continued)

Question 24 k) using visual aids	Frequency	Percent (%)
First choice	8	20.0
Second choice	32	80.0
Third choice	--	--
Total	40	100.0
Question 24 l) ignoring visual aids	Frequency	Percent (%)
First choice	--	--
Second choice	40	100.0
Third choice	--	--
Total	40	100.0

As can be deduced from Table 3.32, 52.5% of the subjects reported reading very carefully and slowly, paying attention to the meaning of every word. Another finding of this analysis indicates that all the subjects mentioned ignoring pictures and tables when reading English texts.

97.5% reported not being able to go on any further if they come across an unknown word. Moreover, 50% of the subjects stated that they try to translate mentally into Turkish.

j) Item No 31: Table 3.33 shows the distribution of answers to the question, “With which of the following statements do you agree in relation to foreign language vocabulary learning?” by all the subjects:

Table 3.33  
Replies to item number 31

Question 31 a) without special effort	Frequency	Percent (%)
First choice	3	7.5
Second choice	37	92.5
Total	40	100.0
Question 31 b) with dictionary use	Frequency	Percent (%)
First choice	17	42.5

Second choice	23	57.5
Total	40	100.0
Question 31 c) frequent reading	Frequency	Percent (%)
First choice	24	60.0
Second choice	16	40.0
Total	40	100.0
Question 31 d) with special attention and effort	Frequency	Percent (%)
First choice	20	50.0
Second choice	20	50.0
Total	40	100.0

The analysis of the answers to this question yields a remarkably striking finding which reveals the subjects' approach to foreign language learning: As revealed in Table 3.33, 60% of the subjects agreed upon the view that frequent reading is essential to vocabulary learning by placing this option in first place of their choices.

Surprisingly, 92.5% of the participants positioned the belief, "Vocabulary learning is a natural learning process and therefore doesn't require any special effort" in second place. In other words, 92.5% of the subjects did not consider vocabulary learning as an area of language which requires special effort and attention.

k) Item No 32: The distribution of the answers to the question numbered 32, which aims to elicit the vocabulary study strategies adopted by the participants, is as shown in Table 3.34:

Table 3.34  
Replies to item number 32

Question 32 a) using word with equivalentents	Frequency	Percent %
First choice	21	52.5
Second choice	19	47.5
Total	40	100.0
Question 32 b) using words with English definitions	Frequency	Percent %
First choice	11	27.5

Table 3.34 (continued)

Second choice	29	72.5
Total	40	100.0
Question 32 c) using Turkish equivalents and sample sentence	Frequency	Percent %
First choice	5	12.5
Second choice	35	87.5
Total	40	100.0
Question 32 d) underlining and using Turkish definitions	Frequency	Percent %
First choice	27	67.5
Second choice	13	32.5
Total	40	100.0
Question 32 e) underlining and writing English definitions	Frequency	Percent %
First choice	8	20.0
Second choice	32	80.0
Total	40	100.0
Question 32 f) sticking word cards around to be seen	Frequency	Percent%
First choice	1	2.5
Second choice	39	97.5
Total	40	100.0
Question 32 g) underlining looked-up words in the dictionary	Frequency	Percent %
First choice	--	--
Second choice	40	100.0
Total	40	100.0
Question 32 h) memorising after looking up in the dictionary	Frequency	Percent %
First choice	1	2.5
Second choice	39	97.5
Total	40	100.0
Question 32 i) others	Frequency	Percent %
First choice	--	--
Second choice	40	100.0
Total	40	100.0

Table 3.34 demonstrates that 67.5% of the subjects agreed with the statement “I underline the unknown word in the text and write the Turkish equivalent” and nominated this as their first choice, and all the subjects put the statement, “I underline the words in the dictionary after looking them up” into second place.

Additionally, 52.5% of the subjects reported listing the words and then writing the Turkish equivalent as the first technique they adopt when learning vocabulary, whereas 72.5% of them stated listing and then writing the English definition as the second technique they adopt when learning vocabulary.

1) Item No 43: The order of the subjects’ choices for the question “Which of the following methods will help to keep new vocabulary in mind?” is as shown in Table 3.35:

Table 3.35  
Replies to item number 43

Question 43 a) reading equivalents or definitions	Frequency	Percent (%)
First choice	9	22.5
Second choice	5	12.5
Third choice	8	20.0
Not selected	18	45.5
Total	40	100.0
Question 43 b) reading English definitions from dictionary	Frequency	Percent (%)
First choice	4	10.0
Second choice	6	15.5
Third choice	4	10.0
Not selected	26	65.0
Total	40	100.0
Question 43 c) reading or writing a sample sentence	Frequency	Percent (%)
First choice	13	32.5
Second choice	12	30.0
Third choice	7	17.5
Not selected	8	20.0
Total	40	100.0

Table 3.35 (continued)

Question 43 d) reading texts	Frequency	Percent (%)
First choice	4	10.0
Second choice	12	30.0
Third choice	6	15.0
Not selected	18	45.0
Total	40	100.0
Question 43 e) teacher explanation in Turkish	Frequency	Percent (%)
First choice	9	22.5
Second choice	1	2.5
Third choice	4	10.0
Not selected	26	65.0
Total	40	100.0
Question 43 f) teacher explanation in English	Frequency	Percent (%)
First choice	1	2.5
Second choice	4	10.0
Third choice	10	25.0
Not selected	25	62.5
Total	40	100.0
Question 43 g) others	Frequency	Percent (%)
First choice	--	--
Second choice	--	--
Third choice	--	--
Not selected	40	100.0
Total	40	100.0

The analysis of all the subjects' answers to this question reveals that 32.5% marked the option "when I read or write a sentence in which the new word appears" as their first choice as the best method of vocabulary learning, while 30% marked the option "when I read a text in which the word appears" as their second choice.

25% of the subjects, on the other hand, placed option "f" in third place among their choices, which involves learning the meaning of English words from the teacher.

A summary of all these above mentioned findings can be seen from Table 3.36.

Table 3.36  
Summary of the research findings

PRE-TEST (word list technique)

	<b>Vocabulary teaching technique</b>	<b>Achievement</b>
<b>Experimental Group</b>	Word list	Better results
<b>Control Group</b>	Word list	

POST-TEST (word list and semantic mapping)

	<b>Vocabulary teaching technique</b>	<b>Achievement</b>
<b>Experimental Group</b>	Semantic Mapping	
<b>Control Group</b>	Word list	Better results

GEFT and PRE-TEST

	<b>Vocabulary teaching technique</b>	<b>Achievement</b>
<b>Field Independent Subjects</b>	Word list	
<b>Field Dependent Subjects</b>	Word list	Better results (positive relationship but not significant)

GEFT and POST-TEST

	<b>Vocabulary teaching technique</b>	<b>Relationship</b>
<b>Experimental Group</b>	Semantic Mapping	A positive and significant relationship
<b>Control Group</b>	Word list	A negative relationship but not significant

## TURKISH CLOZE TEST (authentic) and PRE-TEST

	<b>Relationship</b>
<b>Experimental Group</b>	A positive relationship but not significant
<b>Control Group</b>	A positive relationship but not significant

## TURKISH CLOZE TEST (authentic) and GEFT

	<b>Achievement</b>
<b>Field Independent Subjects</b>	Better results
<b>Field Dependent Subjects</b>	

## TURKISH CLOZE TEST (translation) and GEFT

	<b>Achievement</b>
<b>Field Independent Subjects</b>	Better results (but with lower level of achievement than original cloze test scores)
<b>Field Dependent Subjects</b>	

## PERCEPTUAL LEARNING STYLE PREFERENCES and PRE-TEST

	<b>Vocabulary Teaching Technique</b>	<b>Relationship</b>
<b>Experimental Group</b>	Word list	No significant relationship
<b>Control Group</b>	Word list	No significant relationship

## PERCEPTUAL LEARNING STYLE PREFERENCES and POST-TEST

	<b>Vocabulary Teaching Technique</b>	<b>Relationship</b>
<b>Experimental Group</b>	Semantic Mapping	No significant relationship

## FOLLOW-UP QUESTIONNAIRE and PRE-TEST

	<b>Vocabulary Teaching Technique</b>	<b>Relationship</b>
<b>Experimental Group</b>	Word list	Positive and significant relationship
<b>Control Group</b>	Word list	Positive and significant relationship

## FOLLOW-UP QUESTIONNAIRE and POST-TEST

	<b>Vocabulary Teaching Technique</b>	<b>Relationship</b>
<b>Experimental Group</b>	Semantic Mapping	Positive and significant relationship
<b>Control Group</b>	Word list	Positive and significant relationship

## IV. DISCUSSION AND EVALUATION OF RESULTS

### 4.1. Discussion and Suggestions for Further Research

This study mainly investigated the effect of contextualised and decontextualised vocabulary teaching techniques, namely “word list” and “semantic mapping” techniques, together with a group of cognitive style characteristics, field dependence and independence, on vocabulary learning in English as a foreign language. As the research subject in-question deals with extensive issues, this study adopts a restricted approach to these broad issues associated with vocabulary learning and vocabulary retention. In designing this study, it was not intended to cover all vocabulary learning strategies, nor to enter the debate about the range of metacognitive strategies the learners adopted. The main focus was on investigating the relationship between the success in vocabulary learning and FD/I cognitive style construction, under the effect of two different vocabulary instructions.

Differences in cognitive styles do not indicate differences in learning ability or memory (Witkin, Moore, Goodenough, and Cox, 1977). Cognitive styles indicate the preferences an individual has for perceiving and processing information, not the ability to learn the material. Thus, students with equal learning abilities but different cognitive styles may experience different levels of success in the same environment.

Tracing the developments in research on cognitive styles and their impact on classroom teaching practice, Morgan (1997) emphasises the role of an increased awareness of diverse cognitive styles and the individual preferences of learners.

The aim of this study also coincides with the prevailing attitude that instructional research can benefit from an investigation of the interaction between FI/D cognitive style and various instructional treatments on vocabulary learning.

The influence of cognitive style in this interaction, however, is complex and difficult to interpret. The cognitive style effect did not reach statistical significance, but the results of this interaction suggest that it is a complex variable that needs further investigation in order to tease out the complexities of its relationship with success in vocabulary learning.

As field independency intrinsically suggests an analytical ability, it was expected these field independent subjects would display a higher level of performance when using semantic mapping which requires the capability to recognise the links between the concepts in the same semantic area. The mapping process depicts inter-relational overlapping of concepts in a visual format. This promotes automatic recall of semantically linked words as a group. In regard to the unity of a context as being a meaningful piece of language, semantic groups represent a form of contextual use of lexical items. That is to say, constructing meaning entails bringing the individual meanings of lexical items together, which enables the reader to comprehend the contextual meaning. Such a process accounts for recognising and understanding lexical items in context to be able to recall and use them correctly in a context at a later date. Semantic mapping offers the opportunity to learn words in a contextual format rather than by random lexical items.

Another focus of the study was the extent of relationship between the success in vocabulary learning in English and the native language proficiency. Five hypotheses were asserted and findings supported two of them. One produced results contrary to related literature.

1. The first hypothesis suggested a significant and positive link between success in vocabulary learning and the field independent cognitive style. A tremendous amount of research has been generated to investigate the relevance of cognitive styles to learning and education with subsequent implications for how students learn and how teachers teach. An immense number of studies by researchers in the field, as stated by Davey & Menke (1990), has provided support for the interactions between the cognitive style dimension and a variety of components underlying the foreign language learning process.

Despite the magnitude of this research, most educational issues were examined but focus was limited to consider only the research which deals with learner characteristics and achievement outcomes in terms of cognitive construct of field dependency and independency.

The theory of cognitive styles asserts that field dependent and independent learners employ different manner and procedures in their learning. The field independent learners adopt an active role in learning, making more use of analysing and restructuring processes.

Coward and Lange (1979), as cited in Davey & Menke (1990), suggested that field dependence/independence cognitive style may be particularly important for tasks requiring the use of organisational structures for recall of information.

In contrast, the field dependent learner is characterised by having superior social skills and making less use of structuring and analysing processes. The characteristics of field independent learners lead them to better learning outcomes. However, research shows that field dependent learners are better at learning and remembering information that has a social relevance (Davis, 1991 in Wapner & Demick, 1991).

In a study in which students were presented with a number of neutral and social words, field dependent students did better on the recall of social words whereas no difference in recall was observed for the neutral words (Fitzgibbons, Goldberger and Eagle, 1965 in Davis, 1991).

However, some recent studies have challenged this conclusion. Frank and Noble (1985 in Davis, 1991) reported that field independent learners achieved better in a task of solving anagrams regardless of word type. Referring to Marx, Howard & Winne (1987), Davis (1991) mentions another study which revealed that field independent students did better on achievement tests and one of the measures of perception.

A thorough examination of literature serves the emergence of intuitive expectations about a relationship between cognitive style and second language learning. The expectation that the way in which individuals store, process and retrieve information, in other words their cognitive style, influences their language proficiency, sounds quite realistic. This expectation also inspired the hypothesis of this study suggesting an interaction between cognitive style and success in vocabulary learning in English as a foreign language. In view of this, some research can be taken as evidence for this assumption. For example, Naiman et al. (1978, in Ellis, 1985) found out that learners produce different kinds of errors depending on their cognitive style. Additionally, Fillmore (1980 in Ellis, 1985) notes that cognitive style may interact with other learner factors, such as level of attention.

However, the existing research so far does not conclusively demonstrate that cognitive style is a major factor affecting second language learning. There are many unexplored areas where no findings are possible with regard to the relationship between cognitive style and various aspects of second language learning. This means that there are a number of interesting possibilities which have not yet been investigated fully and in

future, the outcomes of research may suggest that cognitive style may turn out to be a significant determiner of development and success in second and foreign language learning.

In the light of these findings, it was expected that a positive relationship would be revealed between vocabulary learning and field independence cognitive construct within this study as learning a foreign language includes not only learning structural rules but also learning the meaning and use of lexical items. Lewis (1993) emphasizes the importance of lexical phrases in language learning and states that language is “grammaticalised lexis”, not “lexicalised grammar” (pp.12). He believes that lexical phrases, the larger sequences of language, cannot be ignored in teaching. This, as he argues, will help the learner acquire a sense of how words fit together.

This assumption was proved correct according to the findings obtained from the Independent Group T-test applied to discover the relationship between GEFT scores and Pre- and Post-test scores.

For the pre-test scores, even though no significant relationship was found between GEFT scores and Pre-test scores of the subjects, the field dependent subjects were observed to achieve higher scores than the field independent subjects.

This finding was in line with the assumption of this study relating field dependence cognitive style with the vocabulary teaching method of word lists. As the cognitive style of field dependency employs poorer analytical ability and less inclination to follow cues for restructuring, field dependent subjects were more successful when they studied using word lists.

Davis’s (1991) studies, as cited in Wapner & Demick (1991), reporting that field dependent learners make less effective use of mediational processes, while field independent learners make greater use of these processes such as analysing and structuring, supports the first conclusion of this study.

2. Another finding of the study, which meant support for the third hypothesis, revealed that there is a relationship between the GEFT scores and Post-test scores of the subjects. The subjects of the experimental group, who were instructed to study the target vocabulary through semantic maps, were identified according to their cognitive styles of field dependency and independency using GEFT and it was found that the subjects obtaining the higher scores on GEFT also obtained high levels of achievement on the Post-test. This implies that a high degree of field independency is related to greater

success in vocabulary learning using the vocabulary teaching/learning technique of semantic mapping.

In accordance with this finding, a negative but not significant correlation was found between the Post-test scores and GEFT scores of the subjects of the control group, who were instructed to learn the target vocabulary through word lists.

This demonstrates that a higher level of field independency results in a higher level of achievement in learning vocabulary items using semantic maps rather than word lists.

Therefore, it could be suggested that knowledge of cognitive style can be used to match learning tasks to individual learners to develop cognitive flexibility. Such an approach may be an asset for creating curriculum flexibility. Increasing our awareness of individual differences in language learners is a must.

3. As for the findings of the Turkish cloze tests, which supported the fourth hypothesis, the scores both the control and experimental group subjects achieved on the Turkish cloze test (authentic), correlated with the scores from the Pre-test positively but not significantly. This result partly supports the assumption that a high degree of native language proficiency results in a more successful vocabulary learning ability in a foreign language.

The reason for the low degree of significance may stem from the small size of the sample of participants in the study. Results may have been skewed without access to a broader cross-section of the student population.

On the other hand, the subjects' results of the second Turkish cloze test, which was constructed from a translation of a book synopsis, were significantly poorer leading to the necessity to eliminate these results from the study. No correlation could be derived from these results without broader research than was possible within the scope of this study. The wide deviation of the results between the two Turkish cloze tests opens the need for discussion and future study on the differences between authentic and translated materials in measuring native language proficiency.

The influence of field dependence/independence cognitive styles on native language proficiency was also solved. It was found that the control and experimental group subjects' scores on the Turkish cloze test (authentic) correlated with their scores on the GEFT positively and significantly.

Such a finding indicated that the higher level of achievement on the GEFT, which means a greater degree of field independency, is directly related to a higher level of native language proficiency.

This assumption of the study was made considering a remarkable amount of research which demonstrated a significant correlation between field independency and language learning proficiency (Abraham, 1985; Bialystok & Frohlich, 1978; Carter, 1988; Chapelle & Jamieson, 1986; Chapelle & Roberts, 1986; Hansen, 1984; Hansen & Stansfield, 1981, 1982; Stansfield & Hansen, 1983 in Wapner & Demick, 1991). In the light of such extensive research, it was predicted that field independency would be an asset to native language proficiency. The finding that the field independent subjects in this study performed better in reconstructing the Turkish cloze tests than the field dependent subjects corroborates the assumption in question.

4. The research, as indicated by Felder (1993), shows that students are characterised by significantly different learning styles: they preferentially focus on different types of information, tend to operate on perceived information in different ways, and achieve understanding at different rates.

In this study, concerning individual learning styles, which account for some of the differences in how students learn, i.e. visual, auditory, tactile and kinaesthetic, no significant relationship was found between the subjects' major learning styles and their achievement in vocabulary learning measured according to the scores they obtained from the Pre-test and Post-test. The correlational study showed no relationship between the Pre-test scores for the control and experimental group nor the Post-test scores for the experimental group.

5. The second hypothesis suggested a positive relationship between contextualised vocabulary teaching technique and success in vocabulary learning. Unexpectedly, the findings did not support this assumption. Nevertheless, contrary to the findings in the literature, one of the aims of this study to prove that the benefits of the vocabulary teaching method of semantic mapping outweighs those of the other vocabulary teaching method of word lists, was not met. However, some members of the experimental group, who facilitated the associative links between the target words, namely the use of semantic mapping, obtained higher success rates, and these subjects were detected to be field independent.

Data was collected to ascertain the strategies and methods the students employed in relation to vocabulary learning in English as a foreign language and their study habits, and evaluated to find out the reasons behind this unpredicted result.

The Vocabulary Learning and Study Strategies Questionnaire was designed containing 47 questions and distributed to the subjects to collect this data. The interpretation of the results obtained through this data collection questionnaire indicated a general lack of studying strategies on the part of the subjects. Due to the necessity of limiting the scope of the study, not all the items, but rather a set of the most essential questions were chosen to be analysed in order to find out the subjects' vocabulary study habits and their beliefs about vocabulary learning.

The analysis of the answers the subjects gave exhibited some different preferences for vocabulary learning; some aspects such as the amount of time they spent on vocabulary learning, the extent to which they were engaged in independent study, the type of vocabulary activities they did on a regular basis, and the amount of their reviewing efforts. Such an analysis showed the existence of different student approaches to lexical learning. Accordingly, to a certain degree, these findings established a basis to determine the relationship between strategy use and achievement level. All aspects considered, the outcomes of the questionnaires reflect some clues about what L2/FL learners do to facilitate their vocabulary acquisition and also the role of individual differences in lexical acquisition.

These findings, in fact, as also concurred by Kojic-Sabo & Lightbown (1999), have been the empirical questions that have been investigated in depth so far. For instance, Ahmed (1989), as quoted in Kojic-Sabo & Lightbown (1999), centred his research around the identification of the ways in which "good" and "poor" learners approached lexical learning. Analysis of his findings led him to conclude that good learners showed greater awareness of what they could learn about new vocabulary, used more strategies and relied more on different strategy types.

Kojic-Sabo & Lightbown (1999) also cite Sanaoui's (1992) research that conducted to document the various approaches that L2/FL learners employed to facilitate their lexical learning.

Sanaoui (1992) concluded that learners seemed to fall into two groups: those whose approach was to organise their vocabulary learning and those who did not appear to approach this task in any obviously organised way. The results of Sanaoui's (1992)

research indicated that learners with a structured approach were more successful in acquiring new vocabulary items than those who followed an unstructured approach.

Nevertheless, some unexpected results, which contradict those mentioned above, have been obtained by Lessard-Clouston's (1996) research whose outcomes failed to hint at any relationship between students' approaches to vocabulary learning and their lexical acquisition. In addition to this contradictory finding, the unstructured group also performed better on a test of overall language proficiency (Kojic-Sabo & Lightbown, 1999).

In relation to strategy use and approaches to lexical development, Kojic-Sabo & Lightbown (1999) found that learners in ESL and EFL settings exhibited some differences with regard to what strategies they used and to what extent.

In the light of all these findings, a succinct comment may be made that lexical learning is heavily influenced by individual differences and a number of variables including cognitive differences and individual preferences.

