

T.C.  
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İNGİLİZCE ÖĞRETMENLİĞİ PROGRAMI  
YÜKSEK LİSANS TEZİ

**THE EFFECTS OF USING ACTIVITIES BASED ON  
MULTIPLE INTELLIGENCE THEORY ON 11TH GRADE  
STUDENTS' LEARNING AND RETENTION OF  
ENGLISH VOCABULARY**

**Sefanur AKÇİN**

**İzmir  
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## **YEMİN METNİ**

Yüksek lisans tezi olarak sunduğum “11.Sınıf Öğrencilerinde Çoklu Zeka Kuramına bağlı aktivitelerin kullanılmasının kelime öğrenimi ve kalıcılığı üzerine etkileri” adlı çalışmanın tarafımdan bilimsel ahlak ve geleneklere aykırı bir yardıma başvurulmaksızın yazıldığını ve yararlandığım eserlerin kaynakçada belirtilenlerden oluştuğunu, bunlara atıf olarak yararlanmış olduğumu belirtir ve bunu onurumla doğrularım.

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## ÖZET

Bu araştırmanın amacı Çoklu Zeka Kuramının İngilizce kelime öğrenimine etkisini araştırmaktır. Bu çalışma kelime öğretiminde geleneksel öğretim yöntemiyle Çoklu Zeka Kuramına bağlı öğretim yöntemi arasında karşılaştırma olanağı sağlamaktadır. Bu, yarı-deneysel bir çalışmadır. Bu yaklaşım kişilerin Deney ve Kontrol gruplarına gönderilmesinde rasgele dağılımın uygulanmadığı durumlarda kullanılan bir deneysel araştırma yaklaşımıdır. Bu çalışmada varolan sınıflardan birisi Deney diğeri Kontrol Grubu olarak rasgele seçilmiştir. İki gruba da çalışmanın başında kelime bilgisini ölçmek için kelime testi Ön-test olarak uygulanmıştır. Ayrıca çalışmanın başında deney grubuna Çoklu Zeka Anketi uygulanarak, öğrencilerin baskın olan zeka türleri belirlenmiş ve sınıf içi aktiviteler buna göre hazırlanmıştır. Deney Grubunda dersler Çoklu Zeka Kuramına bağlı aktivitelerle öğretilmiş, Kontrol Grubunda ise ders geleneksel öğretim teknikleriyle öğretilmiştir. Çalışmanın sonunda aynı kelime testi Son-test olarak uygulanmıştır. Bu test uzun süreli kalıcılığı ölçmek için iki hafta sonra yeniden uygulanmıştır. Veriler SPSS programında ANCOVA (Kovaryans Analizi) kullanılarak analiz edilmiştir. Çalışmanın sonunda Çoklu Zeka Kuramına bağlı aktivitelerin kelime öğretiminde kullanımının, öğrencilerin kelime öğrenimlerindeki başarısına ve öğrenilen kelimelerin kalıcılığına önemli bir etkisinin olduğu görülmüştür.

Çalışmanın ilk bölümünde çalışmayla ilgili önbilgi, çalışmanın amacı, problem sunumu çalışmada kullanılan yöntem ve sınırlılıklar belirtilmiştir. İkinci bölümde, Çoklu Zeka Kuramı ve Kelime Öğretimiyle ilgili kaynak taraması sunulmuştur. Üçüncü bölümde, araştırmanın metodu sunulmuştur. Dördüncü bölümde bulgular ve yorumlar yer almıştır. Son bölümde, sonuç, tartışma ve öneriler sunulmuştur.

**Anahtar Kelimeler:** Çoklu Zeka Kuramı, Kelime Öğretimi, Uzun Süreli Kalıcılık.

## ABSTRACT

The purpose of this study is to find out the effects of Multiple Intelligence Theory in teaching English vocabulary. Traditional vocabulary teaching techniques and vocabulary teaching techniques based on Multiple Intelligence Theory are compared in the study. It is a quantitative study which utilizes quasi-experimental non-equivalent control group design. This design is used when random assignment of participants to groups is not possible. In the study, classes were randomly assigned as an Experimental Group and a Control Group. Both of the groups were pre-tested at the beginning of the study by using a vocabulary test. In addition, Multiple Intelligence Inventory was applied to Experimental Group to identify their dominant intelligences and prepare classroom activities accordingly. In the Experimental Group, the lesson was taught through activities based on Multiple Intelligence Theory and in the Control Group the lesson was taught by using traditional teaching methods. Both of the groups were post-tested at the end of the study. In order to determine the long-term retention, the vocabulary test was applied again two weeks after the study. The data have been analyzed by ANCOVA using SPSS. The results of the study suggest that Multiple Intelligence Theory based activities have a significant effect on achievement and retention of students' English vocabulary.