Almost half of the subjects declared using dictionaries for all the unknown words they came across and the other half, only some of the unknown words. Such a finding can be interpreted to mean some subjects are more inclined immediately to seek the Turkish equivalent of the English word without attempting to make use of the contextual cues to infer meaning.

Surprisingly, the majority of the subjects claimed that they would keep studying vocabulary regardless of the existence of exams in school. Only 17.5% of the subjects admitted having no inclination to learn vocabulary without the pressure of exams.

The Pre-test, and especially the Post-test, scores of the subjects were not very satisfying as they managed to fill in fewer than half of the Cloze test blanks. This result clearly contradicts the claim made by 15% of the subjects, who put vocabulary learning in the first place as the area in which they find themselves most successful and 85% of the subjects who ranked vocabulary learning as their second most successful area of language skills.

It appears that the subjects are not fully aware of the strategies and methods they employ when learning vocabulary in English as a foreign language, or their strategy classification and application lack a proper systematic approach. This issue plays a leading role when we consider the degree of their employment of higher level mental processes, i.e. metacognitive strategies in a vocabulary learning task. This finding was

also supported by the responses of the subjects to the question "What percentage of your study time do you devote to vocabulary learning?" Since 30% of the subjects reported devoting half of their study time to vocabulary learning and nearly half of them claimed to have spent about one quarter of their study time on vocabulary learning, it is clear that little value was gained from this extensive period of study.

Nevertheless, one of the questions in this Vocabulary Learning and Study Strategies Questionnaire clearly demonstrates a lack of the subjects' recognition of ineffective study habits. Question Number 34 produced responses in a distribution of 62.5% of the subjects claiming a high success rate for their chosen methods of vocabulary learning whereas 37% were actually aware of their shortcomings in vocabulary learning.

At this point, it should be mentioned that, in this investigation, the link between field dependence/independence and metacognitive awareness have not been questioned. Regarding this issue, research by Borkowski, Peck, Reid & Kurtz (1983; in Saracho, 1990) suggests that different memory performances may be due to a lack of metacognitive awareness as to what strategy would be useful in a specific task. A further study dwelling on metacognitive awareness in vocabulary learning in English as a foreign language is believed to contribute to one of this neglected area of ELT.

In order to elicit the best way to help subjects remember new words, one of the question items was designed to find out whether they learn best in the classroom or by studying independently. Only 40% of the subjects claimed to have greater success in vocabulary learning when they studied independently. This finding is likely to explain the low success in vocabulary learning after the implementation of two vocabulary teaching instructions as both techniques allowed the subjects to do a considerable amount of self-study.

In the first place, the word list requires memorisation, which is a time-consuming self study method. Secondly, the other vocabulary teaching technique of semantic mapping was demonstrated in the classroom with instructions for further self-study. In this case, the subjects were assigned to employ either their guessing skills or do some dictionary work to find the Turkish equivalents of the target vocabulary.

For both groups of texts, the subjects were instructed to learn only the contextual meanings of the target vocabulary and they were encouraged to make a guess before searching for the meanings in the dictionary. However, the responses to question item

number 24 demonstrated that 97.5% of the subjects had a habit of interrupting their reading by checking in the dictionary for any unknown word they encountered.

Another finding of the analysis of these responses indicated that 50% of the subjects in this study had a tendency to translate mentally into Turkish when reading an English text.

Question Item Number 22 revealed another reality that 72.5% of the subjects had a habit of keeping a notebook for new vocabulary to help them to recall the words they had learned.

The most striking finding was obtained through the answers given to question Item Number 31 as 92.5% of the subjects posited the idea that vocabulary learning is likely to be a process which requires no special effort and attention. Moreover, Question Item Number 32 revealed that the subjects had a very strong preference for making Turkish equivalent notations in the text, followed by a second preference of listing English definitions while learning English as a foreign language.

Approximately a third of the subjects found reading or writing a sentence containing the new word the most effective method of retaining vocabulary. Additionally, again this third of the subjects placed the option of seeing a word in a text as their second best way of retaining the vocabulary. These two responses appear to defend their awareness of the importance of contextualisation, while in reality their results indicated otherwise as the majority of them actually employed the word list technique for vocabulary learning.

As can be seen from the results already discussed, the subjects of this study did not benefit from the semantic mapping technique, but chose to revert to the familiar word list technique. The subjects' failure to adopt the semantic mapping technique satisfactorily caused the hypothesis not to be proven. There could be several reasons for this outcome, one of which may be the subjects' previous educational experience and cultural conceptions of learning. Considering the general attitudes and approaches within the Turkish educational system, the students, more or less, are accustomed to learning by rote. Reflecting on the results of this study, it can be indicated that the subjects had resisted using the strategies during training and self-study period, and had preferred to use rote repetition, which was their usual way of handling the learning process. It seems likely that an individual's preference for a particular study method would influence his or her success in a given task.

Not only are analytical skills in schools not developed, but neither are skills to utilising memorised information encouraged or advanced in order to be used in relevant tasks or studies. However, these suggested reasons warrant further investigation.

Accordingly, Bernstein's (1981) cultural transmission, of which the educational system is one channel, deals with variation in the cognitive operations of members of a culture. Essentially, his claim is that the manner of a culture, which is conveyed between successive generations, operates on linguistic and social codes. Consequently, analytic thought is facilitated in cultures which supply constituents of cognition that have resulted from a process of analysis (Bernstein, 1981).

Thus, referring to Bernstein's (1981) work, it is appropriate to assume that cognition is not in a position of being disembedded from cultural, educational and social structures.

Additionally, McDonough (1995) makes a synthesis of the research in the area of strategy training and concludes that improvement caused by strategy training is relatively weak as it is also culture specific and more beneficial for beginners.

Previous experience in educational systems as well as programmed thinking through specific cultural thought processes have a strong bearing on how reluctantly students adopt suggested strategies. Powerful cultural bias toward learning can represent a restrictive influence when presented with unconventional approaches. In an attempt to discover the reasons for this failure in the achievement levels of the subjects in vocabulary learning using two different vocabulary teaching techniques, two Follow-up Questionnaires were designed after all the data were statistically analysed revealing an unexpected result. The responses given to these Follow-up Questionnaires showed that the majority of the subjects had not adhered to the instructions for the study process of semantic mapping and instead they stated having studied according to their own methods, if they had actually studied at all. Their answers indicated that they had chosen to disregard the importance of studying as instructed. In other words, the participants of this study reported not to have used some of the strategies as much as directed.

Rather, they believed that it was unnecessary to build up relationships between the words in a contextual way. This was supported by their replies to Question Number 7 in the Follow-up Questionnaire for the experimental group, which is concerned with the effect of creating links between vocabulary items when studying new words. The majority of the subjects rejected the premise that linking the words thematically and semantically contributed to the improvement of their vocabulary learning. However, the statistical

results demonstrated that there were subjects who actually did adhere to the instructions they had been given in the introductory session on how to study using the semantic mapping technique, and these subjects achieved better results than those who abandoned this principle for other methods. Upon further examination, these more successful subjects were found to be the most field independent testees. In this study, the findings showed that semantic mapping was proved to be a more facilitative method for field independent individuals to be used in vocabulary teaching in English as a foreign language.

This revelation further supports the assertion that there is a positive link between field independency and vocabulary learning in English as a foreign language using the semantic mapping technique, as there also is between field independency and second language proficiency.

Cohen and Aphek (1980), as cited in Wenden & Rubin (1987), trained 26 learners of Hebrew as a second language to generate associations for new vocabulary items. They found a high success rate for recall of words that were learned through association. However, a subgroup of students who learnt some words without association were able to recall these words as well as words for which they did find associations. Therefore, a question is raised as to the type of learner who benefits from learning vocabulary through association. The implication of this finding is that teachers should determine the best approach to use in facilitating different strategies that will work best for learners with different cognitive styles.

It should be mentioned here that, as Hansen & Stansfield (1983) indicate, although field dependent persons are considered to be disadvantaged in cloze tests, the subjects involved in this study were familiar with this method of testing and had considerable practice and experience completing such tests in the first semester of their preparatory year. However, for the independent subjects, whether the results of the cloze tests for vocabulary learning were influenced by cognitive style construct of field independence or by the advantageous effect of using cloze tests requires further investigation.

In the context of L2/FL vocabulary learning, the above mentioned findings and discussions lead us to conclude that Turkish students are unlikely to be well versed in the appropriate approaches to effective study methods. This could be due to their lack of awareness of their metacognitive strategies or the persistent influence of previously learned study habits in their other fields of study throughout their educational life, which

historically, has mainly employed a system of rote learning. Another pertinent point to be made is that learning vocabulary is not a matter of merely memorising equivalents in one's native language. An awareness of the contextual use should be incorporated into the study method to enable one to allocate correct and appropriate vocabulary communicatively.

It is possible that the effects of foreign language study habits adopted pertaining to the general study strategies further influence the paucity of some other effective strategies. The assumption made here is that the Turkish students in this study used less of effective and metacognitive strategies and more of memory strategies.

As Davis (1991) states, metacognition involves individuals' knowledge and awareness of their cognitive processing capabilities. Since field independent individuals rely on internal cues, it would be reasonable to hypothesise that they would develop metacognitive skills more efficiently than field dependent individuals. Therefore, it may be suggested that future research be done in the direction involving a consideration of metacognitive skills. Such a study would contribute to finding the achievement strengths and weaknesses of field dependent and independent learners in vocabulary learning tasks in English. Consequently, additional research linking metacognitive abilities to vocabulary learning and retention in a foreign language would be fruitful in extending cognitive styles and metacognitive skills to problems relevant to foreign language education.

As such, in general, Turkish foreign language learners are unlikely to be familiar with contextualised ways of teaching and learning vocabulary. At this point, the current educational system may not be functioning as an encouraging factor for guiding the learners to adopt a more global approach to learning processes. These reasons may partially explain the agreement on the part of the Turkish students on the choice of strategies for learning foreign language vocabulary regardless of the received training and instruction on using semantic maps which credits an approach of uniting language items of lexis in particular semantic areas for the sake of empowering the ability of recall. This situation can be interpreted as foreign language vocabulary study behaviour of Turkish students having a great deal to do with the type of general study strategies within a set of cultural assumptions that are held within the Turkish education system.

As can be seen from this study, learners' use of second or foreign language is greatly drawn upon the strategies they use along with the development of their sense of

awareness. Cohen (1998) gives a detailed account of strategy training in learning and using a second language, claiming that the overall goal of any strategy training program is to help learners become more successful in their attempts to learn a foreign language. In this context, learners can be taught to make choices about how they will learn a foreign language by introducing strategies to raise awareness of their learning preferences and to identify and transfer strategies to new learning situations (Cohen, 1998).

The final remark that can be made from this study is that language teachers should not assume that instruction in vocabulary teaching prompts learners to automatically adopt the approach relevant to the vocabulary teaching technique recommended to them disregarding their own learning strategies which, they believe, are more effective.

As another suggestion for future research, a further opportunity exists to extend this study by conducting a replication of Schmitt's (1997) Japanese survey to find out the attitudes of Turkish students toward vocabulary learning strategies. More research can be undertaken in this way to ascertain whether students are aware of such strategies and whether this awareness or lack of it enhances or inhibits the teaching of these strategies.

All in all, this research may contribute to developing new insights into how Turkish learners of English as a foreign language approach the study of foreign language vocabulary and how the cognitive processes they adopt operate in accordance with their previous experiences of learning. Therefore, this study could be seen as a pioneering step for future studies.

#### **4.2. Limitations of the Study**

With respect to methodology, the measures used in this study proved appropriate for the research purposes. The measures reflected the investigated aspects of cognition and vocabulary learning although certain refinements were required.

Due to the limited number of the students selected to comprise the sample for this study, a non-parametric design had to be carried out. The reason for this stemmed from the difficulty of getting permission from school authorities for administering tests to larger groups. Additionally, the sample consisted only of students from Yıldız Technical University, School of Foreign Languages, Basic English Department. More general and reliable results could be obtained if these studies were to be conducted with larger groups of subjects.

Another limitation of the study arises from the absence of normative data for the use of the GEFT in Turkey. Drawing general conclusions based on the use of this test might be misleading without a standardisation for our country.

The third limitation can be attributed to the institutional restrictions limiting the time allocated to the demonstration of "semantic mapping". The subjects were instructed on how to use and study the diagrams which consisted of interrelated lexical words that belong to the same semantic area. The explanatory session held to give instruction on the use of these maps could have been a bit longer if the institutional restrictions and time constraints had not inhibited this practise. A longer training period, such as devoting a few blocks of time to the procedure that needed to be followed when using the semantic maps, could have played a supportive role in enhancing the students' awareness of effective study strategies prior to their self-study.

Obviously, a parametric design would yield much more discrete results, and because of the small number of students selected for the study, it may not be appropriate to generalise on the results obtained. Most correlations that have been found to indicate either a positive or a negative direct relationship between the two variables of the study are actually quite low, which makes it impossible to derive any implications based on these data at this point.

A study with a greater number of subjects would generate more significant relationships between the variables of the study.

The testing procedure in this research aimed at revealing whether the students understood the meanings of the words and used them in similar contexts correctly. However, it demonstrated nothing about the extent to which the students can manipulate these foreign language words. For example, it did not assess whether the students can use these lexical items in a sentence, nor did it ascertain whether the students know in which context these lexical items can be used.

One of the several limitations of these results is that the research did not investigate the retention of target words from the perspective of long-term and short-term recall. Further study may investigate the effect of the interval factor on vocabulary learning by setting two different allotted times for studying the target vocabulary.

Another limitation is that word characteristics such as concreteness (word type), cognate status, and frequency have not been dealt with across the experiments here. Only the effects of two vocabulary teaching techniques, FD/I cognitive styles, perceptual

learning style preferences and native language proficiency have been included in the scope of the study.

To reiterate, more research is needed to determine the contributions of the general study habits and strategies of Turkish students in vocabulary learning in English as a foreign language. Since one of the results of this study does not confirm the results of previous studies regarding the role of vocabulary instruction in L2/FL context, further investigation is strongly emphasised to conclude whether these findings are generalisable or subject to situational variation.



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APPENDICES

## APPENDIX I

## Kişisel Bilgiler Anketi

Kimlik Bilgileri

1) Adınız, Soyadınız:

.....

2) Yaşınız:

.....

3) Doğum yeriniz:

.....

4) Cinsiyet: K  E 

5) Uyruğunuz:

.....

6) Ana diliniz:

.....

Aile Bilgileri:Anne7) Sağ  Ölü 8) Öz  Üvey 

9) Ana dili:

.....

10) Bildiği yabancı dil(ler):

.....

11) Mesleği:

.....

12) Çalışıyor mu? Evet  Hayır 13) Ortalama aylık geliri: 250 milyondan az   
250-500 milyon   
500 milyon-1 milyar   
1 milyardan fazla 14) Eğitim düzeyi: Okur Yazar   
İlk   
Orta   
Lise



28) Ailenin yaşadığı kent:

.....

29) Kiminle beraber oturuyorsunuz:

.....

- a) aile ile
- b) akraba ile
- c) arkadaş ile
- d) yurttta
- e) tek başına

30) Ailenizin oturduğu ev:

- a) kira
- b) ailenize ait

31) Ailenizin oturduğu ev:

- a) apartman dairesi
- b) müstakil ev

32) Ailenizin oturduğu ev kaç odalı?

- a) 1+1
- b) 2+1
- c) 3+1
- d) daha fazla

Eğitim Geçmişi

33) Bölümünüz:

.....

34) Buraya gelmeden önce bitirdiğiniz son okulun adı:

.....

35) Öğrenim hayatınızda başarısızlık nedeniyle hiç sene kaybettiniz mi?

- a) evet
- b) hayır

36) Evet ise kaç yıl?

.....

37) Türkçe dışında bildiğiniz dil sayısı (yoksa (X) koyun):

.....

38) Türkçe dışında bildiğiniz dil varsa bu dili nerede öğrendiniz?

- a) yurt içinde
- b) yurt dışında

39) Yurt içinde öğrendiyse nasıl öğrendiniz?

- a) aile/ev ortamında
- b) okulda

40) Yurt dışında öğrendiyse nasıl öğrendiniz?

- a) okulda dil eğitimi alarak
- b) eğitim almadan kendi başına

41) Kaç yıldır İngilizce öğreniyorsunuz?

- a) 1 yıldan az
- b) 1-3 yıl
- c) 4-6 yıl
- d) 6 yıldan fazla

42) İngilizce hazırlık okudunuz mu?

- a) evet
- b) hayır

Evet ise :

43) Kaç yıl hazırlık okudunuz?

.....

44) Kaç yıl önce hazırlık okudunuz?

.....

#### Bedensel Özellikler ve İlgi Alanları

45) Okurken gözlük kullanmayı gerektirecek şekilde görme kusurunuz var mı?

- a) evet
- b) hayır

46) Bilgisayarınız var mı?

- a) evet
- b) hayır

47) Bilgisayar kullanabiliyor musunuz?

- a) evet
- b) biraz
- c) hayır

48) Boş zamanlarınızı en çok nasıl değerlendirirsiniz? (En çok yaptığımız aktiviteye 1 vererek

yaptıklarınızı numaralandırarak işaretleyiniz.)

- a) okuyarak
- b) internet / bilgisayar
- c) spor yaparak
- d) hobi faaliyetleri (koleksiyon, resim, satranç, vb.)
- e) TV seyrederek

- f) müzik dinleyerek
- g) sinema, tiyatro, veya konsere giderek
- h) arkadaşlarla gezerek ve sohbet ederek
- i) bulmaca çözerek
- j) diğer(belirtin):

.....

49) Çalışmayı düşündüğünüz iş kolu:

- a) eğitim
- b) yönetim / finans / bankacılık
- c) mühendislik / mimarlık alanları
- d) turizm
- e) sanat
- f) diğer(belirtin):

.....





- 22) Educational Background
- Literate (but no formal education)
  - Primary
  - Junior High
  - Senior High
  - Tertiary
  - Further degrees/Masters/Doctorate

- 23) Parents together
- Separated
  - Divorced

24) Number of siblings.....

25) Number of sisters .....

26) Number of brothers.....

27) Educational background of siblings

Siblings/Education	Literate	Primary	Junior High	Senior High	Tertiary	Further degrees

28) City/Town where family resides.....

29) Who do you live with?

- a) Family
- b) Relative
- c) Friend
- d) In a dormitory
- e) Alone

30) Family home

- a) Rented
- b) Owned

31) Family home

- a) Apartment/Flat
- b) Detached house

32) How many bedrooms does the family home contain?

- a) 1 + 1
- b) 2 +1
- c) 3+1
- d) more

Educational Background

33) Department/Field of Study.....

34) Where did you study immediately prior to your current university?.....

- 35) Did you ever repeat a year?  
 a) Yes  
 b) No
- 36) If yes, how many years?.....
- 37) Other languages spoken (put X if none) .....
- 38) If you speak other languages, where did you learn them?  
 a) In your own country  
 b) Overseas/Abroad
- 39) If in your own country, how?  
 a) In your own country  
 b) Overseas/Abroad
- 40) If abroad, how?  
 a) At a course  
 b) Independently
- 41) How long have you been learning English?  
 a) Less than one year  
 b) 1 – 3 years  
 c) 4 – 6 years  
 d) more than 6 years
- 42) Have you ever attended an English Preparatory Class?  
 a) Yes  
 b) No
- If yes,:
- 43) How many years?.....
- 44) How long ago? .....

Physical features and interests

- 45) Do you have any visual defects which necessitate special aids?  
 a) Yes  
 b) No
- 46) Do you have a computer?  
 a) Yes  
 b) No
- 47) Can you use a computer?  
 a) Yes  
 b) A little  
 c) No
- 48) What do you do in your spare time? List in order of preference.  
 a) Reading  
 b) Internet/Computer  
 c) Sport  
 d) Activities (collections, painting, chess, etc)  
 e) Television  
 f) Listening to music  
 g) Cinema/Theatre/Concerts.....  
 h) Socialising with friends  
 i) Puzzles  
 j) Other (please explain).....

49) Which field of work do you want to go into?

- a) Education
- b) Management/Finance/Banking.....
- c) Engineering/Architecture
- d) Tourism
- e) Art
- f) Other (please explain).....



### APPENDIX III

#### Perceptual Learning Style Preference Questionnaire

This questionnaire has been designed to help you identify the way(s) you learn best—the way(s) you prefer to learn.

Please respond to the statements AS THEY APPLY TO YOUR STUDY OF ENGLISH. Decide whether you agree or disagree with each statement. Please respond to each statement quickly, without too much thought. Try not to change your responses after you choose them.

	strongly agree	agree	undecided	disagree	strongly disagree
value:	5	4	3	2	1

1. When the teacher tells me the instructions, I understand better.
2. I prefer to learn by doing something in class.
3. I get more work done when I work with others.
4. I learn more when I study with a group.
5. In class, I learn best when I work with others.
6. I learn better by reading what the teacher writes on the chalkboard.
7. When someone tells me how to do something in the class, I learn it better.
8. When I do things in class, I learn better.
9. I remember things I have heard in class better than things I have read.
10. When I read instructions, I remember them better.
11. I learn more when I can make a model of something.
12. I understand better when I read instructions.
13. When I study alone, I remember things better.
14. I learn more when I make something for a class project.
15. I enjoy learning in class by doing experiments.