In the first chapter, the general background of the study, the goal and scope of the study, the statement of the problem, method of the study and limitations are introduced. In the second chapter, literature review about Multiple Intelligence Theory and vocabulary teaching are presented. In the third chapter, methodology of the study is told. In the fourth chapter, findings and interpretations of the study are presented and in the last chapter conclusion, discussion and suggestions are presented.

**Key Words:** Multiple Intelligence Theory, Vocabulary Teaching, Long-term Retention

## **CHAPTER 1**

### **INTRODUCTION**

This study examines the effectiveness of activities based on Multiple Intelligence Theory on 11th grade students' learning and retention of English vocabulary. An experimental study was conducted to investigate whether an implementation of activities based on Multiple Intelligence Theory improves 11th grade students' learning and retention of English vocabulary in Sandıklı Anatolian High School. This chapter will discuss the background of the study, purpose and significance of the study and present the research problem, limitations, assumptions, definitions and abbreviations.

#### **1.1 Background of the Study**

Owing to the political, economic, cultural, and technological changes in the world, English has become a lingua franca, a global language generally used for communication between the speakers whose native languages are different from each other's (Harmer, 2001). It is certain that learning English is essentially important. Vocabulary learning is an important part of learning English. (Harmer, 1994; Schmitt, 2000; Schmitt & McCarthy, 1997). Learners may acquire the grammar of English but they cannot use it fluently due to their lack of vocabulary knowledge.

Learning a foreign language is also a matter of learning the vocabulary of that language, thus promoting vocabulary growth has been a major concern of educators in the area of second language acquisition. Maiguashca (1993) states that learning grammar can be managed by learning some rules and structures but following the same way is not enough for learning vocabulary. Nation (1990) states that learning vocabulary can be managed by meeting with one word between five and sixteen times. This shows us that learning vocabulary is not an easy task. Nation and Waring (1997) claim that to make one word permanent, this word can be met several times, but they add that this does not mean to form word lists. This shows that forming word lists which is used in traditional language teaching cannot be helpful to learn vocabulary. In traditional language

teaching, words are written and pronounced many times, and these are the techniques used for learning vocabulary. Oral communication is limited in it, so the students who do not have the chance to use the words they have learnt, tend to forget these words in a short time.

Foreign language instruction in public schools in Turkey generally consists of memorization of vocabulary, and written grammar exercises. Classes are generally teacher-centred, and students are usually asked to read passages from the course books and underline and look up the new words in a dictionary. Learning vocabulary by using traditional techniques such as writing words repeatedly or mouthing them are popular. Oral communication in English is very limited. In recent years there is a tendency in teaching process from teacher-centred to student-centred lesson so that the students can learn effectively.

In that sense, Multiple Intelligence Theory may provide a good framework to use in ensuring good teaching practices and improved outcomes for students. It is not meant to pigeon-hole students into categories such as “bodily-kinesthetic,” or “logical-mathematical”. Any individual can develop any intelligence to a reasonably high level with particular environments, stimulation and encouragement. According to Gardner, any person can exhibit sensitivity and strength in all or some of the linguistic abilities such as word meanings, word order, word sounds, and language function (Gardner, 1983).

Multiple Intelligence Theory (MI) which is introduced by Howard Gardner in 1983 has many implications for teaching and learning a foreign language. It is a learner centred theory. It gives importance to the abilities-intelligences in each individual. In terms of teaching English, Multiple Intelligence Theory presents a wide variety of teaching strategies that can be implemented in the classroom to support the existing ones. It assists teachers expand their teaching repertoire to include a broader range of methods, materials and techniques for reaching more diverse range of learners. The principle in Multiple Intelligence Theory is to meet students’ different needs so it

emphasizes learner-centred language learning. In vocabulary teaching, teachers can apply activities for different intelligences of the students. These activities can help the students to learn and remember the vocabulary easily.

In conclusion, Multiple Intelligence Theory may provide a framework to teach English vocabulary and the monotony of a traditional English class can be broken with activities. It is possible that achievement and retention of vocabulary learning can be easier when the suitable activities are chosen for the students depending on their intelligences.

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

Using Multiple Intelligences as a model for vocabulary teaching has the possibility of giving importance to all students' ways of learning. The traditional classroom tends to treat students as a homogeneous group, with the teacher presenting the same exercises to all of the students at the same time, and expecting the same answers to be produced within similar time limits. Students are expected to learn the knowledge presented by the teacher with an emphasis on the use of language and logical-mathematical analysis.

The goal of this study is to find out whether Multiple Intelligence Theory is effective on the achievement and retention of high school 11th grade students' vocabulary learning or not. In this study, traditional vocabulary teaching and vocabulary teaching through Multiple Intelligence Theory based activities are compared. Traditional instruction of vocabulary is defined as reading words in context, writing the words in sentences, and memorizing the vocabulary and their meanings.

Theory of Multiple Intelligences has several implications for educators in terms of classroom instruction. The theory states that all intelligences are needed to productively function. Teachers; therefore, should think of all intelligences of the students' as equally important. This is in great contrast to traditional education system

because it typically places a strong emphasis on the development and use of Linguistic and Logical/Mathematical Intelligences. Multiple Intelligence Theory implies that educators should recognize and teach to a broader range of talents and skills. It provides a theoretical foundation for recognizing the different abilities and talents of students. This study examines the effects of Multiple Intelligence Theory on students' achievement and also retention in vocabulary learning. The assumption is that when the learners get involved in the activities appropriate to their intelligences, their vocabulary achievement and retention will increase. In this study, Multiple Intelligence Theory based activities will be used to find out their effects on students' achievement and retention of English vocabulary learning. These activities can also help the teachers to create a good classroom atmosphere where both students can enjoy and learn.

This is a quasi-experimental study. At the beginning of the study, a Pre-test is prepared and its reliability is measured. Then the students are divided into two groups as Experimental and Control Groups and both groups are given a Pre-test. The students in the Experimental group were also given a Multiple Intelligence Inventory. Then, the activities are designed regarding the intelligence profiles in the classroom. In the Experimental Group, the words are taught according to the Multiple Intelligence Theory. The Control Group is taught according to the traditional vocabulary teaching methods. The study takes four weeks. After the teaching period, students in both groups are post-tested to see the difference on their achievement and short term retention of vocabulary. After two weeks, the test is again administered to assess the long term retention of vocabulary.

### **1.3. Statement of the Problem**

This study aims to answer these questions:

1. Does vocabulary teaching through traditional teaching contribute positively to the 11th grade students' achievement and retention of English vocabulary learning?
2. Does vocabulary teaching through activities based on Multiple Intelligence Theory contribute positively to the 11th grade students' achievement and retention of English vocabulary learning?



3. Is there a significant difference between the high school 11th grade students' achievement and retention of English vocabulary learning who received teaching through activities based on Multiple Intelligence Theory and traditional vocabulary teaching?

#### **1.4. Sub – Problems**

1. What effects does this study have on 11th grade students' learning of English vocabulary?
2. What effects does this study have on 11th grade students' retention of English vocabulary?

#### **1.5. Assumptions**

1. The students answer the vocabulary test and Multiple Intelligence Inventory sincerely.
2. The variables that cannot be prevented affect the experimental and control groups in the same way.

#### **1.6. Limitations of the Study**

The study is limited with two 11th grade classes in Sandıklı Anatolian High school in Afyonkarahisar. The study is limited with one unit in the English book of the students New Bridge to Success 4 Upper-Intermediate. The students are taught the subjects in a limited period, four weeks.

#### **1.7. Definitions**

For the purpose of this study terms are defined as follows:

**Vocabulary:** Vocabulary can be defined, roughly, as the words we teach or learn in a foreign language.

**Multiple Intelligence Theory:** It refers to the theory of Howard Gardner which gives importance to the different intelligences in people.

**Retention:** It is the state of retaining vocabulary in the mind after learning them.

**Traditional instruction:** It is defined as reading words in context, writing the words in sentences, and memorizing the vocabulary and their meanings.

### **1.8. Abbreviations**

**ALM:** Audio-Lingual Method

**ANCOVA:** Analysis of covariance

**CLT:** Communicative Language Teaching

**DM:** Direct Method

**L2:** Second Language

**MI:** Multiple Intelligence Theory

**N:** The Number of the Sample

**SD:** Standard Deviation

**SLA:** Second Language Acquisition

**SW:** Silent Way

## **CHAPTER 2**

### **LITERATURE REVIEW**

This section presents Multiple Intelligence Theory, vocabulary teaching and the previous research on Multiple Intelligence Theory and vocabulary teaching and learning.

#### **2.1. Multiple Intelligence Theory**

In 1983, Howard Gardner, a professor at Harvard University's School of Education, published the book *Frames of Mind: The Theory of Multiple Intelligences*. In this book, Gardner (1983) criticises the definition of intelligence as a single, general capacity manifested in certain linguistic and logical abilities that can be measured in a number (the Intelligent Quotient, or IQ) a definition that has dominated American education. Until that time, IQ test was thought to be psychology's biggest success because intelligence seemed to be something quantifiable. However, now it is believed that this type of tests cannot measure or quantify all intelligences. Gardner developed a theory with Multiple Intelligences because he felt that the current psychometric tests only examined the Linguistic, Logical, and some aspects of spatial intelligence, whereas the other facets of intelligent behaviour such as athleticism, musical talent, and social awareness were not included (Neisser, et al 1996). Gardner (1983) views intelligence multifaceted. His model is based on findings from both cognitive science (the study of the mind) and neuroscience (the study of the brain). His approach is called "Theory of Multiple Intelligences". This theory suggests that intelligence is the ability to solve problems and difficulties in a particular domain. This is an inborn attribute of the individual and the general faculty of intelligence does not change much with age or with training or experience (Gardner, 1983).