16. I learn better when I make drawings as I study.
17. I learn better in class when the teacher gives a lecture.
18. When I work alone, I learn better.
19. I understand things better in class when I participate in role playing.
20. I learn better in class when I listen to someone.
  
21. I enjoy working on an assignment with two or three classmates.
22. When I build something, I remember what I have learned better.
23. I prefer to study with others.
24. I learn better by reading than by listening to someone.
25. I enjoy making something for a class project.
26. I learn best in class when I can participate in related activities.
27. In class, I work better when I work alone.
28. I prefer working on projects by myself.
29. I learn more by reading textbooks than by listening to lectures.
30. I prefer to work by myself.

## VISUAL

6-.....

10-.....

12- .....

24- .....

29- .....

TOTAL .....X 2 = .....(SCORE)

## AUDITORY

1-.....

7-.....

9- .....

17- .....

20- .....

TOTAL .....X 2 = .....(SCORE)

## TACTILE

11- .....

14- .....

16- .....

22- .....

25- .....

TOTAL ..... X 2= ...(SCORE)

## GROUP

3- .....

4- .....

5- .....

21- .....

23- .....

TOTAL ....X 2=.....(SCORE)

## KINESTHETIC

2-.....

8-.....

15- .....

19- .....

26- .....

TOTAL .....X 2 = .....(SCORE)

## INDIVIDUAL

13- .....

18- .....

27- .....

28- .....

30- .....

TOTAL.....X 2=.....(SCORE)

Major learning style preference

36-50

Minor learning style preference

25-37

Negligible

0-24

(From Richards &amp; Lockhart, 1994, pp76)



## APPENDIX IV

### Algısal Öğrenme Şekli Tercih Anketi

Aşağıdaki her grup soru farklı bir öğrenme yöntemini temsil etmektedir. Cevapladığınız her soruya aşağıdaki puanlama çizelgesini kullanarak puan vermeniz ve bu puanı 'değerlendirme' bölümünde soru numarasının yanına yazmanız yeterlidir.

Kesinlikle katılıyorum. Katılıyorum. Fikrim yok. Katılmıyorum. Kesinlikle katılmıyorum.  
Puan: 5 4 3 2 1

1. Öğretmen anlatarak açıkladığı zaman daha iyi anlarım.
2. Sınıfta aktif derse katılım ile öğrenmeyi tercih ederim.
3. Başkalarıyla çalıştığım zaman daha çok iş bitiririm.
4. Grup çalışmasıyla daha çok öğrenirim.
5. Sınıfta en iyi öğrendiğim zaman, arkadaşlarımla çalışarak öğrendiğim zamandır.
6. En iyi, öğretmenin tahtaya yazdıklarını okuduğum zaman öğrenirim.
7. Sınıfta birisi birşeyi nasıl yapacağını söylediği zaman daha iyi öğrenirim.
8. En iyi, derse katılarak öğrenirim.
9. Sınıfta duyduklarımı okuduklarımdan daha iyi hatırlarım.
10. Okuduğum şeyleri daha iyi hatırlarım.
11. Birşeyin modelini/maketini yaparsam daha iyi öğrenirim.
12. Birşeyi okuduğumda daha iyi anlarım.
13. Tek başıma çalışıp öğrendiklerimi daha iyi hatırlarım.
14. Sınıfça hazırlanan bir projeye katıldığımda daha iyi öğrenirim.
15. Sınıfta deneyler yaparak öğrenmeyi severim.
16. Çalışırken çizimler/şemalar yaptığımda daha iyi öğrenirim.
17. Sınıfta öğretmenin sözlü olarak anlatmasıyla daha iyi öğrenirim.
18. Tek başıma çalıştığımda daha iyi öğrenirim.
19. Sınıfta oyun şeklindeki aktivitelerde rol üstlenerek pratik yaptığımda daha iyi anlarım.

20. Sınıfta anlatılanları dinleyerek daha iyi öğrenirim.  
 21. Verilen bir ödev üzerinde birkaç sınıf arkadaşımınla beraber çalışmaktan hoşlanırım.  
 22. El becerisini kullanarak öğrendiğim şeyleri daha iyi hatırlarım.  
 23. Başkalarıyla çalışmayı tek başıma çalışmaya tercih ederim.  
 24. Okuyarak, birisini dinleyerek öğrendiğimden daha iyi öğrenirim.  
 25. Sınıf projesi için kendime düşeni yapmaktan hoşlanırım.
26. En iyi, sınıfta yapılan aktivitelere katıldığım zaman öğrenirim.  
 27. Derste, tek olarak çalıştığımda daha çok çalışırım.  
 28. Ödevler/ projeler üzerinde kendi başıma çalışmaktan hoşlanırım.  
 29. Ders kitabını okuduğumda anlatılanları dinleyerek öğrendiğimden daha çok öğrenirim.  
 30. Tek başıma çalışmayı tercih ederim.

## VISUAL

- 6-.....  
 10-.....  
 12- .....  
 24- .....  
 29- .....

## TACTILE

- 11- .....  
 14- .....  
 16- .....  
 22- .....  
 25- .....

TOPLAM .....X 2 = .....(PUAN)  
 .....(PUAN)

TOPLAM ..... X 2=

## AUDITORY

- 1-.....  
 7-.....  
 9- .....  
 17- .....  
 20- .....

## GROUP

- 3- .....  
 4- .....  
 5- .....  
 21- .....  
 23- .....

TOPLAM .....X 2 = .....(PUAN)  
 .....(PUAN)

TOPLAM .....X 2=

## KINESTHETIC

2-.....

8-.....

15- .....

19- .....

26- .....

TOPLAM .....X 2 = .....(PUAN)

.....(PUAN)

## INDIVIDUAL

13- .....

18- .....

27- .....

28- .....

30- .....

TOPLAM.....X 2=

Birincil Öğrenme Yöntemi	36-50
İkincil Öğrenme Yöntemi	25-37
Önemsiz derecedeki Öğrenme Yöntemi	0-24



## APPENDIX V

## Vocabulary Learning and Study Strategies Questionnaire

Reading Habits

- 1) How often do you read?
  - a) Every day
  - b) Alternate days/Every second day
  - c) Two or three days a week
  - d) Once a week
  - e) Less often
- 2) How long do you read for?
  - a) Less than one hour
  - b) 1 – 2 hours
  - c) 2 – 3 hours
  - d) More than three hours
- 3) What do you read in your spare time? Choose a maximum of three.
  - a) History
  - b) Philosophy
  - c) Humour
  - d) Literature
  - e) Science and Technology
  - f) Psychology and Education
  - g) Foreign language stories, novels, newspapers, magazines, etc
  - h) Other (please explain) .....
- 4) List two books you have read recently .....
- 5) Which of the following publications do you read regularly/ subscribe to?
  - a) Newspaper
  - b) Weeklies
  - c) Monthlies
  - d) Books

- e) All of the above
  - f) None of the above
- 6) Do you ever read English newspapers or books?
- a) Yes
  - b) Sometimes
  - c) Never

Study Habits

- 7) Do you have your own study room?
- a) Yes
  - b) No
- 8) Do you study regularly?
- a) Yes
  - b) Only prior to exams
  - c) No
- 9) Do you have fixed study hours?
- a) Yes
  - b) No
- 10) Do you organise your study materials well?
- a) Yes
  - b) No
- 11) Do you take breaks during study periods?
- a) Yes
  - b) Sometimes
  - c) No
- 12) If yes, how often?
- a) Every half an hour
  - b) Every hour
  - c) Every two hours
  - d) Other (please explain) .....
- 13) Do teachers influence your study habits?
- a) Yes
  - b) Sometimes
  - c) No

- 14) Does your family situation affect your study habits?
- a) Yes
  - b) Sometimes
  - c) No
- 15) Would you study if there were no exams?
- a) Yes
  - b) No
- 16) Approximately how many hours per week do you study English?
- a) Less than 2 hours
  - b) 2 – 4 hours
  - c) 4 – 6 hours
  - d) More than 6 hours
- 17) Do stress and nerves affect your study prior to exams?
- a) Yes
  - b) Sometimes
  - c) No
- 18) Is it necessary for you to re-read everything in order to understand?
- a) Yes
  - b) No
- 19) Do you sometimes convert what you read into graphics, summaries, tables, etc?
- a) Yes
  - b) No

Vocabulary Learning Habits

- 20) When you are reading English text, do you immediately look up unknown words in the dictionary?
- a) All of them
  - b) Some of them
  - c) None of them
- 21) Would you try to learn vocabulary if there were no exams?
- a) Yes
  - b) No

22) Do you keep a notebook for newly learned words?

- a) Yes
- b) No

23) Do you immediately incorporate new words in daily usage?

- a) Yes
- b) Sometimes
- c) No

24) Which of the following methods do you employ when reading English texts?

- a) First I scan the headings, then a few sentences of each paragraph to get the general gist of the text, before reading in detail.
- b) I read very carefully and slowly, paying attention to the meaning of every word.
- c) I try to translate mentally into Turkish.
- d) I ask others about anything I can't understand.
- e) I look up any unknown words I can select from the text before reading the entire passage.
- f) I research the subject in my native language before reading the English text.
- g) I try to make inferences while reading.
- h) When I come across an unknown word I can't go on any further.
- i) I try to memorise the sentences as I read them.
- j) I try to relate my past reading and experiences to the current text.
- k) I examine any tables or pictures before reading the text.
- l) I ignore pictures and tables when reading.

25) Do you usually keep your study periods short due to an inability to concentrate for long periods?

- a) Yes
- b) No

26) Number the following areas of English language learning in order of importance. (1 being most important)

- a) Reading
- b) Writing
- c) Speaking
- d) Listening

27) Number the following skills in order of your success. (1 being your most successful area)

- a) Reading
- b) Writing
- c) Speaking
- d) Listening
- e) Pronunciation
- f) Vocabulary Learning
- g) Grammar

28) What percentage of your study time do you devote to vocabulary learning?

- a) Approximately 25%
- b) Approximately 50%
- c) More than 50%
- d) Almost all it
- e) None

29) Do you use newly learned vocabulary in written or oral sentences?

- a) Yes
- b) No

30) Do you make any effort to learn vocabulary outside class time?

- a) Yes
- b) No

31) With which of the following statements do you agree in relation to foreign language vocabulary learning?

- a) Vocabulary learning is a naturally learning process and therefore doesn't require any special effort.
- b) It's essential to use a dictionary when learning vocabulary.
- c) Frequent reading is essential to vocabulary learning.
- d) Vocabulary learning is the most difficult area in language learning and therefore requires special attention and effort.

32) Which of the following techniques do you adopt when learning vocabulary?

- a) I list the words and then write the Turkish equivalents.
- b) I list the words and then write the English definitions.
- c) I write both the Turkish equivalent and also a sample sentence to demonstrate the

usage of the word.

- d) I underline the unknown words in the text and write the Turkish equivalents.
- e) I underline the unknown words in the text and write the English definitions.
- f) I write the new words on small pieces of paper and stick them where I will see them often.
- g) I underline the words in the dictionary after looking them up.
- h) I try simply to memorise the words after looking them up in the dictionary.
- i) Others (please explain) .....

33) How do you learn the pronunciation of the words?

- a) From the teacher
- b) From the dictionary
- c) From my friends
- d) Other (please explain) .....

34) Do you think your method of learning vocabulary is successful?

- a) Yes
- b) No

35) Which of the following ways best helps you remember new words?

- a) When I learn them in class
- b) When I learn them independently
- c) When I learn them from someone else
- d) Others (please explain) .....

36) Please explain any method you have to help you remember new vocabulary.....

.....

.....

37) Do you need to revise the vocabulary you learned in class later?

- a) Yes
- b) Sometimes
- c) No

38) Do you make sentences with your newly learned vocabulary?

- a) Yes
- b) Sometimes
- c) No

- 39) Do you use your newly learned vocabulary when writing a composition?
- a) Yes
  - b) Sometimes
  - c) No
- 40) How much contribution do you think the teacher makes to vocabulary learning?
- a) 100%
  - b) 75%
  - c) 50%
  - d) Less than 50%
- 41) With which of the following opinions do you agree?
- a) Having a large vocabulary is the most important indication of knowing a language.
  - b) Vocabulary knowledge is not the only indication of the level of language proficiency.
- 42) Should a teacher know every word of the language he/she is teaching?
- a) Yes
  - b) No
- 43) Which of the following methods will help to keep new vocabulary in mind? (Number from 1, 1 being the most helpful)
- a) When I read the Turkish equivalents or definitions from the dictionary or word list.
  - b) When I read the English definition from the dictionary or word list.
  - c) When I read or write a sentence in which the new word appears.
  - d) When I read a text in which the new word appears.
  - e) When the teacher explains the meaning of the word in Turkish.
  - f) When the teacher explains the meaning of the word in English.
  - g) Others (please explain) .....
- 44) Which of the following kinds of words pose the most difficulty in learning?
- a) Concrete
  - b) Abstract
  - c) Both
  - d) No special difficulty with any kind of words
- 45) Do you try to understand the words of English songs?
- a) Yes

b) Sometimes

c) No

46) What type of dictionary do you use?

a) Small pocket dictionary

b) Dictionary with full explanations and examples

c) Electronic dictionary

d) Whatever is handy

e) No dictionary

47) Which of the following dictionaries do you use?

a) English/Turkish

b) Turkish/English

c) English/English

d) All of them



## APPENDIX VI

## Sözcük Öğrenme ve Çalışma Stratejileri Anketi

Okuma Alışkanlıkları

1) Ne sıklıkta okuyorsunuz?

- a) her gün
- b) gün aşırı
- c) birkaç günde bir
- d) haftada bir
- e) daha seyrek

2) Her okuyuşunuzda okumaya ayırdığınız süre ne kadardır?

- a) 1 saatten az
- b) 1-2 saat
- c) 2-3 saat
- d) 3 saatten fazla

3) Boş zamanlarınızda okumayı tercih ettiğiniz konular nelerdir? (En fazla 3 tanesini işaretleyiniz.)

- a) tarih
- b) felsefe
- c) mizah yazıları
- d) edebiyat
- e) bilim teknik
- f) psikoloji / eğitim
- g) yabancı dilde yazılmış hikaye, roman, gazete vb.
- h) diğer(belirtin):

.....

4) En yakın zamanda okuduğunuz iki kitabın adını yazınız.....  
.....

5) Ana dilinizde yazılmış aşağıdaki yayınlardan hangilerini düzenli olarak okuyorsunuz?  
(Birden fazla işaretleyebilirsiniz.)

- a) gazete
- b) haftalık dergi
- c) aylık dergi
- d) kitap
- e) hepsi
- f) hiçbiri

6) İngilizce herhangi bir yayın veya kitap okuyor musunuz?

- a) evet
- b) bazen
- c) hayır

Ders çalışma alışkanlıkları

7) Kendinize ait bir çalışma odanız var mı?

- a) evet
- b) hayır

8) Düzenli ders çalışma alışkanlığınız var mı?

- a) evet
- b) sadece sınav zamanlarında
- c) hayır

9) Belirli çalışma saatleriniz var mı?

- a) evet
- b) hayır

10) Çalışma malzemeniz düzenli midir?

- a) evet

b) hayır

11) Çalışırken ara verir misiniz?

- a) evet
- b) hayır
- c) bazen

12) Ara veriyorsanız ne sıklıkta veriyorsunuz?

- a) yarım saatte bir
- b) saatte bir
- c) iki saatte bir
- d) diğer: (belirtin) .....

13) Öğretmenler ders çalışmanızı etkiler mi?

- a) evet
- b) bazen
- c) hayır

14) Ailenizin durumu / tutumu çalışmanızı etkiler mi?

- a) evet
- b) bazen
- c) hayır

15) Sınavlar olmasa ders çalışır mıydınız?

- a) evet
- b) hayır

16) İngilizce ders çalışma süreniz haftada yaklaşık olarak kaç saattir?

- a) 2 saatten az
- b) 2-4 saat
- c) 4-6 saat
- d) 6 saatten fazla

17) Bir sınava hazırlanırken gerginlik ve huzursuzluktan ötürü çalışmakta güçlük çeker misiniz?

- a) evet
- b) hayır
- c) bazen

18) Çalışırken anlayabilmek için çoğunlukla bir konuyu defalarca okur musunuz?

- a) evet
- b) hayır

19) Zaman zaman öğrendiklerinizi grafikler, şemalar ve özetler halinde ifade eder misiniz?

- a) evet
- b) hayır

#### Sözcük öğrenme alışkanlıkları

20) İngilizce metin okurken bilmediğiniz veya anlamından emin olmadığınız sözcükleri hemen sözlükten bakar mısınız?

- a) evet, hepsine bakarım
- b) birkaçına bakarım
- c) hayır, bakmam

21) Sınav olmasa sözcük çalışır mıydınız?

- a) evet
- b) hayır

22) Öğrendiğiniz yeni sözcükleri ve anlamlarını yazmak için bir defter tutar mısınız?

- a) evet
- b) hayır

23) Yeni öğrendiğiniz sözcükleri hemen kullanmaya çalışır mısınız?

- a) evet
- b) bazen
- c) hayır

24) Aşağıdakilerden hangileri İngilizce bir metni okurken izlediğiniz yöntemlerdir? (En fazla 3 tanesini seçiniz.)

- a) Ayrıntılı olarak okumaya başlamadan önce genel bir fikir sahibi olmak için hızlı bir göz gezdirir, örneğin sadece paragraf başlıklarını ve altındaki cümleleri okurum.
- b) Her sözcüğün anlamına dikkat ederek çok yavaş okurum.
- c) Okuduklarımı aklımdan Türkçe'ye çevirmeye çalışırım.
- d) Anlamadığım yerleri arkadaşşıma/arkadaşlarıma sorarım.
- e) Önce sözcükleri çıkarır, anlamlarına bakar, sonra okurum.
- f) Konu ile ilgili anadilde araştırma yaparım.
- g) Okurken ne demek istiyor diye düşünürüm.
- h) Bilmediğim sözcük çıkarsa ilerleyemem.
- i) Okuduğum cümleleri ezberlemeye çalışırım.
- j) Yazılanlar ile başka okuduklarımı ve yaşadıklarımı karşılaştırmaya çalışırım.
- k) Resim, şema vs. varsa önce bunlarla ilgilenirim.
- l) Resim, şema vs. varsa bunlarla pek ilgilenmem.

25) Çalışırken dikkatinizi toplamakta güçlük çektiğinizden dolayı, çalışma süreleriniz genellikle kısa mıdır?

- a) evet
- b) hayır

26) Aşağıdaki İngilizce dil becerilerini sizce en önemliden en önemsizye doğru sıralayınız ( en önemli olana 1 veriniz):

- a) okuma
- b) yazma
- c) konuşma
- d) dinleme

27) Aşağıdaki İngilizce dil becerilerini kendinizi en başarılı bulduğunuzdan en başarısız bulduğunuza doğru sıralayınız ( en başarılı bulduğunuza 1 veriniz):

- a) okuma
- b) yazma

- c) konuşma
- d) dinleme
- e) telaffuz
- f) sözcük öğrenimi
- g) gramer öğrenimi

28) İngilizce ders çalışma sürenizin ne kadarını İngilizce sözcük öğrenmeye ayırıyorsunuz?

- a) yaklaşık % 25 ini
- b) yaklaşık % 50 sini
- c) % 50 sinden fazlasını
- d) yaklaşık tüm süreyi
- e) sözcük öğrenmek için hiç vakit ayırmıyorum.

29) Öğrendiğiniz sözcüklerle yazılı veya sözlü olarak cümle kuruyor musunuz?

- a) evet
- b) hayır

30) İngilizce sözcük öğrenmek için ders dışında özel bir çaba harcıyor musunuz?

- a) evet
- b) hayır

31) Yabancı dilde sözcük öğrenimi konusunda aşağıdaki görüşlerden hangisine katılıyorsunuz? (En fazla 2 tanesini seçin)

- a) Sözcük öğrenimi, dil öğreniminin doğal bir parçasıdır ve bu nedenle sözcük öğrenmek için özel bir çabaya gerek yoktur.
- b) Sözcük öğreniminde sözlük kullanımı esastır.
- c) Sözcük öğreniminde bol bol okuma yapma esastır.
- d) Sözcük öğrenimi, dil öğreniminin en zor kısmıdır ve bu nedenle özel bir çalışma yapmayı gerektirir.

32) Sözcük öğrenimi için aşağıdaki yöntemlerden hangisini/hangilerini kullanıyorsunuz? (En fazla 2 tanesini işaretleyin.)

- a) Sözcüklerin bir listesini yapıp, Türkçe karşılıklarını yazarım.
- b) Sözcüklerin bir listesini yapıp, İngilizce karşılıklarını yazarım.
- c) Sözcüklerin hem karşılıklarını, hem de nasıl kullanıldığını belirtmek için birer örnek cümle yazarım.
- d) Sözcüklerin geçtiği yerde altını çizip yanına Türkçe anlamını yazarım.
- e) Sözcüklerin geçtiği yerde altını çizip yanına İngilizce anlamını yazarım.
- f) Sözcükleri kağıtlara yazıp odamda vs. görünen bir yere asarım.
- g) Sözlükten sözcüğü bulup orada altını çizerim.
- h) Özel bir yöntem izlemeksizin sözcüğün anlamını sözlükten bulup aklımda tutmaya çalışırım.
- i) Diğer(belirtin):

.....