In almost everybody the intelligences work together to solve problems. In traditional view, intelligence is defined as the ability to answer items on tests of intelligence. According to Gardner (1983) there are at least seven distinct forms of human intelligence, each with its own developmental history in the child, its own way of getting information, and its own way of expressing itself and creating products. The

seven intelligences are Linguistic, Logical-Mathematical, Spatial, Bodily-Kinesthetic Musical, Interpersonal, and Intrapersonal. Then he added Naturalist Intelligence.

### **2.1.1. The Eight Intelligences**

#### Verbal / Linguistic Intelligence

Verbal/Linguistic Intelligence involves perceiving or generating spoken or written language. It allows communication and sense-making through language. It includes sensitivity to meanings in language. Novelists, stand-up comedians, journalists, lawyers, poets can generally have Verbal/Linguistic Intelligence. People who have Verbal/Linguistic Intelligence are good at reading and writing. They learn best by saying, hearing and seeing words. Gardner (1983) claims that “music and language may have arisen from a common expressive medium” (p.98). People who have Verbal-Linguistic Intelligence are interested in the meanings, sounds, and rhythms of words. They are sensitive to poetry, tongue twisters, puns, humour, puzzles, and riddles.

#### Logical/Mathematical Intelligence

Logical/Mathematical Intelligence allows individuals to use abstract relations. The use of numbers and logical thinking are characteristics of this intelligence. Mathematicians, scientists, engineers, architects can generally have logical/Mathematical Intelligence. They are good at solving puzzles, exploring patterns, reasoning and logic. They learn best by asking questions, categorising and working with patterns. Their favourite activities are puzzles and problem solving. Berman (1998) states that “logical-mathematical intelligence enables us to perceive relationships and connections, to use abstract, symbolic thought, sequential reasoning skills, inductive and deductive thinking processes” (p.3).

#### Visual / Spatial Intelligence

Visual/Spatial Intelligence involves perceiving and using visual or spatial

information. Gardner (1993) states that “spatial problem solving is required for navigation and in the use of the notational system of maps. The visual arts also employ this intelligence in the use of space” (p.21). It transforms this information into visual images. It recreates visual images from memory. Sculptors, architects, surgeons, cab drivers, dancers can show this intelligence. People who have this intelligence are good at drawing, building, arts and crafts. They learn best by visualising. Their favourite activities are project works, flashcards, colours, pictures, drawing,

### Bodily/Kinesthetic Intelligence

Bodily/Kinesthetic Intelligence allows an individual to use all or part of his/her body to "create". “it includes athletic, creative, fine, and gross motor movement. Berman (1993) claims that this intelligence involves a sense of timing and the perfection of skills through mind-body union” (p.4). Dancers, surgeons, athletes, sculptors can have this intelligence. Their favourite activities are Total Physical Response activities, action songs, dictations, miming and realia.

### Musical Intelligence

Musical Intelligence involves communicating, and understanding meanings made out of sound. Musicians, conductors, sound engineers or choreographers can have Musical Intelligence. They are good at singing, listening to music and playing instruments. They learn best by using rhythm, with music on. Their favourite activities are using songs, chants, drilling. They like the sounds of the human voice, environmental sounds, and instrumental sounds. Gardner (1993) states that “certain parts of brain play important roles in perception and production of music” (p.17).

### Naturalist Intelligence

Naturalist Intelligence involves the ability of understanding the natural world (Gardner, 1999). It allows people to distinguish among, classify, and use features of the environment. Botanists, biologists, gardeners, farmers, chefs can have this intelligence.

People who have this intelligence are good at nature, they learn best at working outside and observing nature. Their favourite activities are environmental projects.

### Interpersonal Intelligence

Interpersonal Intelligence involves the capacity to recognize and make distinctions among the feelings, beliefs, and intentions of other people. Gardner (1993) states that “Interpersonal Intelligence builds on a core of capacity to notice distinctions among others; in particular, contrasts in their moods, temperaments, motivations, and intentions”(p.23). Teachers, mediators, salespeople can show this intelligence. People who have this intelligence are good at mixing with others, leading groups, understanding others and mediating. They learn best by co-operating, working in groups and sharing, their favourite activities are group work, debate and discussions. The interpersonal intelligence is the ability to understand the thoughts and intents of others and the ability to respond appropriately. Those possessing the interpersonal intelligence are social people. They can be excellent leaders, can help people and work easily with others.

### Intrapersonal Intelligence

Intrapersonal Intelligence enables individuals to understand themselves. Therapists and poets can show this intelligence. Gardner (1993) claims that “[A] person with good Intrapersonal Intelligence has a viable and effective model of himself or herself”(p.25). People who have this intelligence are good at working alone and pursuing own interests, they learn best at working alone. It is a sense of self-awareness. Their favourite activities are working individually on personalised projects

### **2.1.2. Research on Multiple Intelligence Theory**

Multiple Intelligence Theory and its effect were studied widely (Anderson, 1998; Geimer, Getz, Pochert, Pullam, 2000; Bulut, 2003; Servi, 2004; Erdir, 2005; Karadeniz, 2006; Hamurlu, 2007; Temel, 2008). Geimer, Getz, Pochert, Pullam (2000) studied on

improving student achievement in Language Arts through Implementation of Multiple Intelligences Strategies. The students were taught through Multiple Intelligence based activities and traditional language teaching methods. At first, the theory was presented to the learners. Students were given a Multiple Intelligences assessment and exposed to a variety of lessons following a Multiple Intelligences format. These lessons were taught using a variety of subjects and intelligences. The language art subjects identified throughout the process were English grammar, reading comprehension and spelling. Lesson plans following both traditional and Multiple Intelligences approaches for each subject area were designed. The study took four months. The results of the grammar phase, reading comprehension phase were more successful when compared to traditional teaching results. Spelling results showed a slight trend towards traditional instruction in three out of the four targeted classrooms. If the students do not give attention to studying spelling words consistently, then the scores will not improve. In general, it can be concluded that Multiple Intelligence strategies helped the learners in this study.

Anderson (1998) studied on the improvement of retention in foreign language vocabulary. In this study, there was an experiment for increasing retention of foreign language vocabulary by using Multiple Intelligence Theory and Memory Enhancement Tools. The population of the study was 100 seventh and eighth grade Latin students. The students had low vocabulary quiz scores. They had generally verbal activities such as oral repetition drills, writing exercises or paragraphs, using the overhead projector. Multiple Intelligence Theory was preferred to focus all the intelligences of the students. Special attention was given to mnemonic devices and study skills to help with the memorization. The students were grouped. The vocabulary quizzes administered to the students after ten weeks of instruction. Identical quizzes were given to the groups. Owing to the implementation of Multiple Intelligence activities, the scores of the students improved. The research indicated that using Multiple Intelligence skills in the learning and retention of vocabulary can be a helpful tool. Students from each intelligence can learn when the activities are applied to him/her. Keeping journals was advised for the teacher as a result of this study so that new activities can be found.

Multiple Intelligence Theory and its effect in English lessons were studied in our country by several scholars (Bulut, 2003; Erdir, 2005; Hamurlu, 2007; Karadeniz, 2006; Servi, 2004; Temel, 2008). Temel (2008) explored the impact of learning activities based on the Multiple Intelligence Theory on the success of first stage primary school students in English lessons. The learning activities based on the Multiple Intelligence Theory were used in the treatment groups while traditional learning methods were used in the control groups. To gather data, “English success Pre-tests and Post-tests” and “Multiple Intelligence Inventory” were used. As a result of this study, Multiple Intelligence Theory based learning proved to be helpful on the English achievement of the students.

Another study about Multiple Intelligence Theory is the thesis carried out by Hamurlu (2007). This study’s aim was to analyze the effects of the instruction based on Multiple Intelligences Theory on the students’ achievements in English classes, and the students’ attitudes towards the English classes. He conducted the study at ninth grade at foreign language based high school. It is an experimental study with Pre-test and Post-test model. Lessons are presented through traditional foreign languages teaching methods and techniques in the control group, and in the Experimental Group, they are presented through activities based on Multiple Intelligences Theory. At the end of the study, it has been realised that the instruction based on multiple intelligences theory has increased the students’ achievement in English classes and has made positive effects on the students’ attitudes towards English.

Karadeniz (2006) studied on the effects of Multiple Intelligence Theory based instruction to the achievement in English lesson and the permanence of the learned knowledge of the ninth grade students in Anatolian high school. In this study, two ninth grade classes are chosen. The study takes five weeks. There is a significant difference between the Experimental Group and Control Group. Experimental Group, which was taught through Multiple Intelligence based instruction, was more successful in achievement and retention of learned knowledge in English lesson. Multiple Intelligence



Theory based English teaching and learning studies were in variety but there were a few studies about its effects on achievement and retention of English vocabulary.

Erdir (2005) aimed to find the benefits of Multiple Intelligence Theory in terms of vocabulary teaching to improve reading and listening skills. The hypothesis of this study is that the success rate of the vocabulary teaching by Multiple Intelligences Theory to improve reading and listening skills would be higher than the ones taught by traditional method. This study is carried out in the army academy to the second year cadets. The applications made in the 2003-2004 academic year lasted for four months, and the success rates between two groups were observed. Multiple Intelligence Theory based instruction is found to be far more successful than the traditional methods.