33) Sözcüklerin telaffuzlarını nasıl öğreniyorsunuz?

- a) öğretmenden öğrenirim
- b) sözlüğe bakarım
- c) arkadaşşıma sorarım
- d) diğer (belirtin):

.....

34) Sözcük öğrenme yönteminiz sizce başarılı mı?

- a) evet
- b) hayır

35) Sözcükleri aşağıdakilerden hangi yolla öğrendiğinizde daha çok aklınızda kalıyor?

- a) derste öğrendiğim zaman
- b) kendi başıma çalışırken öğrendiğim zaman
- c) başkasından öğrendiğim zaman
- d) diğer (belirtin):

.....

36) Sözcüklerin aklınızda kalması için uyguladığınız özel bir yöntem varsa belirtin:

.....

37) Derste öğrendiğiniz sözcükleri daha sonra mutlaka gözden geçirmeniz gerekiyor mu?

- a) evet
- b) bazen
- c) hayır

38) Öğrendiğiniz sözcüklerle cümle kurar mısınız?

- a) evet
- b) bazen
- c) hayır

39) Öğrendiğiniz sözcükleri kompozisyon yazarken kullanır mısınız?

- a) evet
- b) bazen
- c) hayır

40) Sözcük öğreniminde öğretmenin katkısı sizce nedir?

- a) % 100
- b) % 75
- c) % 50
- d) % 50 den az

41) Aşağıdaki görüşlerin hangisine katılıyorsunuz?

- a) Sözcük bilmek, kesinlikle bir dili bilmenin en önemli göstergesidir.
- b) Sözcük bilgisi, kişinin dil bilme düzeyinin tek göstergesi değildir.

42) Öğretmen dildeki her sözcüğü bilmeli midir?

- a) evet
- b) hayır

43) Yeni öğrendiğiniz sözcükler en çok hangi şekilde aklınızda kalıyor? ( Seçtiklerinizi 1'den başlayarak sıralandırarak belirtiniz.)

- a) Türkçe anlamını sözlükten / sözcük listesinden okuduğum zaman
- b) İngilizce anlamını sözlükten / sözcük listesinden okuduğum zaman
- c) O sözcüğün kullanıldığı bir cümle örneği okuduğum / yazdığım zaman
- d) İçinde o sözcüğün geçtiği bir metin okuduğum zaman
- e) Öğretmen anlamını Türkçe olarak açıkladığı zaman
- f) Öğretmen anlamını İngilizce olarak açıkladığı zaman
- g) Diğer(belirtin):

.....

44) Hangi tür sözcükleri öğrenmede zorlanıyorsunuz?

- a) somut kavramlar
- b) soyut kavramlar
- c) her ikisinde de
- d) öğrenmede özellikle zorlandığım bir sözcük türü yok

45) İngilizce şarkı dinlerken sözlerini anlamaya çalışıyor musunuz?

- a) evet
- b) bazen
- c) hayır

46) Ne tür sözlük kullanıyorsunuz?

- a) küçük cep sözlüğü
- b) kapsamlı ve örnekli sözlük
- c) elektronik sözlük
- d) hangisi olursa
- e) sözlüğüm yok

47) Normal sözlük kullanıyorsanız aşağıdakilerden hangisini kullanıyorsunuz?

- a) İngilizce-Türkçe
- b) Türkçe-İngilizce
- c) İngilizce-İngilizce
- d) Hepsini

## APPENDIX VII

### Follow-up Questionnaire for the Control Group

The following questions were prepared to determine the vocabulary learning strategies used by students who were assigned the study of selected new vocabulary from authentic texts using the word lists only. Please answer every question by selecting the most appropriate option/s to you.

- 1) In this study
  - a) I read the texts but I didn't study the word lists.
  - b) I studied the word lists but didn't read the texts.
  - c) I both studied the word lists and read the texts.
  - d) I couldn't find time either reading the texts or studying the word lists.
- 2) In this study
  - a) I read the texts several times trying to guess the meanings of unknown words before I started studying the word lists.
  - b) I focussed primarily on the word lists without trying to guess the meaning of the words.
- 3) I read the texts
  - a) once
  - b) twice
  - c) more than twice
- 4) While studying word lists
  - a) I practised writing the words and also repeating the Turkish equivalents.
  - b) I mentally tried to memorise the words while reading the word lists.
  - c) I memorised them while writing and orally repeating the words.

5) In this study

- a) I looked up the meaning of the words while reading the texts.
- b) I read the texts after memorising the meanings of the words.
- c) I looked up the meanings after readings the texts.
- d) I first read the texts then looked up the meanings of the words and then re-read the texts.

6) While studying vocabulary

- a) I inserted the meanings of the words in the texts after looking them up in the word list.
- b) I memorised the meanings from the word lists.
- c) Other (please explain).....

7) While studying word lists

- a) I tried to memorise individual words and meanings from the word list.
- b) I tried to relate the words to one another while memorising.
- c) Other (please explain).....

8) How many hours did you devote to learning the selected vocabulary in the word list?

Why?

.....

.....

.....

.....

**APPENDIX VIII****Uygulama Sonrası Anketi (Kontrol Grubu)**

Aşağıdaki sorular ikinci dönem yapılan otantik metinler kullanarak sözcük öğrenimi çalışmasında ne tür stratejiler kullanıldığını belirlemek amacıyla hazırlanmıştır. Lütfen soruların hiçbirini boş bırakmayarak size uygun olan seçenek veya seçenekleri işaretleyiniz:

- 1) Bu çalışmada
  - a) metinleri okudum ama sözcük listelerini çalışmadım.
  - b) sözcük listelerini çalıştım ama metinleri okumadım.
  - c) hem metinleri okudum hem de sözcük listelerini çalıştım.
  - d) ne metinleri okumaya ne de sözcük listelerini çalışmaya zaman ayıramadım.
- 2) Bu çalışmada
  - a) sözcükleri listeden çalışmaya başlamadan önce metinleri birkaç kez okuyup anlamlarını tahmin etmeye çalıştım.
  - b) sözcüklerin anlamlarını tahmin etmeye çalışmadan doğrudan sözcük listesine bakarak karşılıklarını öğrendim.
- 3) Verilen metinleri
  - a) 1 kez okudum.
  - b) 2 kez okudum.
  - c) 2 kereden fazla okudum.
- 4) Verilen sözcük listesini çalışırken
  - a) sözcükleri yazarak ve Türkçe karşılıklarını da tekrarlayarak çalıştım.
  - b) sözcükleri yazmadan sadece listeden okuyarak ezberledim.

c) sözcükleri hem yazarak hem de sözlü olarak tekrar ederek ezberledim.

5) Bu çalışmada

- a) metni okurken sözcüklerin anlamlara baktım.
- b) sözcüklerin anlamlarını ezberledikten sonra metni okudum.
- c) metni okuduktan sonra anlamlarına baktım.
- d) metni okudum, sözcüklerin anlamlarına baktım, sonra tekrar metni okudum.

6) Sözcükleri çalışırken

- a) listeden bulduğum karşılıklarını metinlerde sözcüğün yanına not ederek ezberledim.
- b) sadece listelerden karşılıklarını ezberlemeye çalıştım.
- c) diğer (belirtin):
- d) .....

.....

.....

7) Listeleri çalışırken

- a) sözcükleri ve anlamlarını tek tek ezberlemeye çalıştım.
- b) sözcükleri birbirleri ile ilişkilendirerek ezberlemeye çalıştım.

8) Verilen sözcük listesindeki sözcükleri öğrenmek için kaç saat ayırdınız? Neden?

.....

.....

.....

.....

.....

.....

.....

## APPENDIX IX

### Follow-up Questionnaire for the Experimental Group

The following questions were prepared to determine the vocabulary learning strategies used by students who were assigned the study of selected new vocabulary from authentic texts using the semantic mapping method only. Please answer every question by selecting the most appropriate option/s to you.

1. In this study
  - a) I read the texts but I didn't study the semantic maps.
  - b) I studied the semantic maps but didn't read the texts.
  - c) I both studied the semantic maps and read the texts.
  - d) I couldn't find time either reading the texts or studying the semantic maps.
2. In order to learn the words in the semantic maps
  - a) I asked my friends for the Turkish equivalents.
  - b) I asked my teachers for the Turkish equivalents.
  - c) I tried to guess the meanings from the texts.
  - d) I looked up the meanings in the dictionary.
3. In this study
  - a) I read the texts several times trying to guess the meanings of unknown words before I started studying the semantic maps.
  - b) I checked for definitions in the dictionary without trying to guess the meaning of the words.
4. I read the texts
  - a) once
  - b) twice
  - c) more than twice

- 5. If you looked up the meanings in the dictionary, which of the following methods did you use while studying semantic maps?
  - a) I wrote the meanings on the semantic maps.
  - b) I prepared a separate list.
  - c) I inserted the meanings in the text.
  - d) Other (please explain).....
  
- 6. I had difficulty in determining the contextual meaning of the words in the semantic maps.
  - a) Yes
  - b) No
  - c) For some words only
  
- 7. Relating the words to one another in the semantic maps
  - a) facilitated my learning my learning of the target vocabulary
  - b) inhibited my learning of my learning of the target vocabulary
  - c) made no difference to my learning of the target vocabulary
  
- 8. In this study
  - a) I looked up the meaning of the words while reading the texts.
  - b) I read the texts after memorising the meanings of the words.
  - c) I looked up the meanings after readings the texts.
  - d) I first read the texts then looked up the meanings of the words and then re-read the texts.
  
- 9. While studying vocabulary
  - a) I memorised the words by inserting the Turkish equivalent into the texts.
  - b) I memorised the words only by studying the semantic maps.
  - c) Other (please explain).....
  
- 10. How many hours did you devote to learning the selected vocabulary in the word list?  
Why?  
.....

**APPENDIX X****Uygulama Sonrası Anketi (Deney Grubu)**

Aşağıdaki sorular ikinci dönem yapılan otantik metinler kullanarak sözcük öğrenimi çalışmasında ne tür stratejiler kullanıldığını belirlemek amacıyla hazırlanmıştır.

Lütfen soruların hiçbirini boş bırakmayarak size uygun olan seçenek veya seçenekleri işaretleyiniz:

1) Bu çalışmada

- a) metinleri okudum ama sözcük şemalarını çalışmadım.
- b) sözcük şemalarını çalıştım ama metinleri okumadım.
- c) hem metinleri okudum hem de sözcük şemalarını çalıştım.
- d) ne metinleri okumaya ne de sözcük şemalarını çalışmaya zaman ayıramadım.

2) Verilen sözcük şemasındaki sözcükleri öğrenmek için Türkçe karşılıklarını

- a) arkadaşlarıma sordum.
- b) hocalarıma sordum.
- c) metinden tahmin etmeye çalıştım.
- d) sözlükten bakarak buldum.

3) Bu çalışmada

- a) sözcükleri şemadan çalışmaya başlamadan önce metinleri birkaç kez okuyup anlamlarını tahmin etmeye çalıştım.
- b) sözcüklerin anlamlarını tahmin etmeye çalışmadan doğrudan sözlüğe bakarak karşılıklarını öğrendim.

4) Verilen metinleri

- a) 1 kez okudum.
- b) 2 kez okudum.
- c) 2 kereden fazla okudum.

- 5) Verilen sözcük şemasını çalışırken Türkçe karşılıklarını sözlükten bulduysanız aşağıdaki metotlardan hangisini izlediniz?
- Şemanın üzerine yazdım.
  - Kendime ayrı bir liste hazırladım.
  - Metinde kelimelerin yanına not ettim.
  - Diğer (belirtin):.....  
.....  
.....
- 6) Sözcük şemasındaki sözcüklerin metinde hangi anlamda kullanıldığını saptamakta zorluk çektim.
- evet
  - hayır
  - bazılarında
- 7) Sözcük şemasında verilen sözcüklerin birbirleriyle ilişkilendirilmesi
- sözcükleri öğrenmemi kolaylaştırdı.
  - Sözcükleri öğrenmemi zorlaştırdı.
  - Sözcükleri öğrenmeme olumlu ya da olumsuz bir katkıda bulunmadı.
- 8) Bu çalışmada
- metni okurken sözcüklerin anlamlara baktım.
  - sözcüklerin anlamlarını ezberledikten sonra metni okudum.
  - metni okuduktan sonra anlamlarına baktım.
  - metni okudum, sözcüklerin anlamlarını buldum, sonra tekrar metni okudum.
- 9) Sözcükleri çalışırken
- Türkçe karşılıklarını metinlerde sözcüğün yanına not ederek ezberledim.
  - sadece sözcük şemasına bakıp ezberlemeye çalıştım.
  - diğer (belirtin):  
.....  
.....  
.....
- 10) Verilen sözcük listesindeki sözcükleri öğrenmek için kaç saat ayırdınız? Neden?  
.....  
.....

## APPENDIX XI

## Turkish Cloze Test -1- (Authentic)

## Devrimci Bebek Prens Aiko

Japon Veliht Prensi Naruhito ve Prensese Masako'nun yeni doğan kızları "Aiko" doğumunun ilk haftasında tartışmalara konu oldu. Bebeğin kız olması dolayısıyla ..... olup olamayacağı gündeme geldi. .... erkek olsaydı hiçbir sorun ..... Prens Naruhito'dan sonra tahta ..... .

Japon yasalarına göre kadınlar ..... çıkamıyor. Yapılan araştırmalar halkın ..... çoğunluğunun bu kuralın değişmesi ..... olduğunu gösteriyor. Politikacılar da ..... fikri gözden geçirmeye başladı. .... Muhafazakar kesim, özellikle de ..... olan Liberal Demokratik Parti ..... değişime pek sıcak bakmıyor.

..... durgunluk, hızla yaşlanan nüfus ..... kadınlara iş dünyasında uygulanan ..... Japon halkının sesini giderek ..... neden oluyor. Bebek Aiko'nun ..... ve değişimi müjdelediğine inanıyorlar.

..... düşünenler yeni bir dalgayla ..... daha fazla tüketim yapmasını ..... ediyor. Uzun vadede ülkede ..... 'bebek patlaması' olması bekleniyor. .... hızla emekliye ayrılan çalışanların ..... yeni işgücü yetişecek. Ülkenin ..... oranı (bir kadının doğurduğu ..... çocuk sayısı) yalnızca 1.4.

İşgücünün .....ekonomiyi kadın emeğine gittikçe ..... bağlı hale getiriyor. Bugün ..... ülkede her açıdan hak ..... çok daha düşük standartlarda ..... . Eğer işgücü düşmeye devam ..... kadınların kariyer planları desteklenecek, ..... yaşta ve çok sayıda ..... sahibi olmaları teşvik edilecek.

..... durum çocuk bakımına daha ..... önem verilmesine, kariyer şartlarının ..... esnek olmasına ve erkeklerin ..... radikal bir biçimde

değişmesine .....açacak. Bunlar şimdilik birçok ..... aklından bile geçmeyen değişiklikler.

..... tahta geçmesine izin veren .....yenilik Japon kadınların zaferinin ..... olabilir. Ülkenin tarihinde toplam ..... imparatoriçenin olduğu düşünülürse ( inanışa ..... imparatorluğun kaynağı olan güneş ..... Amaterasu'yu saymazsak) bu umudun ..... olmadığı görülüyor. Tahta çıkacak ..... daha genç olması kadın ..... yıllarca unutulmasına yol açabilir.

(Radikal, 18 Eylül, 2001.)



## APPENDIX XII

## Turkish Cloze Test -2- ( Translation)

## Babalık Sanatı

Amerika'nın en komik ve tuhaf babası ilk kitabını yazmak üzere kalemi eline alırsa, *Babalık Sanatı*'ndan daha iyi bir konu bulunabilir mi?

*Babalık Sanatı* adlı bu ..... Bill Cosby'nin kendine özgü ..... anlayışı, akli, zekası ve ..... ama görkemli insanlığı baba ..... insana haz veren kutlayışını ..... üzere bir araya gelmişlerdir. Bill Cosby ..... bir oğul sonra bir .....olarak kendi yaşadığı deneyimlere ..... fıkraları, esprili öyküleri ve ..... aklına geliveren anıları gerçekten ..... bir güldeste halinde bir ..... getirmiştir. İşte böylece oluşturulan ..... Bill, babalığın tamamını mutlu ....., "Bir kızım oldu!" bildirisinden ..... yeniyetmelerin yetişip ortaya çıkışına ..... çocukların birer birer yuvayı ..... duyumsadığı karmakarışık duygulara değin ..... anlatmaktadır. *Babalık Sanatı* tüm ..... adına baba olanlara, baba ..... planlayanlara ya da kendi babaları ..... daha çok şeyi öğrenmek ..... erkeklere seslenir. Ve kitap, ..... ile kocalarını daha iyi ..... isteyen kadınlar için aydınlatıcı ..... kılavuzdur.

Çocuklardan bir türlü ....., çocuklar üzerinde yarattığı çekim ..... pek çok ana baba ..... gıpta ile karşılanan Bill Cosby ..... beş ya da elli yaşında ..... bile çok iyi anlamaktadır. ..... gelen duyumsamalarla öğretmenlik mesleğini ..... Bill, öğrenim üzerine doktorasını 1977 ..... otuz dokuz yaşındayken tamamlamıştır. ..... yılı aşkın süredir evli ..... Bill beş çocuk babasıdır. ..... dizi filminde, televizyon reklamlarında ..... günümüzde benzersiz başarıyla sürmekte ..... "Cosby Ailesi" dizisinde rol

..... Bill Cosby her Amerikalı ..... pek sevilen ve sevgi  
..... üyesi durumuna gelmiştir.

Cosby, B. (1922). *Bill Cosby-Babalık Sanatı*. (Çev. Nejat Ebciođlu). İstanbul: İnkilap  
Kitabevi.



## APPENDIX XIII

### Pre-Test

Fill in the spaces with a suitable word from the box. There are two extras.

<b>conditions</b>	<b>household</b>	<b>teaching</b>	<b>attacks</b>	<b>gradually</b>
<b>industrial</b>	<b>counterparts</b>	<b>cynics</b>	<b>make</b>	<b>achievements</b>
<b>paid</b>	<b>force</b>	<b>admit</b>	<b>outspoken</b>	<b>industries</b>
<b>in</b>	<b>went</b>	<b>inner</b>	<b>women's</b>	<b>threats</b>
<b>no</b>	<b>computer</b>	<b>of</b>	<b>around</b>	<b>exaggeration</b>
<b>committed</b>	<b>spite</b>	<b>then</b>	<b>refundable</b>	<b>administrator</b>

A century ago, women spent almost all of their adult lives in having and taking care of children. Decades later, things were .....(1) changing. Women became more ..... (2) and men had to .....(3) adjustments while their wives .....(4) out to work, leaving .....(5) chores to them.

In .....(6) jobs, women made up .....(7) half of the labour .....(8). They did a lot .....(9) the 'assembly line work' .....(10) the car and electrical .....(11) but were frustrated by .....(12) which meant they were .....(13) less money than men.

.....(14) professional jobs other than .....(15) were available for women .....(16) but nowadays women's exceptional .....(17) have shown how strongly .....(18) they are to the .....(19) movement.

It is no .....(20) to say that in .....(21) of many savage verbal .....(22) and occasionally even death .....(23), they have demonstrated enormous .....(24) strength and integrity. Women .....(25) consultants and politicians today .....(26) that they have become .....(27) and that their male .....(28) still boast of their superiority in the workforce.

## APPENDIX XIV

### Post-test

Fill in the spaces with a suitable word from the box. There are two extras.

<b>defeat</b>	<b>endured</b>	<b>unaware</b>	<b>suburbs</b>	<b>indescribable</b>
<b>unaware</b>	<b>virtually</b>	<b>comprehend</b>	<b>supplied</b>	<b>evacuated</b>
<b>consolation</b>	<b>rescue teams</b>	<b>trapped</b>	<b>victims</b>	<b>flashlights</b>
<b>moaning</b>	<b>darkened</b>	<b>refuge</b>	<b>under the auspices of</b>	
<b>supplied</b>	<b>convicted</b>	<b>distraction</b>		

Cyclone Tracy was one of Australia's worst peacetime disasters this century. The magnitude of the .....(1) destruction was impossible to ..... (2). Thirty-five thousand inhabitants were .....(3) from the city-centre and .....(4).

The swift, treacherous storm .....(5) the sun and left .....(6) frozen in terror and .....(7) that the city was .....(8) destroyed.

Forced to take immediate .....(9), thousands of homeless were .....(10) with basic emergency housing .....(11) the Red Cross Organisation.

.....(12) pooled resources accomplishing breathtaking .....(13) crawling through backyards with .....(14), and lurching along flooded, .....(15) streets determined to detect .....(16) survivors.

Torrential rain brought ..... (17) and deep despair as .....(18) bodies were exposed. Little .....(19) was available and families .....(20) their grief which would haunt them for many years to come.

## APPENDIX XV

### First Set of Six Authentic Texts

#### Just an Old-fashioned Girl

Near the end of our hour in November at the Dorchester, I asked Kate Winslet: "And you're going to get married next year?" She is a good actress - I have replayed the tape a few times, and there is no **hint** of a **hiccup**. She said: "This is the plan, yeah. We're trying to set our date at the moment. I can't wait, I'm so excited." She couldn't wait either: A few days later she was on the front of every newspaper in the country with her new husband, Jim Threapleton - first in a country churchyard in Reading, her home town, then later having **bangers and mash** and **bakewell tart and custard** at the Crooked Billet pub. Ah well.