Servi (2004) studied on the relationship between learning and teaching vocabulary and Multiple Intelligences. It was a comparative study on vocabulary teaching regarding and disregarding Multiple Intelligences. The results of the study indicated that teaching vocabulary regarding Multiple Intelligence Theory has positive effects on students' learning vocabulary. Bulut (2003) aimed to identify the advantages of applying Multiple Intelligence Theory in teaching English as a foreign language to children. The participants of the study are 71 students at fifth grade. There are 2 hours of English lessons of them every week. At the beginning of the study, the intelligences of the students are identified. Then, their English course book "Enjoy English 5" is evaluated to identify activities for each intelligence. As a result of this study, it has been ascertained that specific grammatical structures should be presented via different activities and exercises designed in accordance with various intelligences of the students. Multiple Intelligence Theory seems to be helpful in English lessons.

## **2.2. Vocabulary Teaching**

Vocabulary can be defined, roughly as the words we teach or learn in a foreign language. Vocabulary has a vital role in the process of language learning but generally it is ignored so language learning becomes too difficult because of the lack of vocabulary knowledge. McCarthy (1990) states that without words to express a wide range of

meanings, communication in a Second Language (L2) cannot happen in any meaningful way although the students learn the grammar or the sounds of the L2. Cook (1991) states that grammar enables the learners the overall patterns but vocabulary is needed to put the material in practice. Vocabulary knowledge helps to relate all the words in a sentence not just knowing the words' meanings. Wallace (1988) claims that learning a foreign language is also a matter of learning the vocabulary of that language. Wilkins (1974) states that "without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (p.111). Thus, vocabulary teaching has a special part in language teaching. Vocabulary has not been given importance in programs for teachers during much of the twentieth century (Allen, 1983). According to Allen (1983) grammar was being given too much time in language classrooms, so vocabulary teaching was neglected. Celce-Murcia (1979) states that grammatical items are meaningless without words and words are not enough without grammatical items. Thus, the place of the vocabulary is as important as the place of grammar in language teaching and learning.

It can be said that toward the end of the twentieth century, it becomes possible to see a revival of attention to vocabulary learning. Instead of vocabulary items as long and boring lists of words, lexical forms have taken place in contextualised and meaningful language (Brown, 2001). The status of lexis increased through the developments in lexical and linguistic theory. More central role for vocabulary was adopted. Nation (2001) claims that deliberately teaching vocabulary is one of the least efficient ways of developing learners' vocabulary knowledge but nonetheless it is an important part of a well-balanced vocabulary programme. According to Waring (2002) it is not certain that students learn the words after the teacher teaches them. Learners have difficulties in learning a vocabulary item, although they hear the words many times. To Nation (2001), language learning requires language items such as pronunciation, vocabulary, grammatical constructions, subject matter knowledge and cultural knowledge. Learners should try to improve their vocabulary by means of speaking and writing activities which are important ingredients of vocabulary. Productive activities such as speaking and writing make learners focus on words and so strengthen their knowledge of previous

vocabulary. To highlight this importance Nation (2001) claims that the learners can be encouraged to listen like a speaker and to read like a writer when they have to speak and write. They become more fluent. Both learners and teachers should devote enough time to effective vocabulary learning.

Vocabulary teaching has its importance since it is an essential part of learning a new language. Different methods treated vocabulary teaching differently. The Grammar Translation Method, which is called a classical method as it is used in teaching of classical languages (Latin and Greek), has been used for years (Freeman, 1986). In Grammar Translation Method, vocabulary is taught through translation. Vocabulary in the target language is learned through direct translation from the native language, e.g. with vocabulary tests. Mistakes should be corrected with special attention. Vocabulary lists are learned. There is little or no attention to pronunciation.

In Direct Method, only everyday vocabulary and sentences were taught; teaching vocabulary is pantomiming, realia and other visuals are used to teach vocabulary. Vocabulary was explicitly taught. In Audio-lingual Method, Like the Direct Method, it is advised that students be taught a language directly, without using the students' native language to explain new words or grammar in the target language. However, unlike the Direct Method, the Audio-lingual Method didn't focus on teaching vocabulary. Rather, the teacher drilled students in the use of grammar. In audio-lingualism, there is no explicit grammar instruction-everything is simply memorized in form. Vocabulary was just a tool to conduct grammar drills (Richards & Rodgers, 1986).

Unlike the Audio-lingual Method, Communicative Language Teaching's (CLT) primary focus is on helping learners create meaning rather than helping them develop perfectly grammatical structures. CLT is usually characterized as an approach to teaching, rather than as a teaching method with a clearly defined set of classroom practices. There is an emphasis on learning to communicate through interaction in the target language (Richards & Rodgers, 1986). In a Silent Way class, the students express their thoughts and feelings about concrete situations created in the classroom by

themselves or the teacher. In this approach, it is assumed that the students' previous experience of learning from their mother tongue will contribute to learning the new foreign language (Richards & Rodgers, 1986). Total Physical Response (TPR) is suited to teaching classroom language and other vocabulary connected with actions. In the Natural Approach, particular emphasis is laid on language as a set of messages that can be understood. It is designed to help beginner become intermediates. Vocabulary is seen as a means to the end of communication (Richards & Rodgers, 1986).