I don't think she would have enjoyed the **fib**. Although she had the usual, **depressing, celebrity** complaints about the press - for her they sent her on our **obsession** with her weight, which we'll come to - she has not, at 23, become a **cynic**. Talking to her felt like talking to (or, more accurately listening to) a real person - our **mutual connivance** in the publicity production line **notwithstanding**. A young, self-confident, middle-class English person.

.....  
 She's an **enthusiast** and **emphasiser**. She did not use one "very" or "really" or "absolutely" where three will do. To **render** her speech with full **precision** would bring protests of overwork from the **italic function** on this **keyboard**.

.....  
 She loves acting, loves the life, loves the travel, but believes that it is vital not to work all the time because (philosophical tone) "life is so important, so important."

She is **sensible**. She is **rooted** in a big, happy family. She is **keen** to be **down-to-earth**, and for the most part she is down-to-earth. When I met her I asked her what she was wearing so I could describe it for those who like that detail. "A black Joseph suit and a T-shirt I bought in Australia for about \$20." That combination says: enjoying success in an **understated** way, not letting it to go to her head. If this combination were **calculated**, then it would be **irritating**. I don't think it is calculated.

.....  
 She was one of those girls who grew up quickly, wanted responsibility and got it. Although success has come early, she was ready for it. "I started working when I was 13. My heart was so in it." She is not one of those performers who perform because their parents got it so wrong they left their child with a **craving** for **affection** and attention. Rather, her parents got it very much right, **enabling** their girl to take her place in the **adult** world while still, **numerically**, very young.

.....  
 She smoked **roll-ups** throughout our interview. I should have asked if cigarettes **replaced** over-eating, but it's only just **occurred to** me now. I did ask if she drank much. "I am like everyone - I love a drink. But I don't enjoy getting drunk. I am a bit of a

**control freak** so I don't like the feeling of out of control. I have never taken any drugs in my life, I really haven't. Also I didn't go to university, that's where you do Ecstasy or coke or whatever."

.....  
 People think that celebrities, especially performers must be selfish, **self-indulgent**, wild, **egotistical** people. The more I meet, the more I think they are more often the opposite: **straight, focussed**, hard-workers who get the **drive** necessary to maximise their talent from a sense of responsibility to something bigger than themselves - a family, a profession, a cause even. It's just a theory. Kate Winslet **fits** it rather well.

*(from Time Magazine, August 2000)*

## Beyond Genius

### Patek Philippe's **legendary legacy**

*Every century produces men and women who, through their **exceptional achievements**, leave an **indelible mark on the universe** - none more so than Albert Einstein, **physicist, humanitarian, true genius**.*

Some discoveries have completely **altered** our lives: electricity, the telephone, the motor car. Although useful, they are **minor** in their importance when compared to the work of Albert Einstein. His theories have altered forever our views on **matter**, time, space and **motion** and have helped scientists across the **globe** understand our universe.

At 12, bored and **frustrated** with formal education, the German-born **devoted** himself to solving the **mysteries** of the world. 1905 was his **miracle** year. Just 26 years old, he **conjectured** that everything in the universe is a **repository** of energy. His famous  $E=MC^2$  formula **theorised** that **converting** a small amount of **mass** would **release** an enormous amount of energy (later **demonstrated** by the atomic bomb). That alone would have been enough to secure his reputation in history.

Yet he published work on critical **opalescence** which answered the **age-old** question of why the sky is blue. His general theory of **relativity** was the first **major** new theory of **gravity** since Isaac Newton's more than two and a half centuries earlier. He proved the **existence** of atoms, **modelled** the behaviour of the **entire** universe and developed **quantum theory**.

An **outspoken** and political man, Einstein was subject to **savage verbal attacks** and **death threats**, not only for his political views on pacifism and Zionism, but also for his scientific ones. Just how **controversial** his work was considered is **revealed** by the Nobel Prize awarded to him in 1922, not for relativity but for his work on photoelectric effects.

Before Einstein, physicists had always viewed time as **immutable**. Einstein wore a **constant** reminder that he was to introduce time into the relativity **equation**. His Patek Philippe pocket watch, with its extra large Roman **numerals** to **compensate** for his bad **eyesight**, was certainly well-worn throughout his lifetime.

.....  
 He later considered his letter to Roosevelt one of his greatest mistakes. One of his last acts, a week before his death in April 1985, was an agreement that his name should **head a manifesto urging** all nations to give up **nuclear weapons**. "The release of atomic power has changed everything except our way of thinking the solution to this problem lies

in the heart of **mankind**. If only I had known I would have become a watchmaker," he **lamented**.

(from *Time*, December 31, 1999)

### Measuring Up: It's Not A Small World After All

Nancy Rotering can't help smiling when her **paediatrician** looks at Government **growth charts** and tells her that both her **toddlers** are bigger than 95 percent of their **peers**. "I'm unfortunately one of those parents who just loves seeing that my children are **off the charts**," she **admits**. She's not alone. Since the United States first began publishing national statistics for kids' height, weight and head **circumference** in 1977, parents have **boasted** that their kids are so-o-o big -- or have **obsessed** that they are too small. Pam Hussey, the mother of 1-year-old twins, was worried when her daughter was born in the 10<sup>th</sup> **percentile** for weight and then was **elated** when she quickly shot into the 95<sup>th</sup>. "I've got to admit, I like having big kids," she says.

When it comes to young children, people **equate** large size with health -- and that's the problem. Too many American **kiddies**, like their parents, are **obese**. "I don't see how they can **blow up** much more," says Tulane University's Gerald Berenson. A typical 10-year-old today, for example, is about 10 pounds heavier than his peer two **decades** ago. As a result, when the U.S. Centres for Disease Control and Prevention **posts** on the Internet its first-ever **revision** in growth charts later this year, the numbers will not **reflect** the weight change for kids 6 and older. Health experts worried that revising the weights upward to reflect reality would **lull** parents into thinking their kids' **hefty poundage** was all right. "We're no longer exactly describing the American population. We're making some **judgements** about what's good for them," explains National Centre of Health Statistics **consultant** Alex Roche.

.....

All the data being **gathered** will give parents a **significant** new measurement to **fret** about: a body-mass index. The index is a measure of weight **adjusted** for height that scientists already use in adults to determine who is at greatest risk for **severe** health problems. **Over-weight** children often become obese adults, who are far more likely to suffer from heart disease, diabetes, and high **blood pressure** even in their early 20s. And so parents and their paediatricians will have a new **tool** to **evaluate** whether their children 2 and up have become more than **merely charmingly plump**.

.....

The new charts may **dash** parents' expectations that their kids will be taller than the previous generation's. While human **stature** can be **stunted** by bad **nutrition** (Europeans in the 19<sup>th</sup> century, for example), the outer limit on height probably hasn't changed much in 1.5 million years: 14 years ago, **palaeontologists** in northern Kenya **unearthed** a skeleton of a boy who even then would have grown to be 6 feet 1. **Competitive** parents should be happy, too, that their sons aren't all **shooting up** to NBA **altitude**. The world's tallest man, 8-foot-11 Robert Pershing Wadlow, died in 1940 at the age of only 22. It's not always nice to be off the charts.

(from *Time*, December 31, 1999)

## Samples of Job Advertisements

### Marketing Manager

- ★ Global Media Group
- ★ Reporting to the Managing Director

This newly created role will **appeal to** a highly **talented** senior Marketing Manager with a background in media, advertising or **e-commerce**.

Responsible for eight **brands**, you will develop marketing strategies and **drive** these marketing programs with the **assistance** of four marketing **staff**.

Working closely with the Sales Manager your **primary purpose** will be to **assist** in growing this **unique** business by way of **corporate** branding and creative marketing programs.

**Whilst tertiary qualifications** are highly **desirable**, we are **seeking** a "**hands on**" senior marketing **executive** who can bring a high level of commercial **expertise** to the firm.

Personal **qualities** will include a high level of both personal and professional **integrity**, a **poised** personal style with a corporate **outlook**.

*For further details, **in confidence**, contact:*

*Jennifer Galvin-Rowley  
Level 11, 99 Queen Street,  
Melbourne 3000*

### Nursing Manager

#### (Aged Care)

- ★ New **purpose-built facility**
- ★ Atmosphere of growth and development

This position **requires** an experienced nursing **administrator** to manage a 110 bed nursing home which was built 18 months ago. **Previous** experience in **gerontic** nursing and in managing an aged care facility is **essential**.

Working in partnership with the **proprietors** the Nursing Manager will be responsible for some 120 staff across the facility and be experienced in the supervision and administration of staff as well as **ensuring** that a range of support services are **maintained** to the highest standard. We **seek** an experienced nursing professional who is **committed to** quality and staff development. Previous experience in **leading** an **accreditation process** is expected.

Applications can be **forwarded** to SIAG on the following:

*Telephone 9662 4500 or Facsimile 9662 4442*

*(from The Age-Australian newspaper- November 27, 1999)*

## Language-Link Schools

(Extract from the Prospectus of Language-Link Schools in Bayswater and Kensington, London.)

### *How do I register?*

When you first visit the School you can take an Entrance Test, without having to register, and meet with the Head Teacher, who will **assess** your Level and discuss the most **appropriate** Class for you to join in. You can then begin almost immediately if you wish to do so.

### *How long are the Courses?*

Students can study for a period of one month or longer, although each term's Course **lasts** for 3 months, with **internal** testing during the 6<sup>th</sup> and 12<sup>th</sup> week of the term. Progress checks can also be made on an **individual basis** where requested.

### *At what time can I study?*

**Attendance** at School is for 15 hours per week and Class times are in blocks of 3 hours, including break times. The times are 9-12, 12-3 and 3-6; students may choose to study at one of these times for a term, provided that there is an appropriate Level at that time.

### *Can you help with accommodation?*

The School Registrars can help with (short-term) hostel and **occasionally** family accommodation; the Schools use the services of an Accommodation agency in Central London and the Registrars will show you how to contact them.

### Conditions of Enrolment

- 1) On beginning a Course of Study, students may not change their chosen course of study unless the Head Teacher, exercising his/her **discretion**, agrees that such a change would be **beneficial**.
- 2) Registration and Course **Fees** are not normally **refundable**, in part or in total, and may be refunded **solely** at the Directors of Language-Links discretion.
- 3) Fees for the Course as quoted in the School Fees List are for **tuition** only and do not include the cost of materials, books and external examination fees.
- 4) The Schools **reserve** the right to **revise** published Fees at any time, such a **revision** would not apply to Course fees already paid.
- 5) Courses will only be offered and continued if **justified by demand** and the Schools therefore reserve the right to change Class times, rooms and teachers, to make alternative arrangements for the tuition of students, or to close Classes **due to insufficient** numbers.
- 6) Students must try to **ensure punctual** attendance to avoid **disruption** of other students and they may only leave Class before the **scheduled** time if directed to do so by the teacher. If a student is unable to attend School, he/she must inform the School as early as possible.
- 7) Where students change address while on a course, the Registrar and Home Office should be **notified** immediately.
- 8) Students who do not pass an end-of-term examination will be expected to repeat that Level during the following term.

The **contents** of this Prospectus are correct at the time of going to print, but are **subject to alteration**.

*(from the leaflet of Language-Link Schools in Bayswater and Kensington, London)*

### **Weak Men, Strong Women by Mitsuko Shimomura**

The Western stereotype of Japanese women is **out of date**. It certainly fit in the 1960s, when I joined the Asahi Shimbun, one of the biggest dailies in Japan, straight out of a graduate school in the United States. I won the reporter's position in **competition** with many other **candidates**, and you can't imagine how high my spirits were when I walked into the office on my first day. My **enthusiasm** didn't last long. First I was told that I wasn't going to be a full-time **staffer**, which meant I wouldn't receive any **benefits**. "You are a woman," my editor told me. "You have got to come to work 30 minutes before the men **show up**. **Wipe** the desktops, clean the ashtrays and serve everyone tea." In those days, you were **fired** if you complained.

But the situation of Japanese women was **gradually** changing. Eight years after my **humiliating** start, I got an **exclusive** interview with a half-Japanese princess of Oman-and was made a **full-fledged** company **employee**. My working conditions began to change **rapidly**. I was the first woman at Asahi to be **dispatched** to our New York bureau as a foreign correspondent. Although it was (and is) quite natural for Japanese men to be **stationed overseas** while their families remain in Japan, my situation was **novel**- my husband stayed in Japan. That was big news in Japan. Magazines interviewed my husband, asking him about what it was like to be left behind, taking care of **household chores**.

He wasn't the only man who had to **make adjustments**. I was **promoted** to a **senior** staff writer, and when I became the first woman editor of the Asahi Journal (in 1990), an intellectual **weekly** that later closed, it was a **trial** for me- but it must also have been a great culture shock for male reporters who had never had a female boss.

Just think of it. When I joined the Asahi Shimbun there were fewer than 10 female reporters among the 2500 reporting staff. Now, there are 300 women reporting or editing stories for the same paper. They cover every field, including politics, economics, sports and foreign news. It's no longer considered strange- or **newsworthy**- when women are stationed away from their families.

I suppose that all of these changes became possible largely **thanks to** social and legal **reforms** in Japan as well as the **influence** of the **feminist movement** in the West. But it's also because Japanese women have an **inner strength** that is perhaps not **apparent** to the **casual** observer. When I recently interviewed Akihiro Miwa, a popular Japanese singer and actor, he said with a deep **sigh**, "Until now, I haven't met a weak woman or a strong man." An **exaggeration**, perhaps, but he has a point: these days we hear so many stories about **suicides** by Japanese company presidents whose companies have **collapsed**, all of them men. "There are tens of thousands of women presidents of middle - and small-size companies," Miwa said. "But I have never heard of a woman president **hanging herself** because her company **went bankrupt**."

.....  
 ...

Not so with Japan's working women. We are full of **vitality**. Our status may not be as high as we'd like it to be- not yet, anyway- but we're getting stronger. Japanese women are not afraid of change because we don't have as much to lose as our male **counterparts**. In fact, we want new **challenges**. If there is one thing Japanese men should fear, it may be Japanese women.

*(from Newsweek, May 18, 1998)*

## APPENDIX XVI

### Second Six Authentic Texts

#### Helping Your Child to Handle Stress

By Antoinette Saunders and Bonnie Remsberg

Remember when children were protected from danger, and **violence** was a dimly **perceived sense** in the world? Now, on television each night, wars and bombings are paraded before their eyes. They are warned about **molesters**, and they worry that their parents might get divorced.

Yet ever since I began stress- education classes for children, people have told me, "Children don't have stress." Those people can't know any children. I never have to explain to children what stress means. They tell me all about their headaches - about the butterflies in their stomachs, the **lumps in their throats**. They know they feel stress. What they don't know is how to **handle** it. And that's where you can help.

The atmosphere that you create for your family is what makes your child able to deal with this problem. Children who feel emotionally **isolated** do not handle stress well. To give our children the sense that they can **cope**, we must **convey** to them that we know they are doing their best, and that we love them. How?

I cannot **overemphasise** the importance simply touching - and **hugging** - your children. Physical **contact** from their parents helps children to relax and to build up **self-esteem**.

This is an old lesson that is being **rediscovered** by modern psychologists. Touching is how **infants** learn to feel good about themselves. It's a means by which parents can say to older children, "I really like you."

Listening is also **vital**. It lets children know how important they are and that what they say **matters**. Children are **enormously sensitive** about being listened to and being taken seriously. Unfortunately many of them **chatter** or **whine** or talk in ways that **irritate** adults. Given loving **encouragement**, however, children can learn to speak so that adults understand what is **bothering** them.

**Consistency** helps to build an atmosphere of security for you child. Children constantly look for limits. They need to know that adults are in charge. But when it comes to discipline, there should not be any surprises. If children feel that we are doing our best to **deal with fairly** within **reasonably** consistent guidelines, this **calms** them and makes them feel good about their environment.

**Honesty** and **openness** are **essential**. Many parents feel they need to protect their children from what is going on in their adult world - in their **marital** relationship or with their finances. My experience has shown that no matter how thorough the **cover-up**, children will learn what is happening around them. And when they discover a **discrepancy**, it **compounds** the **fright**.

Remember, also, that we are all formed by other people's expectations of us. Children are **self-fulfilling prophecies**. Tell a child often enough that he is bad, or lazy, and that child will become a person who **feels unworthy**. A child who lives with criticism learns to **condemn**. The child who is given **approval** and encouragement learns to like himself.

Many children, fortunately, already have natural methods they use to calm themselves down, like kicking a football against a wall, reading, listening to music, hugging a pet or riding a bicycle. Any kind of physical exercise can be an effective stress reducer.

Questions from you can get children through what looks to them like a crisis. When you notice the familiar signs of panic - the wild eyes, the tears, the **frantic** manner - sit your child down in a relaxed setting and **gently** say, "OK, let's talk about this. What is the worst thing that could happen?" Treat this fear with respect. When he has examined it, ask him, "All right, what could you do to handle it?" This shows your **confidence** in his ability to cope.

Once "the worst thing that could happen" is out in the open, it will become **demystified**. Almost as if by magic, you will see your child's panic **drain away**. The problem will not have been solved yet; indeed, it may be a problem that the child has no control over. But **merely** saying the unsayable often takes away the problem's **menace**, especially when it is said to a loving and **receptive** ear.

Because children don't **articulate** their needs and wants in great detail, we have to establish an atmosphere of receptivity, ask questions, always keep the lines of communication open.

Your child must know that you are **sincerely** interested in his or her feelings. You can **convince** him of that by setting aside time, closing the door and **getting rid of all distractions**. You must then create an accepting, **non-judgemental** atmosphere. Very few children will open up if they expect that criticism or a lecture will be the response.

Don't offer advice unless you are asked for it. Let your child work out answers on his own, with your support.

Bedtime is an excellent opportunity for close communication with your child. I have found in my work how important a **going-to-bed ritual** can be for children. One that works well is the "Goodnight Formula": the parent and child should both say something about themselves; something they did that day that they are pleased about, and something that they are looking forward to doing tomorrow. Tell your child you love him and give him a hug.

All these suggestions add up to one totally reliable **antidote** to stress: parents' love. In my work with parents and children, I have never met anyone who couldn't respond to love.

Love means being there for your children no matter what. With your loving guidance, your children will be emotionally **equipped** to **face** whatever life hands them.

*(from Reader's Digest, August 1985)*

## Abu Simbel

Today the waters of the Nile leave the **dam** via the six **concrete** tunnels of one of the largest electrical power stations in the world, which **supplies** most of the Egyptians' energy needs. Lake Nasser covers an area that once held many Nubian villages. **Inhabitants** were transferred to new towns built especially for them north of Aswan.

With the **construction** of the High Dam nations of the world **united under the auspices of UNESCO** to help Egypt save many **ancient sights** that would otherwise have been **submerged**. The most famous effort was the **race** to save the **fabulous temples** of Abu-Simbel from the rising waters. Unlike most other temples, Abu-Simbel was not built, but was **hewn out of the rocky cliffs**.

The **entire** cliff, including the temples **carved** within and the four **colossal** seated **statues** of its grand **facade**, were sawn into huge blocks that were transported and rebuilt on higher ground **situated** not far from the original site. Today the temples appear almost as they did in the past -- as an **integral** part of the cliff -- and it is almost impossible to detect the cuts in the rock. Past the impressively **gigantic** statues are the **darkened** temple halls, supported by columns which are floor-to-ceiling statues of Ramses in the **posture** of the god Osiris. The walls are beautifully carved and painted. In the **sanctuary** there are four images of **deities** including one of the Pharaoh himself. Twice a year the first morning **rays of sunlight** enter the sanctuary and light the gods just as they did at the original **location**.

Outside the temples a small door is located at the side of the cliff. After entering, you pass along a corridor until suddenly, you are inside an enormous concrete **dome**. Then - and only then - is it possible to really **comprehend** the **magnitude** of this **undertaking**. The dome is the heart of the mountain, built by the engineers who feared **loading** the entire weight of the rock on the temple after it was cut and rebuilt. One cannot miss being impressed by the extent of this marvellous engineering **feat**. The feeling of excitement is further **enhanced** outside the dome when, taking another look at the temples, you face two **breathtaking achievements** - **accomplished** with a **time-span** of over 3,300 years between them.

The **tomb** served as the **eternal** home of the dead where he would continue to require all that had been available to him on earth - including basics such as food and clothing as well as luxury items such as perfume and games. It did not include living people - slaves and **servants**. **Human sacrifices** were not customary in Egypt nor the killing of servants so they could join their **master** upon his death. Instead, **statuettes** of servants - ushebtys - placed in the tomb were expected to **perform** all **tasks**. During **burial**, all these things were put into the **chamber** with the **mummy**. Later, **offerings** were brought to the **deceased** by relatives and **priests**.

(An excerpt from *This Is Egypt* - Tourist Information Book- Cairo, 2000)

## Resources to Last a Lifetime

By Ardis Whitman

It was a bright winter day with ice **stiffening** every branch and air like new-pressed **cider**. A friend and I were driving to a country **inn** for lunch. In a **gale of laughter** and **good spirits**, we pulled up to the entrance and stepped out - onto **treacherous** ice. My friend went down, **twisting** her leg.

"Broken," said the doctor an hour later. "Two months **in a cast**."

"And we were so happy," **moaned** my friend. "Isn't it always like that?"