Michael Lewis, the founder of the Lexical Approach, is an important figure when the topic is vocabulary. He highlights the importance of vocabulary as being necessary to communication. He claims that chunks are important in language learning. Chunks consist of fixed and semi-fixed expressions, idioms, collocations so in language production and vocabulary learning, they are important (Lewis, 1997).

## **CHAPTER 3**

### **METHODOLOGY**

The purpose of this study is to find out the answer to the question whether there is a significant difference between achievement and retention of vocabulary taught through traditional teaching methods and through Multiple Intelligence Theory based activities. This section includes the model of the research, the population, data collection instruments, the sample of the study and the procedure of the research.

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

In this study, Quasi-Experimental non-equivalent control group design was used (Karasar, 1991). Quasi-experimental designs are commonly employed in the evaluation of educational programs when random assignment is not possible or practical non-equivalent control group design is similar to Experimental Pre-test/Post-test Control Group design (Karasar, 1991). The sole and an important difference is that participants are not randomly assigned to the groups.

In this study, two intact classrooms at the same proficiency level (upper intermediate) were chosen. One class was randomly assigned as an Experimental Group and the other one as Control Group. A Multiple Intelligence Inventory was applied to Experimental Group. The results of the inventory enabled to see the most dominant intelligences in the classroom. The most dominant intelligences are Musical, Bodily-Kinesthetic and Linguistic Intelligences. The activities based on Multiple Intelligence Theory are prepared to teach vocabulary in the Experimental Group according to their dominant intelligences. This study was carried out four weeks-two hours for each week. In Control Group, the words were taught to the students according to traditional teaching method and in Experimental Group according to activities based on Multiple Intelligence Theory (Appendix 3).

In Experimental Group, the activities were chosen regarding the intelligence profiles of the students. The students in the Experimental Group had Musical, Bodily-

Kinesthetic and Linguistic Intelligences dominantly so the activities based on these intelligences were given more importance. The Reading Texts were taken from the students' course book *New Bridge to Success 4 Upper Intermediate* and workbook. The topics of the Reading Texts were Seasons, Eskimos, Natural Disasters and Global Warming. There were four reading passages. They were appropriate for students' proficiency level in English (Appendix 4). For instance, the first lesson's title was "Seasons". The students were able to learn vocabulary items related with the topic. New words were as follows: Cycles, annual, flow, drop, recognize, foretell, tend appreciate, bloom and prospect. The teacher followed the below stages to teach these words.

Stage one is awakening the intelligence through multisensory experiences such as touching, smelling, tasting, seeing and so on learners can be sensitized to the many-faceted properties of objects and events in the world that surrounds them. Stage 2 is amplifying the intelligence. Students strengthen and improve the intelligence by volunteering objects and events of their own choosing and defining with others the properties and contexts the experience of these objects and events. Stage 3 is teaching with / for the intelligence. At this stage the intelligence is linked to the focus of the class, that is, to some aspect of language learning. This is done via worksheets and small-group projects and discussion. Stage 4 is transferring of the Intelligence. Students reflect on the learning experiences of the previous three stages and relate these to issues and challenges in the out-of-class world. Students are asked to reflect on both the content of the lesson and its operational procedures (Richards& Rodgers, 2001:118).

At first stage, the teacher brought colourful pictures, newspaper articles, posters to attract the attention of the students, and to appeal to different senses. At second stage he gave them worksheets. Then, he wanted volunteers to find the name of the season or weather condition they chose from the box without looking. One student told the word by using different words, his/her friends tried to find the hidden word. Then, the teacher wanted students to write the name of the season or weather condition under the pictures on the worksheets. At third stage, the teacher explained that they learned seasons. He told the topic. The passage was read. To attract their attention, he used his body

language, he changed his voice. Then, he wanted them to find the right season. In this guessing activity, students also used the previous structures they had learned such as have got/has got and simple present tense. The student who found the name described another season or weather condition. Then the students filled in the charts with their friends both of the students had blanks on their worksheets but at different places, they asked questions to find the missing words. At the last stage, the teacher wanted them to describe any season or weather condition. He gave them homework to do a project either in groups or individually, they described any season or the current season.

In Control Group, the same lesson was taught by using traditional drilling techniques. There was a teacher-centred classroom. The teacher was more active than the students. The teacher read the passage. The students listened to him. Then, the students read the passage in their book. They underlined the unknown words, and they found their meaning. They repeated the words after the teacher.