It is always like that. We are always between tears and laughter, meeting crises, big and little. Just by being people, we are always in trouble -- with hurt feelings, **defeated** ambitions, **unrequited love**, **grief** and **loneliness**.

The real problem is not just that troubles come, but that we don't know how to meet them. We run around **feverishly** to a lot of parties. We **swallow tranquillisers** and **barbiturates**: we **lash out** at the people we care about; or, **resolutely** containing our grief, we come down with **psychosomatic illnesses**. Worst of all, we may find **refuge** in **bitterness**, accusing other people, life or God of **tripping us up**.

The truth is that when we are in trouble we discover **swiftly** and painfully what kind of inner resources, what **imperishable** treasures of mind and heart we have deposited in the bank of the spirit against this rainy day.

Psychologist Willian Mouton Marston once asked 300 people this question: "What do you have to live for?" Nine out of ten were simply waiting for something to happen -- a better job, a new house, a trip, an **inheritance**. They were putting in time while they waited for an uncertain tomorrow.

The people who fail to meet the stresses and **strains of life** are often those who have never learned to **cherish** what the French call *le petit bonheur* - the little happiness - when it comes along. It's too bad; for most lives hold little that is dramatic and **overwhelming**. But every day has its quota of *le petit bonheur*.

"I believe that only one person in a thousand knows the trick of really living in the present," wrote novelist Storm Jameson. "Most of us spend 59 minutes an hour living in the past - or in a future that we either **long for** or **dread**. The only way to live is by accepting each minute as an unrepeatabe miracle - which is exactly what it is."

For myself, I remember the slow staining of the sea by a pale sunrise when I awoke one morning before anyone else and went out to sit alone on the altar of the beach. For all of us, there are joys like these - a row of baby ducks swimming **valiantly** behind a pair of mallards, **stately** as galleons; a branch of apple wood burning in the fireplace; the wind making silken susurrations in the pines.

The web of life is woven from threads like these. No thread alone is wide enough to **encompass** a sorrow but, altogether, they make a shelter that **tempers** the **chill** and slows the rain and softens sadness to the point where it can be **endured**. When recognised and cherished as they come, these small joys build a reservoir of memory against sterile hours.

But the little happiness is **transient**, a sweet accident. We can **cultivate** a more enduring resource. In our minds all events happen, all joys leave, all sorrows find the philosophy that tempers them. Here is a citadel that cannot be taken, a region of peace where a storm cannot enter unless we welcome it.

We cannot **rationalise** our sorrows and our loneliness, but we can make ourselves a kingdom of the mind where life can never fail to be worth living. From here we can reach

out to **grasp** the thoughts of others who have enjoyed the beauty of this world before us and have set down what they discovered on canvas, or in the notes of music, or in good books. Here are the great **consolations**.

.....  
 Another great **resource** is the resource of love. "We are, in a deep sense, what our relationships to other human beings make us," said Rabbi Joshua Loth Liebman in his book "Peace of Mind". Only the discipline of human sympathy keeps life from growing poor and **brittle**. If we keep our sympathy and understanding alive, then we will feel so warm a bond with other people that in time of trouble it will **hearten** us just to look into the faces of our fellow man and feel the comforting sense of our common human **destiny**.

.....  
 The thing to remember is that, in joy and sorrow alike, life itself is precious. And perhaps we never have any need to ask of it more than this: that it gives us a chance to be what we can be; experience what we can experience; and love what we can love.

*(from Reader's Digest, June 1983)*

### **Parents Against Pot**

School authorities often refuse to face the problem; government **drug abuse** agencies have done all too little to inform the public about it; many physicians still seem unaware of it when they examine teenagers. As a result parents may still be the last to know that their children have **fallen victim to** the **drug epidemic** that has been **raging** for more than a decade among America's youth. In a 1980 survey of a middle-income Cincinnati suburb, 38 percent of the sixth grade and 89 percent of the senior class said they used drugs and/or alcohol; 38 percent of the parents thought their children used alcohol but only 8 percent thought their children used drugs.

Fortunately, there is a new force at work against this epidemic - a nationwide movement of more than 4,000 parent groups **formed to expose and battle** drug use among teenagers and **pre-teens**. The groups, **ranging in size** from 15 members to more than 800, have different approaches and widely **varying rates** of success. Yet this **parental crusade** is the only major force in the country to have taken active, organized and effective steps aimed at stopping **marijuana** use.

Why the **concentration** on marijuana? Because it's the illegal drug most used by kids. According to the 1982 National Highschool Senior Survey, 44 percent of US highschool seniors had smoked **pot** during the year, and one out of seven of these were daily or near daily smokers.

Moreover, in 1982 sociologists Richard Clayton and Harwin Voss reported a dose-related connection between pot smoking and subsequent use of cocaine and heroine by young men. Of those who had smoked pot fewer than 100 times, 7 percent had graduated to **cocaine**, 4 percent to **heroine**. But of those who had smoked pot, at least a1000 times, the equivalent of once a day for three years, 73 percent had gone on to cocaine, and one out of three had graduated to heroine.

Parent groups have found that by stopping their kids from smoking pot, they almost automatically stop all other **illegal** drugs - and **cut down on** alcohol use as well. Since virtually all over the country teenage "partying" has come to mean "**getting smashed and getting stoned**" - on anything from pot to pills to **hashish, LSD, angel dust** and alcohol -

some parent groups **hone in** on the partying aspect. The parents' solution: workshops showing kids how to give successful drug- and alcohol-free parties.

The parent movement began in Atlanta in 1976 at a backyard birthday party for Kathy Manatt, age 13. Her mother, Marsha, grew **suspicious** when a boy **lurched** into the kitchen and asked a girl, "Did they bring the **stuff**?" Then Manatt noticed that many of the **youngsters** appeared to be stoned. But they were only 12 and 13 years old. At 1.00 a.m., the party over, Marsha Manatt and her husband **crawled** around the backyard with flashlights. They found dozens of marijuana **butts**, empty beer cans, wine bottles. "I feel absolutely sick," she recalls.

As the parents **pooled** information, some felt shock, but there was also a sense of relief. Many had experienced guilt and shame; now they learned, as Karen Hardy's 12 year old son put it, "Every kid has a drug problem the minute he walks out the front door, because drugs are all around."

The parents **determined** to research this marijuana world. They interviewed school-bus drivers, teachers, **chaperones** at dances. At the next parents' meeting, they agreed on a concept that was to become a cornerstone of the National movement: *parent peer pressure to combat teen peer pressure.*

Manatt's group set down rules. Rock concerts and the **drug-hangout pinball parlour** were off limits. There will be an 11 o'clock **curfew** on weekends. All telephone callers would have to **identify** themselves. Spending would be watched. Parents would chaperone all school functions and monitor school-bus stops and the homes of parents who worked late.

Parents who "**waffled**" and tolerated exceptions made little headway. But those who stuck to the rules found that the pressure worked, and their teenagers' **resentment subsided** because peers were subject to the same rules. Many seemed strangely **relieved**. Within six months, virtually all the children of the parents who had organised were drug-free - and remained that way.

Each new organisation was **triggered** by parental **anguish**. In 1978, for example, Pat Barton, a mother in Naples, saw a report of PRIDE's conference and called Marsha Manatt. The Bartons' 15 year old daughter, Bonnie, had been dating a **drug dealer** and smoking marijuana. Her parents **threatened** the drug dealer with legal action (he moved away) and put Bonnie under strict **surveillance**. But when Bonnie had **shrieking tantrums**, Pat and Bill Barton **wavered**, wondering if what they were doing was wrong. "Our kids seem to know everything about drugs," Pat Barton told Manatt. "We know nothing! Is marijuana harmful?"

All that summer the parents worked with the schools, business and police and when kids returned to Naples High that fall, they were issued a revised handbook **setting forth** a stricter **code**: "No drug or alcohol on school grounds or at any school function." During the same summer, the Bartons, as Pat put it, "**went through sheer hell** with Bonnie." But Bonnie did stay off drugs and returned to the sunny, **spirited** A-student she once had been. Bonnie's brother was so impressed by this change that he too decided to **get off** pot.

*(from Reader's Digest, June 1983)*

## Italy's "Pompeii 2000"

Rescuers **hunt for** survivors of deadly mudslides.

By Sam Seibert

The **rescue teams despair** only **deepened** as the hours passed. Even so, they kept on searching for **survivors trapped** under the **mudslides** at the foot of Italy's Mount Sarno, some 25 kilometers east of Naples. **Quitting was unthinkable**; dozens of children were said to be among the more than 100 people who were **missing** and **presumed** buried alive. At the weekend the death count passed 100 and continued to climb. Long before then the **digging** had become an **ordeal**. The rescuers' problems didn't end with the **torrential** rains that caused much of the mountainside to **peel away**, **burying** houses, cars and whole neighbourhoods in half a dozen towns all around the 1,100-meter **peak**. The sun soon **baked** the sea of **mud** into a **brick-like pavement**. "Yesterday it was like **quicksand**," **remarked** Maria Grazia Salvatur, 20, a **volunteer** in the town of Sarno, where the damage was worst. "The **excavators** and rescue vehicles **raised** clouds of **dust**, **choking** and **blinding** the **emergency** workers who soon **ran short of** breathing masks.

Meanwhile new **landslides** kept **breaking loose** from the mountain and **blocking** the main roads, further **frustrating** the efforts of emergency **crews**. The ground floor of Sarno's hospital was **wrecked** by the **mudflow**; some 200 patients had to be **evacuated**. Drinking water was **trucked** in because **local supplies** were dangerously **contaminated**. "They can't even bring the dead to the **cemetery**, because the cemetery doesn't exist any more," said a Sarno woman. The mud **ripped** through the town's **burial ground**, leaving a **trail of exposed coffins** and human **remains**.

.....

The risk of **disaster** has always been a part of life in the Campania region. People have **shrugged off** warnings of **doom** for thousands of year, since farmers began planting crops on the **fertile volcanic slopes** of Mount Vesuvius, about 15 kilometres southwest of Sarno. Every few centuries a killer earthquake **strikes** the Amalfi coast, a few kilometres south of last week's mudslides, and **dumps cliff-side** villages into the **sparkling** Mediterranean Sea. All the same, the **loss** of loved ones never becomes easier for the survivors to **bear**. In the villages at Mount Sarno's foot, friends and relatives began the work of **grieving**.

*(from Newsweek, May 18 1998)*

## The Exorcism

*A woman **ruined** 18-year-old Mark Hanson's life. But it wasn't a girlfriend, it was a **violent** attacker, and he knew he had to **confront** her -- and his **demons** -- if he were ever to **reclaim** his life.*

Report by Beverly Kemp

In the summer of 1995 a meeting took place in Her Majesty's Prison, New Hall, West Yorkshire. The two main **participants** sitting opposite each other in a prison visiting room had little **in common**, apart from both being teenagers and living in the same county. Mark Hanson was a bright 18-year-old planning a **gap** year before going to

university. The tall dark-haired woman opposite him was a 19-year-old **convicted armed robber**. But the crime for which Rachel Jones was serving a six-year **sentence** had changed Hanson. His life had fallen apart since he first **encountered** Jones on November 20, 1994.

Hanson had taken a part-time job to earn extra cash while studying for three A-levels in Elland, West Yorkshire. As he set off for his **shift** filling shelves at the Costcutter supermarket, nothing could have prepared him for what lay ahead. That night Hanson would experience an act of violence that **obliterated** his usual optimistic nature.

Trade was quiet so Hanson sat in the small back office and checked stock lists. At 8pm a couple walked into the shop. The woman made for the counter where supervisor Janet Lenius stood behind the **till**. The man moved towards the office. "Suddenly he ran up to me and took a gun out of his pocket. He shouted, 'Get your hand up and give me the money'," says Hanson. "My first reaction was to laugh because occasionally some idiot would come in and **mess** around like that. He wasn't even wearing a mask. There was a petrol station close by which held a lot more money than a small mini-market. So it just didn't occur to me to take him seriously at first."

Within seconds Hanson's glasses had been **ripped** off and thrown across the floor. The gun was then pointed at his forehead. "That was the moment I realised it wasn't a **prank**. The fear was **indescribable**. I just lay there very still as instructed, **frozen in terror**. There is no point in trying to be a hero when you have a gun pointed at your head."

The woman **accomplice** had also produced an 8mm **pistol**. Hanson gave them the keys to the till. He was then **dragged** out of the office by his hair and forced to lie in a star shape on the floor next to Lenius. Three **shots** were **fired**, but neither realised they were **blanks**. Both **assumed** the other was dead.

"I remember **praying**, 'Please just take the money and go'," says Hanson. "but the man kept his gun at the **nape** of my neck and his foot on my back." The **raiders** escaped with 265 pounds. Before leaving, they **poured** bubble bath over Hanson and Lenius's faces then **smashed** a bottle of wine on the floor so they were covered in glass. It **stung** so much Mark feared he was going blind. But it was the last words of the armed robbers which would **haunt** him and **precipitate** months of terrifying nightmares: "Don't **bother** calling the police. We know where you live."

Hanson is now 21 and in his second year at a university in the north of England studying business information systems. His face is open and friendly, but it **contorts** with **tension** as he **relives** the horror of November 1994. "I'm not one of those men who hides his feelings. That night I shook and **sobbed** all the way home. My mother made me a cup of sweet tea and I just **curled** into a ball," he says. "The thought of them knowing where I lived frightened me to death. I kept repeating the words, 'They'll find me', over and over again."

Hanson's world **fell apart**. He developed a fear of the dark and became depressed. Unable to concentrate on his schoolwork, he failed his A-levels. His relationship with his girlfriend ended.

.....

In December 1994 Jones and a friend were **arrested** and **charged** with armed robbery of the Costcutter supermarket and the attempted armed robbery of a 64-year-old woman cleaner at the Acapulco nightclub in Halifax. At Leeds Crown Court, Jones and her friend admitted both charges, plus an additional two of carrying a firearm with **intent** to **commit an offence**. Judge Michael Lightfoot sentenced them to six years' **imprisonment**.

"Hearing that they were in **custody** was such a **relief**," says Hanson. "I opened a bottle of wine and just drank the lot."

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## APPENDIX XVII

### Word Lists

#### Language-Link Schools

##### Word List

- accommodation: yatacak, kalacak, oturulacak yer; oda, daire, ev gibi  
 alteration: deęişme, deęiřtirme, başkalařma, deęiřiklik, düzeltim  
 appropriate: uygun, yerinde, elverişli  
 assess (v): deęerlendirmek, bir řeyin nitelięini ve deęerini saptamak  
 attendance: hazır bulunma, devam etme, katılma, izleyici/dinleyici katılımı  
 basis: temel, esas, birřeyin dayandırıldıęı ilkeler  
 beneficial: yararlı, faydalı, hayırlı  
 contents: içerik, muhteva  
 demand: istek, istem, talep  
 discretion: yargı gücü, takdir edebilme hakkı veya yeteneęi  
 disruption: daęınıklık, bozukluk, karmařa  
 due to: bir řey yüzünden, bir řeyden dolayı  
 enrolment: kayıt, üye yazma, üye/öęrenci sayısı  
 ensure (v): bir řeyin olmasını kesinleřtirmek, saęlamak, garanti etmek  
 fee: ücret, hizmetinden dolayı bir kiři ya da kuruma ödenen para miktarı  
 individual: özel, bireysel, kiřiye ait, ayrı  
 insufficient: yetersiz, eksik  
 internal: iç, içsel, içe ait, dahili  
 justify (v): geçerli neden belirtmek, mazur göstermek, haklı çıkmak, geçerli nedeni olmak  
 notify (v): (resmi biçimde) bildirmek, haber vermek, teblię etmek  
 occasionally: zaman zaman, arasıra  
 punctual: dakik  
 refundable: iade edilebilir, geri ödenebilir  
 reserve: tutmak, saklamak, muhafaza etmek  
 revision: düzenleme, inceleme, gözden geçirme  
 scheduled: planlanmış, programlanmış, listelenmiş  
 solely: sadece, yalnızca, sırf, ancak  
 subject to: mağruz bırakmak, uğratmak, tabi tutmak  
 tuition: öęretim, öęretme

**Weak Men, Strong Women by Mitsuko Shimomura**  
**Word List**

- apparent: açık, açık seçik, ortada  
 candidate: aday, talip, bir sınava giren kimse  
 casual: sıradan, rastgele  
 challenge: insanı yarışmaya, harekete, düşünmeye zorlayan bir özellik, yarışma havasına  
 collapse (v): çökmek, başarısızlığa uğramak, dağılmak  
 competition: yarışma, rekabet, boy ölçüşme  
 counterpart(s): bir başkası ile aynı amaca hizmet eden kimse veya şey  
 dispatch (v): göndermek, yollamak  
 enthusiasm: coşku, heyecan, heves, kuvvetli ilgi  
 exaggeration: abartma, mübala  
 exclusive: (seçkin, belli kişilere veya belli bir topluluğa has) özel haber, ilk kez sadece bir  
 feminist movement: kadın hakları hareketi  
 fire (v): işten kovmak, atmak, sepetlemek  
     gazetede yayınlanan haber  
 go bankrupt (v): iflas etmek, batmak  
 gradually: yavaş yavaş, derece derece  
 hang (v): boynuna ip geçirip sarkıtarak öldürmek, asmak  
 household chores: günlük ev işleri  
 humiliate (v): aşağılamak, utandırmak, küçük düşürmek  
 influence: etki, tesir  
 inner: iç, dahili  
 make adjustment (v): ayar yapmak, alıştırmak, uydurmak  
 newsworthy: haber değeri olan  
 novel: yeni, alışılmamış, alışılmışın dışında  
 out of date: modası geçmiş, eskimiş  
 overseas: deniz aşırı, yabancı  
 promote (v): yükseltmek, terfi ettirmek  
 rapidly: çabuk ve süratli bir şekilde  
 reform: yenilik, değişiklik, reform  
 senior: kıdemli, daha yüksek konumda, mevkide olan  
 show up (v): gözükmek, ortaya çıkmak, varmak, çıkagelmek  
     sokan, kendini göstermeye iten bir iş  
 staffer: personel, eleman, bir kuruluştaki çalışanlar topluluğu  
 station (v): belli bir yere yerleştirmek, koymak  
 strength: güç, kuvvet  
 thanks to: yüzünden, nedeniyle, sayesinde  
 trial: deneme, sınama, tecrübe, test  
 vitality: canlılık, neşe, dirilik, yaşama gücü  
 weekly: haftalık dergi veya gazete  
 wipe (v): bir bezle silmek, bir sıvıyı kurulamak, silerek temizlemek

## Beyond Genius Word List

achievement: başarı  
 age-old: çok eski  
 alter (v): değiştirmek  
 attack: saldırı  
 compensate for (v): bir şeyin yerini tutmak, telafi etmek  
 conjecture (v): zannetme, tahmin etme  
 constant: sürekli, devamlı, sabit  
 controversial: tartışmalı, anlaşmazlığa yol açan  
 convert (v): dönüştürmek, çevirmek  
 death threat: ölüm tehdidi  
 demonstrate (v): iyice göstermek, kanıtlamak  
 devote (v): adanmak, hasretmek  
 entire: bütün, tam  
 equation: eşitlik  
 exceptional: olağandışı, ender görülen  
 existence: varlık, var olma  
 eyesight: görme yeteneği, görme gücü  
 frustrated: işi bozulmuş, düş kırıklığına uğramış  
 genius: dahi, deha  
 globe: yerküre, dünya  
 gravity: yer çekimi  
 head (v): öncülük etmek, bir şeyden sorumlu kişi olmak  
 humanitarian: insansever, insanlıkçı  
 immutable: değişmez, sabit  
 indelible: silinmez, sabit, çıkmaz  
 lament (v): üzölmek, keder duymak  
 legacy: miras, kalıt  
 legendary: ünlü, meşhur, destansı  
 major: büyük, önemli, esaslı  
 manifesto: bildiri, yazılı demeç  
 mankind: insanlık, insanođlu  
 mark: iz  
 mass: kütle  
 matter: madde, cisim  
 minor: küçük, önemsiz  
 miracle: mucize  
 model (v): bir şeyin modelini veya kopyasını yapmak  
 motion: hareket, devinim  
 mystery: esrar, giz, gizem  
 nuclear weapon: nükleer silah  
 numeral: sayı, rakam  
 opalescence: opale benzeme, değişken renkli olma  
 outspoken: açık sözlü, dobra  
 physicist: fizikçi  
 quantum theory: kuantum teorisi  
 relativity: izafiyet, görelilik  
 release (v): salmak, serbest bırakmak

repository: bir şeylerin korunup saklandığı yer, depo  
 reveal (v): göstermek, açığa çıkarmak  
 savage: acımasız, gaddar  
 theorise (v): kuram oluşturmak  
 universe: evren, kainat  
 urge (v): ısrar etmek, ısrarla istemek  
 verbal: sözlü, sözle belirtilen

### **Just an Old-Fashioned Girl Word List**

adult: yetişkin kimse  
 affection: sevgi, şevkat  
 bakewell tart and custard: bir çeşit kremalı turta  
 bangers and mash: sosis ve patates püresi  
 calculate (v): tasarlamak, planlamak  
 celebrity: ünlü kişi, şöhretli kişi  
 connivance: suç ortaklığı, bir şeye göz yumma  
 control: denetim, kontrol  
 crave (v): çok güçlü istek, şiddetli arzu duymak  
 cynic: olumsuzcu, alaycı  
 depressing: can sıkıcı, moral bozucu  
 down-to-earth: gerçekçi, dürüst, namuslu  
 drive: itici güç, zihin ve ruh gücü, doğal güdü  
 egotistical: hep kendinden söz eden, hep kendini ileri süren  
 emphasiser: bir şeyin önemini belirten, önemli olduğunu gösteren  
 enable (v): bir şeyi olanaklı kılmak, imkan vermek  
 enthusiast: bir şeye hayranlık duyan, coşku dolu olan  
 fib: önemsiz yalan, küçük yalan  
 fit: uymak, uygun düşmek  
 focussed: dikkatini toplayabilen, açık seçik düşünebilen  
 freak: (bir şey) meraklısı, düşkün, tutkun  
 function: işlev, fonksiyon  
 hiccup: kesinti, küçük gecikme  
 hint: ima, ipucu, iz, ufak bir işaret  
 irritating: sinir bozucu, can sıkıcı  
 italik: eğik yazı biçimi  
 keen: istekli, hevesli, meraklı  
 keyboard: klavye  
 mutual: ortak, karşılıklı  
 numerically: sayıca, sayısal bakımdan  
 obsession: saplantı, sabit fikir  
 occur to (v): aklına gelmek, hatıra gelmek  
 precision: kesinlik, tamlık, doğruluk  
 render (v): söylemek, sunmak  
 replace (v): yerine geçmek, yerini almak  
 roll-up: kişinin kağıda tütün sararak yaptığı sigara  
 root (v): kök salmak, yetişip gelişmek  
 self-indulgent: zevke düşkün, rahata meraklı  
 sensible: sağduyulu, mantıklı

straight: dobra, açık

understated: gerçekte olduğundan daha önemsiz gösterilen

### Measuring Up: It's Not a Small World After All Word List

adjust (v): düzeltmek, derleyip toparlamak

admit (v): itiraf etmek, bir şeyin doğru olduğunu kabul etmek

altitude: yükseklik, irtifa

blood pressure: kan basıncı

blow up (v): büyümek

boast (v): övünmek, böbürlenmek

charmingly: hoş, çekici, alımlı bir şekilde

chart: çizelge, tablo, grafik

circumference: çevre, daire çevresi

consultant: danışman doktor, uzman doktor

dash (v): ümitlerini sona erdirmek, umutlarını kırmak

decade: on yıllık süre

elate (v): mutlu etmek, sevindirmek, gururlandırmak

equate (v): eşit olarak görmek, özdeşleştirmek

evaluate (v): değerlendirmek, takdir etmek

fret (v): dert etmek, kaygılanmak

gather (v): toplamak, bir araya getirmek

growth: büyüme, gelişme, gelişim

hefty: iri yarı, kocaman, çok fazla

judgement: yargı, hüküm

kiddie: yavru, çocuk

lull (v): uyutmak, rahavet vermek

merely: yalnızca, ancak, sadece

nutrition: beslenme

obese: çok şişman, aşırı kilolu

obsess (v): aklından çıkarmamak, zihnini sürekli meşgul etmek

off the charts: normal göstergelerin dışında

overweight: aşırı kilolu, aşırı ağır

paediatrician: çocuk doktoru (çocuk hastalıkları uzmanı)

paleontologist: fosillere bakarak daha eski çağlarda yeryüzünde var olan yaşamı inceleyen

peer: akran, yaşıt

percentile: yüzdellik, değer

plump: tombul, dolgun

post (v): ilan etmek, duyurmak

poundage: ağırlık (vücut ağırlığı)

reflect (v): ifade etmek, yansıtma, göstermek

revision: gözden geçirme, gözden geçirip düzeltme

severe: ciddi, ağır, sert

shoot up (v): yükselmek, çabuk büyüme, boy atmak

significant: önemli

stature: boy bos, endam

stunt (v): gelişmesini engellemek, büyümesini önlemek

toddler: yeni yürümeye başlayan çocuk

tool: alet, araç

unearth (v): toprağı kazıp çıkarmak, bulmak, keşfetmek

**Business (Job) Ads  
Word List**

accreditation bir kuruluş hesabına görev yapma  
 administrator: idareci, yönetici  
 appeal to (v): hitap etmek, yöneltmek, seslenmek  
 assist (v): yardım etmek, desteklemek  
 assistance: yardım, destek  
 brand: marka, belli bir firmanın ürünü olan mal  
 committed to : kendini adanmış, hasretmiş  
 corporate: birleşik, ortak, toplu  
 desirable: istenen, sahip olmak veya yapmak istenen  
 drive (v): yönetmek, idare etmek  
 e-commerce: sanal (elektronik ortamda yapılan) ticaret  
 ensure (v): bir şeyin olmasını sağlamak  
 essential: gerekli şey  
 executive: yönetici, idareci  
 expertise: uzmanlık becerisi, hüner, yeterlik  
 facility: düzen, sistem, hizmet  
 forward (v): göndermek, iletmek  
 geriatric: yaşlılık, yaşlılık hastalıkları ile ilgili  
 hands on: pratik, uygulamalı  
 in confidence: özel olarak  
 integrity: doğruluk, güvenilirlik, bütünlük  
 lead (v): rehberlik etmek, yol göstermek, götürmek  
 maintain (v): sürdürmek, devam ettirmek  
 outlook: görünüş  
 poised: dengeli, ölçülü, ağır başlı  
 previous: önceki  
 primary: temel, asıl, esas  
 process: işlem, süreç  
 proprietor: sahip, mal sahibi  
 purpose: amaç, gaye  
 purpose-built: amaca uygun yapılmış  
 qualifications: nitelikler, vasıflar, deneyim, bilgi  
 quality: nitelik, vasıf, kalite  
 require (v): gerektirmek, ihtiyaç göstermek, istemek  
 seek (v): aramak, bulmaya çalışmak  
 staff: personel, bir kuruluştaki çalışanlar topluluğı  
 talented: yetenekli, kabiliyetli, becerikli  
 tertiary: sıra ve derece bakımından üçüncü olan  
 unique: tek, eşsiz, yegane  
 whilst: esnasında, -iken

**Italy's "Pompei 2000"  
Word List**

bake (v): pişirmek, kavurmak  
 bear (v): dayanmak, tahammül etmek

blind (v): kör etmek, körleştirmek  
 block (v): tıkmak, kapamak, engellemek  
 break loose (v): kopmak, ayrılmak  
 brick-like: tuğlaya benzeyen  
 burial ground: ölülerin gömüldüğü yer  
 bury (v): gömmek  
 cemetery: mezarlık  
 choke (v): boğmak, nefesini tıkmak  
 cliff-side: dik ve derin yamaç tarafında bulunan  
 coffin: tabut  
 contaminate (v): kirletmek, pisletmek  
 crew: takım, ekip, grup  
 deepen (v): derinleşmek, artmak  
 despair: umutsuzluk, çaresizlik  
 digging: kazı  
 disaster: felaket  
 doom: kötü kader, feci akıbet  
 dump (v): yığın halinde dökmek, boşaltmak  
 dust: toz  
 emergency: acil durum  
 evacuate (v): tahliye etmek, boşaltmak  
 excavator: kazı yapan kimse  
 expose (v): açıkta bırakmak  
 fertile: verimli  
 frustrating: düş kırıklığına uğraticı, engelleyici  
 grieve (v): acı çekmek, üzüntü duymak  
 hunt for (v): uzun ve zor araştırma, arama  
 landslide: heyelan, toprak kayması  
 local: yerel, yöresel  
 loss: kayıp  
 missing: kayıp  
 mud: çamur  
 mudflow: çamur akışı  
 mudslide: bayır aşağı çamur yığınının ani düşüşü (çamur heyelanı)  
 ordeal: büyük sıkıntı, çile, azap  
 pavement: kaldırım  
 peak: tepe, uç, doruk, zirve  
 peel away (v): (bir şeyin) yüzeyini soymak  
 presume (v): farz etmek, var saymak, tahmin etmek  
 quicksand: yutan kum, herşeyi içine çeken nemli ve gevşek kum  
 quit (v): bırakmak, terk etmek  
 raise (v): çıkarmak, kaldırmak  
 remains: ölü, ceset, kalıntılar  
 remark (v): söylemek, düşüncesini belirtmek  
 rescue: (bir kötülükten veya tehlikeden) kurtarma  
 rip (v): yarmak, parçalamak, sökmek, deşmek  
 run short of (v): tüketmek, eldekinin hemen hemen tümünü kullanmak  
 shrug off (v): kolay gözüyle bakmak, önemsiz saymak  
 slope: bayır, yamaç

sparkling: parıldayan, parlayan  
 strike (v): vurmak, zarar vermek  
 supplies: erzak, gereçler  
 survivor: sağ kurtulan insan, hayatta kalan kimse  
 team: takım  
 torrential: sel gibi  
 trail: ard arda dizilmiş cisimler yığını, dizisi  
 trap (v): kıştırmak, yakalamak  
 truck (v): kamyonla taşımak  
 unthinkable: düşünülemez, kabul edilemez, olanaksız  
 volunteer: gönüllü  
 wreck (v): kazaya uğratmak, mahvetmek

### The Exorcism Word List

accomplice (v): suç ortağı  
 armed: silahlı  
 arrest (v): tutuklamak, tevkif etmek  
 assume (v): farzetmek, varsaymak  
 blank: kuru sıkı fişek  
 bother (v): zahmet etmek, kendini yormak  
 charge (v): suçlamak  
 commit (v): yasa dışı bir şey yapmak, suç işlemek  
 confront (v): karşılaşmak, karşı karşıya gelmek  
 contort (v): bükmek, eğmek, biçimini bozmak, çarpıtmak  
 convicted: yargılı, mahkum, hapse mahkum edilmiş  
 curl (v): dolanmak, sarılmak  
 custody: gözaltı, hapsedme, tutuklama  
 demon: şeytan, canavar ruhlu  
 drag (v): sürüklemek, çekerek götürmek  
 encounter (v): karşılaşmak, yüz yüze gelmek  
 exorcism: şeytan kovma  
 fall apart: parçalanmak  
 fire (v): ateş etmek, kurşun atmak, silahını ateşlemek  
 frozen: donup kalmış  
 gap: boş  
 haunt (v): aklından çıkmamak, gözünün önünden gitmemek  
 imprisonment: hapis, mahkumiyet  
 in common: birlikte, beraber, ortaklaşa  
 in terror: büyük korku ve dehşet içinde  
 indescribable: tanımlanamaz, tarifi olanaksız  
 intent: niyet, kasıt, maksat  
 mess (v): dağınıklık, karışıklık  
 nape: ense, boynun arka tarafı  
 obliterate (v): silmek, yok etmek  
 offence: suç  
 participant: katılımcı, iştirakçi  
 pistol: tabanca

pour (v): dökmek, akıtmak, boşaltmak  
 prank: oyun, şaka, muziplik  
 pray (v): dua etmek  
 precipitate (v): hızlandırmak, çabuklaştırmak  
 raider: baskıncı, baskın yapan kimse  
 reclaim (v): düzeltmek, ıslah etmek  
 relief: rahatlık, iç ferahlığı, gönül rahatlığı  
 relieve (v): hayalinde yeniden yaşamak, kafasında yeniden canlandırmak  
 rip: sökmek, açmak, parçalamak  
 robber: soyguncu  
 ruin (v): harap etmek, mahvetmek, perişan etmek  
 sentence: yargı, hüküm, ceza  
 shift: vardiya  
 shot: silah atma, atış  
 smash (v): vurmak, çarpmak, paramparça etmek  
 sob (v): hıçkırmak, içini çeke çeke ağlamak  
 sting (v): acıtmak, canını yakmak  
 tension: gerilim, sinir gerginliği, endişe  
 till: kasa, dükkanlarda paranın saklandığı çerçeve  
 violent: set, tehlikeli, şiddetli, zorlu

### Helping Your Child to Handle Stress Word List

antidote: panzehir, çare  
 approval: onay, müsaade, izin  
 articulate (v): ifade etmek, söylemek  
 bother (v): üzme, canını sıkmak  
 calm (v): yatıştırmak, sakinleştirmek  
 chatter (v): gevezelik etmek, çene çalmak  
 compound (v): kötüleştirmek  
 condemn (v): kınamak, ayıplamak  
 confidence: güven, itimat, inanç  
 consistency: tutarlılık, kararlılık  
 consistently: tutarlı, istikrarlı bir şekilde  
 contact: temas, ilişki  
 convey (v): bildirmek, aktarmak, iletmek  
 convince (v): inandırmak, ikna etmek  
 cope (v): başa çıkmak, üstesinden gelmek  
 cover-up: örtbas, hasır altı etme  
 deal with (v): davranmak, muamele etmek  
 demystified: sır olmaktan çıkmış, anlaşılır hale gelmiş  
 dimly: silik ve belirsiz bir şekilde  
 discrepancy: çelişki, ayrılık, uymazlık  
 distraction: dikkati başka yöne çeken şey, oyalayıcı şey  
 drain away (v): azalmak, bitmek  
 emotionally: duygusal olarak  
 encouragement: cesaretlendirme, teşvik etme  
 enormously: pek çok, aşırı ölçüde  
 equip (v): hazırlamak, uygun hale getirmek

essential: gerekli şey, elzem şey  
 face (v): karşı karşıya gelmek, yüz yüze gelmek  
 fairly: dürüstçe, adilce  
 finance: para, finansman  
 frantic: telaşlı, heyecanlı  
 fright: korku, dehşet  
 gently: nazikçe, tatlılıkla  
 get rid of (v): kurtulmak, başından atmak  
 guidelines: kurallar, talimatlar  
 hand (v): getirmek, vermek  
 handle (v): uğraşmak, davranmak  
 honesty: dürüstlük, doğruluk  
 hug (v): kucaklamak, sarılmak  
 in charge: sorumlu, yetkili  
 infant: bebek, küçük çocuk  
 irritate (v): kızdırmak, canını sıkmak  
 isolated: ayrı, yalnız, tek başına duran  
 lump: (boğazda) düğüm, acıma, tıkanma duygusu  
 marital: evlilikle ilgili  
 matter (v): önemli olmak, önem taşımak  
 menace: tehdit, tehlike  
 merely: sadece, yalnız  
 molester: taciz eden, saldırıp zarar veren  
 non-judgemental: (davranışları) yargılamayan, hata bulmayan  
 openness: açık fikirlilik  
 overemphasise (v): aşırı vurgulamak  
 perceived: algılanan, idrak edilen  
 protect (v): korumak, muhafaza etmek  
 reasonably: mantıklı, makul bir şekilde  
 receptive: istekli, kabule hazır  
 ritual: kalıplaşmış biçimde sürdürülen alışılmış hareket(ler)  
 self-esteem: kendini beğenme, kendi değerinin yüksek olduğu düşüncesi  
 self-fulfilling prophecy: kendini doğru çıkartan kehanet  
 sense: duyu  
 sensitive: duygulu, hassas  
 sincerely: içtenlikle, samimi olarak  
 thorough: eksiksiz, tam, mükemmel  
 throat: boğaz  
 unworthy: hak etmeyen, layık olmayan  
 violence: zorbalık, şiddet  
 vital: çok önemli, temel, esaslı  
 whine (v): sızlanmak, inlemek

### Parents Against Pot Word List

abuse: suistimal, kötüye kullanma  
 anguish: büyük acı ve ızdırap, keder  
 backyard: arka avlu  
 battle: savaşmak, mücadele etmek

butt: izmarit, sigara izmariti  
 chaperone: koruyucu, refakatçi  
 cocaine: kokain  
 code: kurallar topluluğu  
 combat (v): savaşmak, mücadele etmek  
 concentration: yoğunlaşma, tüm dikkati verme  
 concept: kavram, görüş, anlayış  
 cornerstone: temel, esas, temel taşı  
 crawl (v): yavaş yavaş gitmek  
 crusade: mücadele, savaş  
 curfew: sokağa çıkma yasağı  
 cut down on (v): azaltmak  
 date (v): birisi ile çıkmak, buluşmak  
 determine (v): karar vermek, azmetmek  
 dose-related: doza bağlı, dozla ilgili  
 drug dealer: uyuşturucu satıcısı  
 drug epidemic: uyuşturucu salgını  
 drug: uyuşturucu madde, ilaç  
 drug-hangout: uyuşturucu kullananların uğrak yerleri  
 expose (v): açığa vurmak, ifşa etmek, gün ışığına çıkarmak  
 fall victim to: birşeyin kurbanı olmak  
 flashlight: el feneri  
 form (v): oluşturmak, kurmak, yapmak  
 get off (v): bırakmak, vazgeçmek  
 get smashed (v): sarhoş olmak  
 get stoned (v): esrar sarhoşu olmak, kafayı bulmak  
 go through (v): maruz kalmak, katlanmak, çekmek  
 headway: ilerleme, yol alma  
 heroine: eroin  
 hone in (v): odaklaşmak, dikkati bir şeye yöneltmek  
 identify (v): kim olduğunu kanıtlamak  
 illegal: yasa dışı  
 lurch (v): sendelemek, sendeleyerek ilerlemek  
 marijuana: marihuana, haşış (bir tür uyuşturucu türü)  
 middle-income: orta düzey gelir  
 parental: ana babayla ilgili  
 parlour: dükkan, salon  
 pinball: bir tür langırt makinası  
 pool (v): birleştirmek, bir araya getirmek  
 pot: uyuşturucu madde  
 pre-teen: onbir veya oniki yaşında olan  
 rage (v): ortalığı kırıp geçirmek, kasıp kavurmak  
 range (v): (sınırlar arasında) değişiklik göstermek, oynamak  
 rate: oran  
 recall (v): hatırlamak  
 relief: rahatlık, iç ferahlığı, gönül rahatlığı  
 relieve: sıkıntıyı azaltmak, hafifletmek  
 resentment: kızma, gücenme, kızgınlık  
 set forth (v): kararlaştırmak, tespit etmek

sheer hell: büyük sıkıntı, cehennem azabı  
 shriek (v): feryat etmek, haykırmak  
 size: büyüklük, boyut  
 spirited: heyecanlı, güçlü, enerji dolu  
 stuff: madde, malzeme  
 subsequent: sonraki, daha sonra gelen  
 subside (v): yatışmak, sakinleşmek, azalmak  
 suburb: banliyö  
 surveillance: denetleme, gözaltı  
 survey: kamu oyu araştırması, anket  
 suspicious: kuşkulanan, şüphe eden  
 tantrum: öfke nöbeti, huysuzluk krizi  
 threaten (v): tehdit etmek, göz dağı vermek, korkutmak  
 trigger (v): başlatmak, harekete geçirmek  
 unaware: farkında olmayan, habersiz  
 varying: farklı, değişik  
 virtually: hemen hemen, gerçekte  
 waffle (v): kurallara uymamak  
 waver (v): tereddüt etmek, kararsızlık göstermek  
 youngster: genç, delikanlı

### Abu Simbel Word List

accomplish (v): başarmak, üstesinden gelmek  
 achievement: başarı  
 basics: temel şeyler  
 breathtaking: olağan dışı, çok ender rastlanan  
 burial: gömme, defin  
 carve (v): oymak, yontmak  
 chamber: oda, yatak odası  
 cliff: uçurum, sarp kayalık  
 colossal: kocaman, dev gibi  
 comprehend (v): anlamak, idrak etmek  
 concrete: beton  
 construction: bina, yapı, inşaat  
 customary: alışılmış, adet olan  
 dam: baraj, bent  
 darken (v): karartmak, koyulaştırmak  
 deceased: ölü, merhum  
 deity: tanrı veya tanrıça  
 detect (v): ortaya çıkarmak, bulmak  
 dome: kubbe  
 enhance (v): arttırmak, fazlalaştırmak  
 entire: tam, bütün  
 eternal: sonsuz, ölümsüz  
 fabulous: mükemmel, harika  
 facade: binanın yüzü, cephe  
 feat: ustalıklı iş, maharet

floor-to-ceiling: yerden tavana kadar olan  
 gigantic: muazzam, dev gibi  
 hew (v): yontmak, kesmek, yarmak  
 inhabitant: oturan kimse, sakin  
 integral: bütünleyici, gerekli olan  
 load (v): bir yükü bir yere yerleştirmek, koymak  
 location: konum, mevki  
 magnitude: (boyut ve önem bakımından) büyüklük  
 master: efendi, sahip  
 mummy: mumya  
 offering: bağış, adak  
 perform (v): yapmak, icra etmek  
 posture: poz, vücudun belli bir duruşu  
 priest: papaz, rahip  
 race: yarış  
 ray: ışın, ışık çizgisi  
 relative: akraba  
 require (v): istemek, ihtiyaç göstermek  
 sacrifice: kurban etme  
 sanctuary: (tapınaklarda) kutsal yer  
 servant: hizmetkar, uşak  
 sight: manzara  
 situate (v): konumlandırmak, konuşlandırmak  
 statue: heykel  
 statuette: heykelcik, biblo  
 submerge (v): suya batma, su altında kalma  
 supply (v): sağlamak, vermek, temin etmek  
 task: görev, hizmet  
 temple: tapınak, mabed  
 time-span: süre  
 tomb: türbe, kabir  
 under the auspices of: himayesi altında  
 undertaking: girişim, teşebbüs  
 unite (v): birleşmek, birleştirmek

### Resources to Last a Lifetime Word List

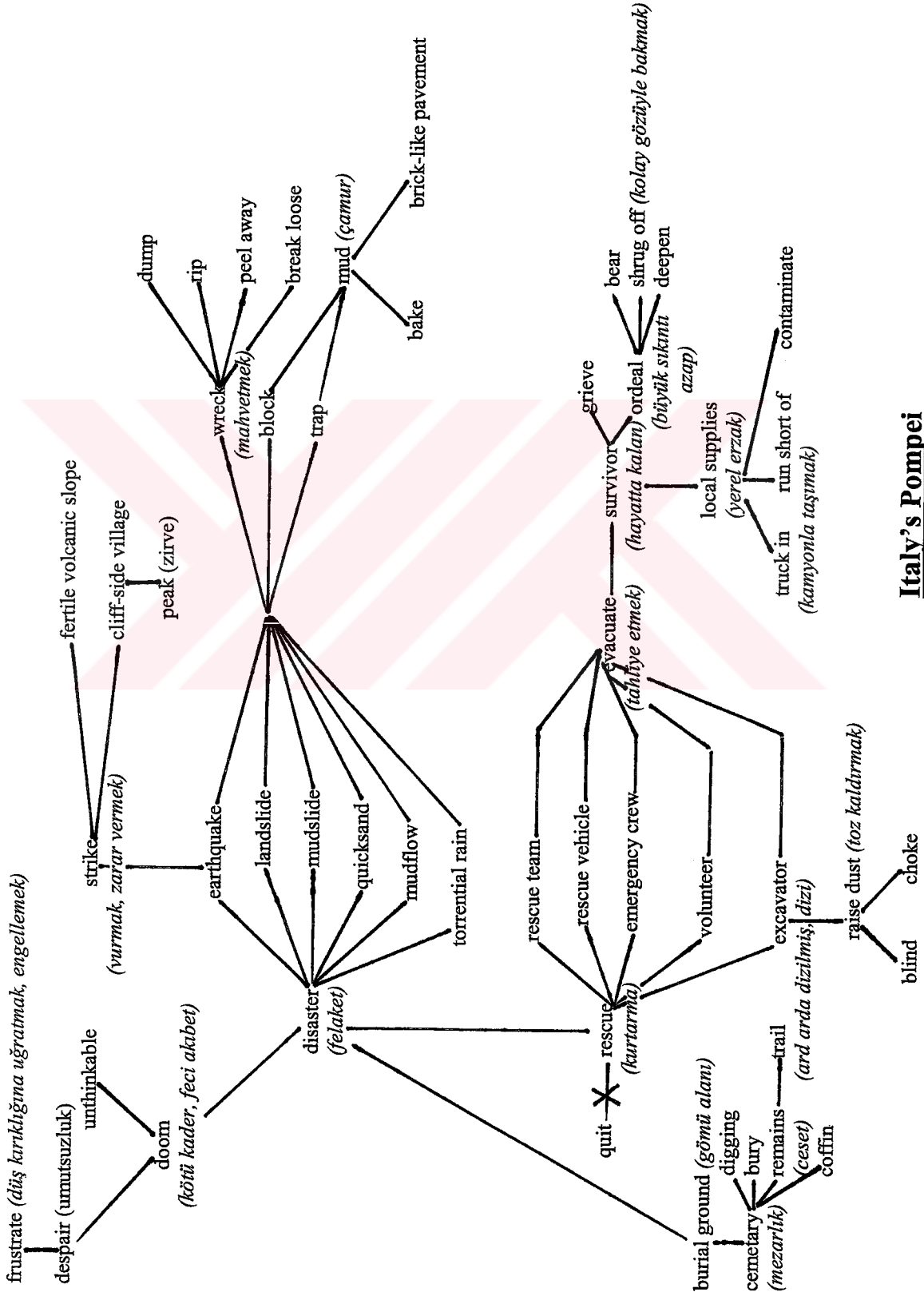
altar: üstü düz, yüksekçe yer  
 barbiturate: uyku hâpı  
 bitterness: (öfke ve umutsuzluk da içeren ) acı, üzüntü  
 bond: ilişki, bağ, benzerlik  
 brittle: duyarlı, kolayca bozulan, kolayca zarar gören  
 canvas: tuval  
 cast: alçı (kırılan kemik için)  
 cherish (v): kalbinde yaşatmak, aklından hiç çıkarmamak, unutmamak  
 chill: moral bozukluğu, korku ve dehşet  
 cider: elma şarabı  
 citadel: kale, hisar

consolation: teselli, avuntu  
 cultivate (v): geliřtirmek, ilerletmek  
 defeat (v): başarısızlıđa uğratmak, bořa çıkarmak  
 destiny: kader  
 dread (v): çok korkmak, ödü kopmak  
 duck: ördek  
 encompass (v): kuřatmak, etrafını çevirmek  
 endure (v): dayanmak, katlanmak  
 feverishly: harıl harıl, çok hızlı ve heyecanlı  
 gale of laughter: kahkaha tufanı  
 galleon: kalyon  
 grasp (v): kavramak, idrak etmek  
 grief: üzüntü, keder, elem  
 hearten (v): yüreklendirmek, cesaret vermek, umutlandırmak  
 imperishable: yokolmaz, eskimez, ebedi  
 in good spirits: morali düzgün, mutlu  
 inheritance: miras  
 inn: eski tarzda otel, han  
 lash out (v): sert sözlerle saldırmak, hücum etmek  
 loneliness: yalnızlık  
 long for (v): çok istemek, arzulamak, özlemini çekmek  
 mallard: bir tür yaban ördeđi  
 moan (v): yakınmak, řikayet etmek, sızlanmak  
 overwhelming: ezici, kahredici, karřı konulamayacak kadar güçlü  
 pale: soluk, donuk, parlak olmayan  
 pine: çam ağacı  
 precious: değerli, kıymetli, paha biçilmez  
 psychosomatic illness: ruhsal kökenli hastalık  
 pull up (v): durmak  
 quota: kota, kontenjan  
 rationalise (v): mazeret bulmak, mantıklı nedenler göstermek  
 refuge: sığınak, barınak  
 reservoir: hazne, dađarcık  
 resolutely: kararlı biçimde, azimle  
 resource: destek, dayanak, teselli kaynađı  
 silken: ipek gibi yumuřak  
 staining: renk deđiřikliđi  
 stately: ciddi, ağır bařlı  
 stiffen (v): sertleřmek, katılařmak  
 strain: gerginlik, güçlük  
 susurration: ördeklerin suda giderken çıkardığı ses  
 swallow (v): yutmak  
 swiftly: çabuk, hızlı, tez  
 temper (v): yumuřatmak, hafifletmek  
 thread: ip, iplik  
 tranquilliser: yatıřtırıcı, sakinleřtirici ilaç  
 transient: geçici, kısa ömürlü  
 treacherous: tehlikeli  
 trick: ustalık, hüner, sır

trip up (v): yanıltmak, hata yaptırmak  
unrepeatable: yinelenemez, tekrarlanamaz  
unrequited: karşılıksız  
valiantly: cesurca, kahramanca  
web: düzenleme, doku, ağ

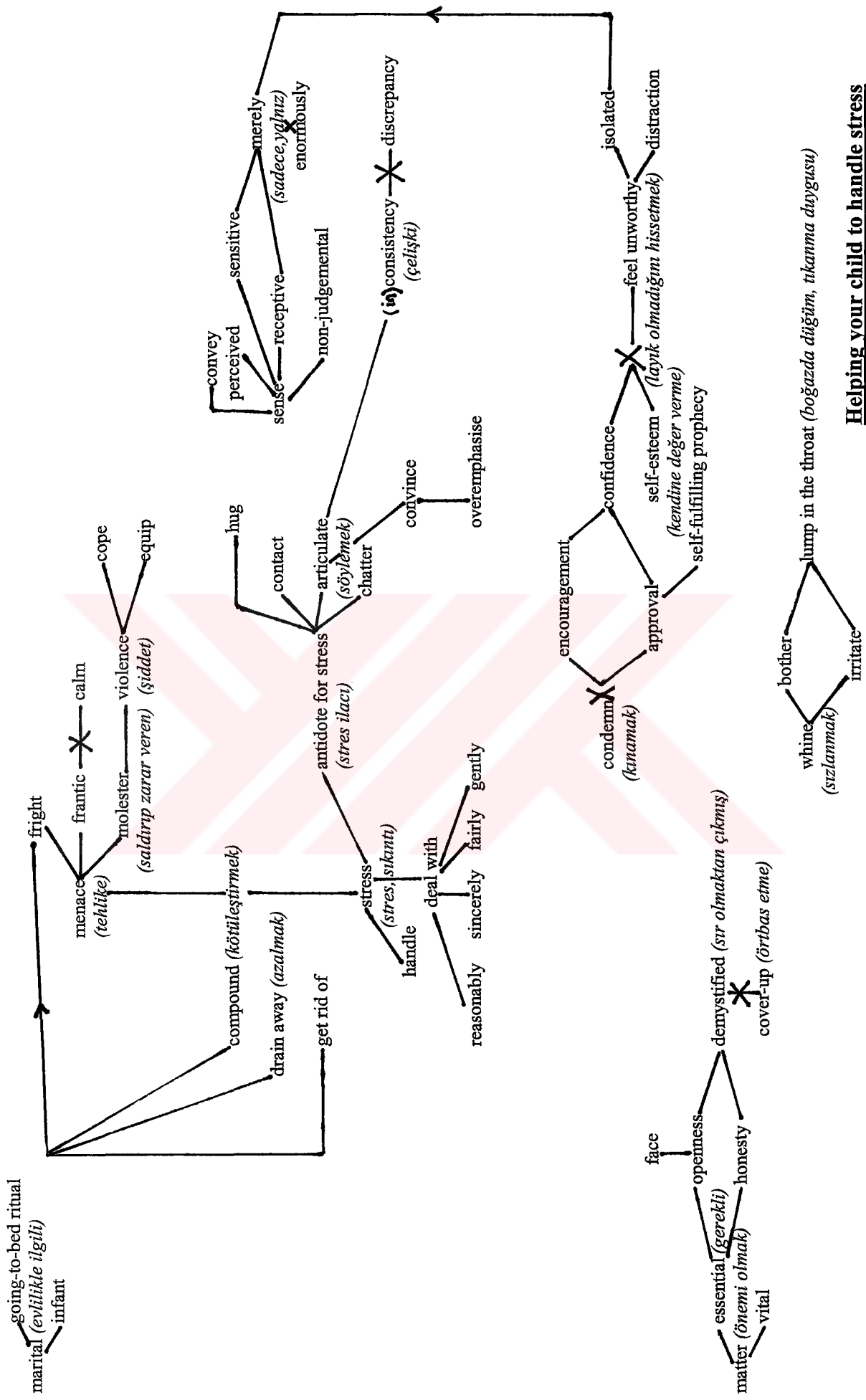


Semantic Maps

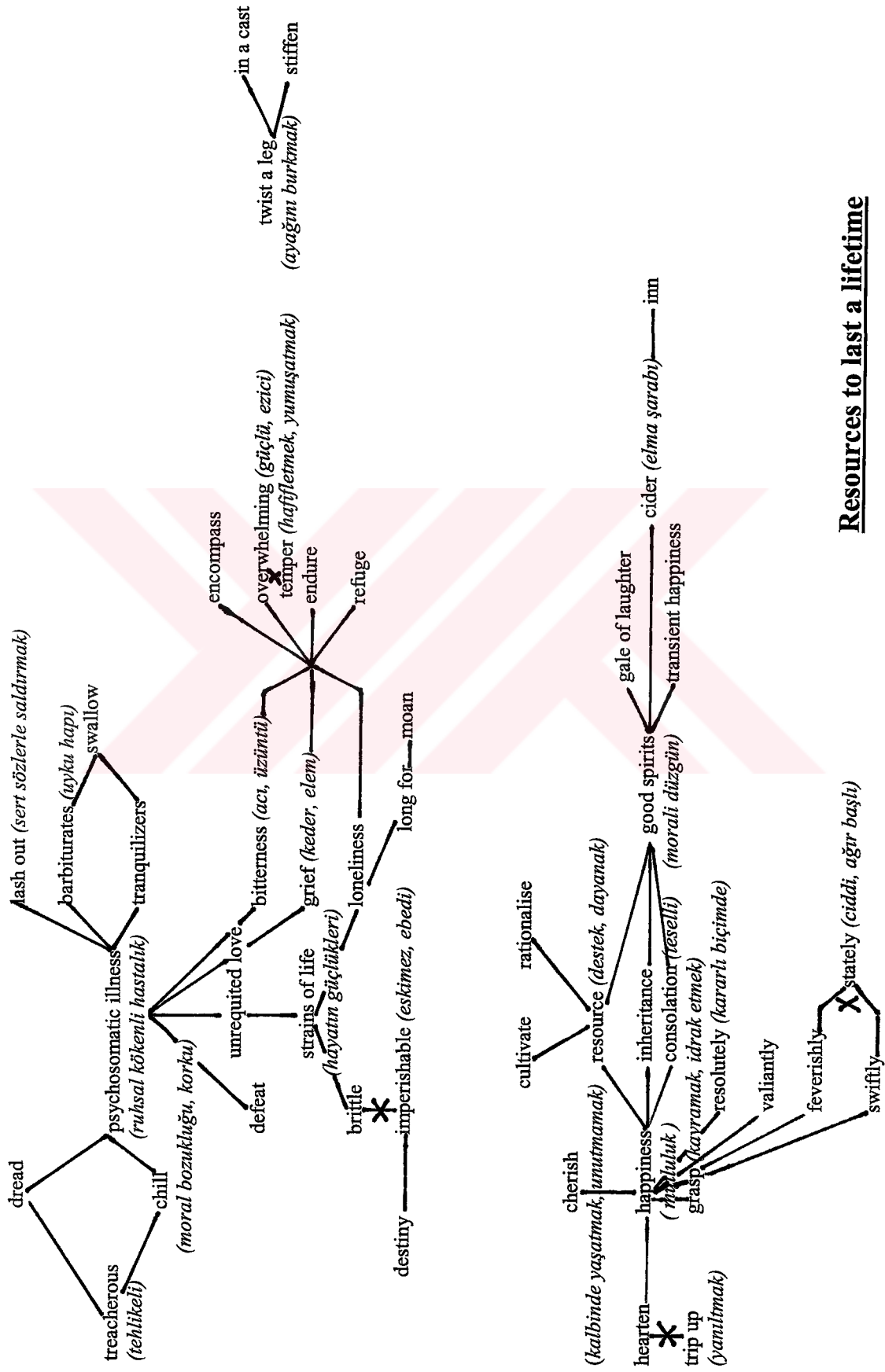


Italy's Pompei

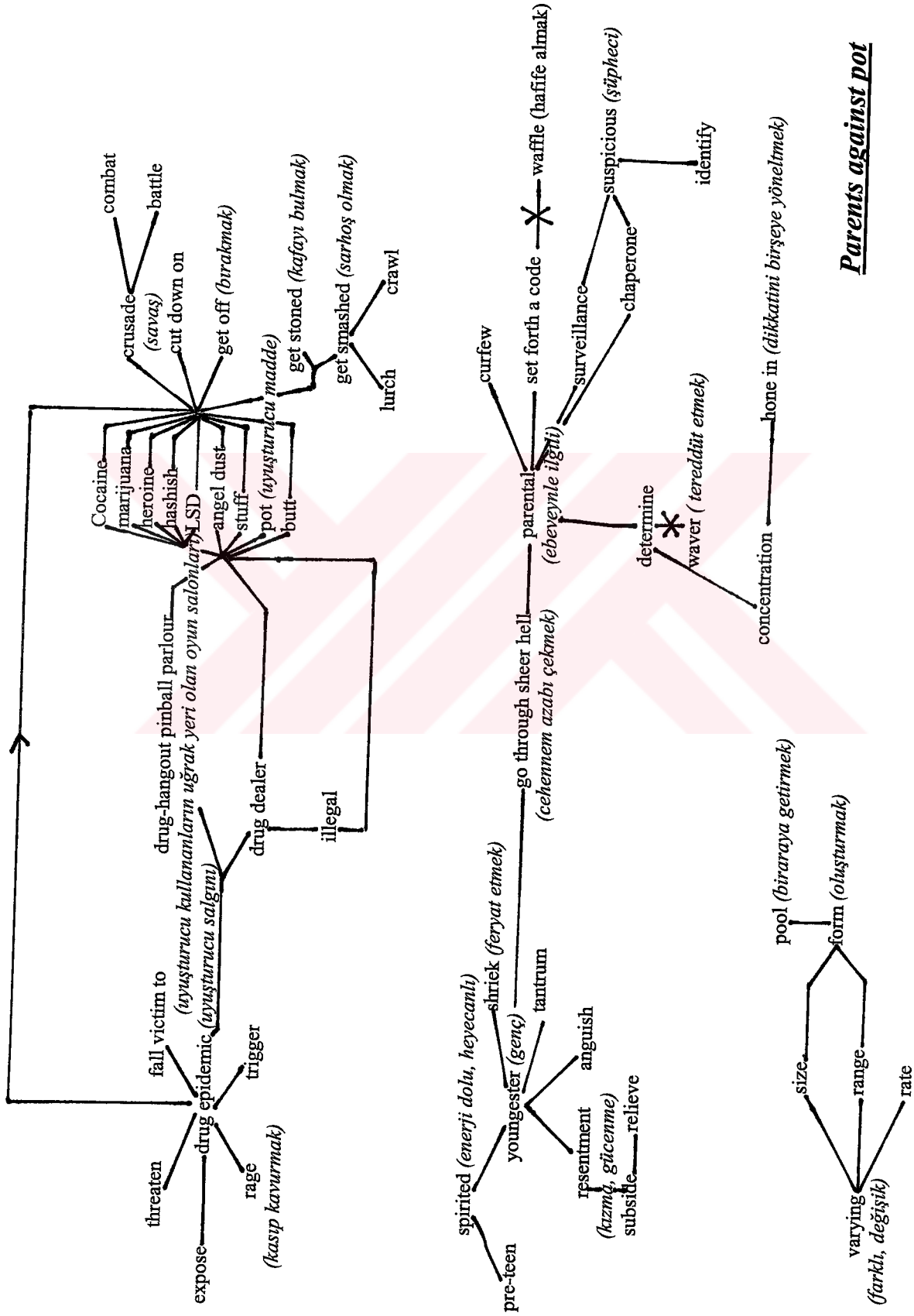




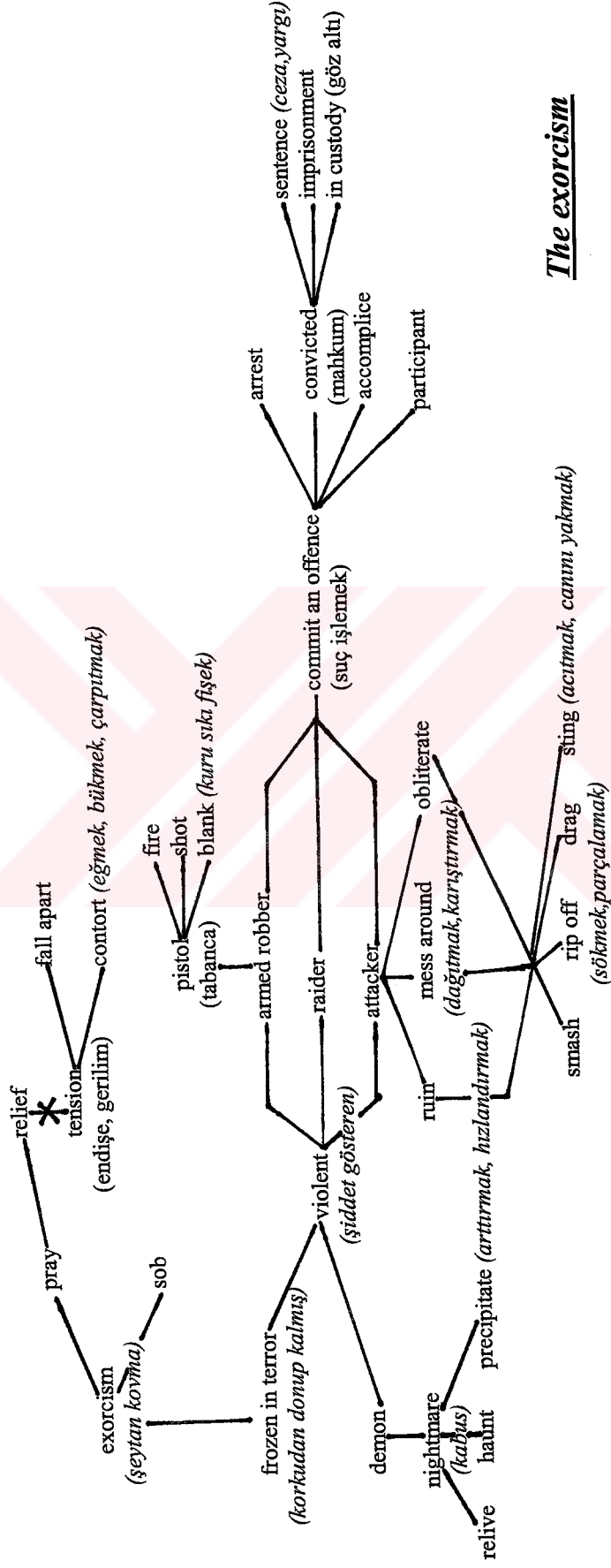
**Helping your child to handle stress**



Resources to last a lifetime



Parents against pot



The exorcism