### **3.2. The Population and the Sample of the Study**

This study was applied in Sandıklı Anatolian High School. The students can enroll Anatolian High Schools after passing the Nationwide High Schools Entrance examination. The students have to get enough score in order to be a student at these schools. Anatolian High Schools give importance to teaching foreign languages. English, German and French languages are generally taught at these schools.

There are two 11th grade classes at Sandıklı Anatolian High School. They are chosen as the subject of the research. These students are between 16–17 years old. There are 49 students in this study. In one class, there are 23 students, in other class there are 26 students. One of these classes is Social class and the other one is Science-Maths class. Social class is chosen as a Control Group and Science-Maths class is chosen as an Experimental Group randomly. They are at upper-intermediate level. The target population of the research is informed about the study in advance. They agreed to take part in this study. The vocabulary test has been applied to all students. One class is chosen randomly as an Experimental Group and the other class as a Control Group.

Twenty-three students in the Control Group and twenty-six in the Experimental Group took part in this study. For this study, one of the English teachers of this school was informed about Multiple Intelligence Theory until he became familiar with the topic and activities. He is an experienced teacher, and he is interested in the research so much. He has been a teacher for 13 years.

### **Data Collection Instruments**

In this study, Data Collection Instruments are “Multiple Intelligence Inventory” and Vocabulary Test. “Multiple Intelligence Inventory” consists of eight sections. Logical/Mathematical Intelligence, Bodily/Kinesthetic Intelligence, Visual/Spatial Intelligence, Interpersonal Intelligence, Intrapersonal Intelligence, Musical Intelligence, Naturalist Intelligence. There are ten statements under the subtitle of each intelligence. Some examples are as follows: (Appendix 1).

#### Verbal/Linguistic Intelligence

- \_\_\_ 1. I write and publish articles.
- \_\_\_ 2. I read something almost every day that isn't related to my work.

#### Musical Intelligence

- \_\_\_ 1. I have a pleasant singing voice.
- \_\_\_ 2. I can tell when a musical note is off-key.

The “Vocabulary Test” which was prepared by the researcher has been used to determine the vocabulary level of the students. At the beginning of the study 50 questions in the form of multiple choices were prepared then some of them were evaluated with the help of an expert. The questions were tested to assess their reliability. They were applied to another group of students before the study. Reliability analysis of the instrument revealed Kuder-Richardson 20 (K-R 20) coefficients of 0.71 for the generation of the instrument at first. Then, there were some exclusion from the test. In



second reliability analysis of the instrument revealed KR –20 coefficients of 0.73 for the generation of the instrument.

**Table 1**  
**KR–20 Reliability Statistics Report for Vocabulary Achievement Scale**

<b>Questionnaire Statistics</b>	<b>Total Scored Items on Exam</b>	<b>Average Score of all Candidates</b>	<b>Average Per cent</b>	<b>KR-20 Realibility Coefficient</b>	<b>Standard Error of Measurement</b>
<b>First Measurement</b>	40	21.208	56.654	0.71	2.687
<b>Enhanced Measurement</b>	35	20.230	59.120	0.73	2.230

Vocabulary test was used as a Pre-test and a Post-test of the study. Pre-test was used before the instruction then after four weeks it was used as a Post- test. To obtain the long-term retention the same test was applied two weeks after the study. There are multiple choice questions in the Vocabulary Test (Appendix 2).

These are the examples from the Vocabulary Test.

- 1 In some oceans, there are strong .....

  - A) Rise
  - B) Seas
  - C) Swells
  - D) Currents
  - E) Wave

- 2 The frozen leaves ..... in the street.

  - A) Rejoiced
  - B) Remained
  - C) Restart
  - D) Replayed
  - E) Request

Data is collected in three stages: Before the instruction, immediately after the instruction and two weeks after the instruction. Before the instruction, Multiple Intelligence Inventory and Vocabulary test as a Pre-test were applied. Immediately after the instruction, Vocabulary test was applied to the both groups as a Post-test. Two weeks

after the instruction, Vocabulary test was applied as a Delayed Post – test.

### **3.3. Data Analysis**

In order to analyse the quantitative data, SPSS 11.0 was used. Descriptive Statistics and Analysis of covariance (ANCOVA) were applied. Descriptive Statistics were used to get the Mean scores and Standard Deviation of the Pre-Test, Post-Test and Delayed Post-test. ANCOVA is used in examining the differences in the mean values of the dependent variables that are related to the effect of the controlled independent variables while taking into account the influence of the uncontrolled independent variables. ANCOVA consists of at least one categorical independent variable and at least one interval natured independent variable. In ANCOVA, the categorical independent variable is termed as a factor, whereas the interval natured independent variable is termed as a covariate. The task of the covariate in ANCOVA is to remove the extraneous variation from the dependent variable. This is done because the effects of the factors are of major concern in ANCOVA (Fraenkel & Wallen, 2000). To see the difference between the Post-tests and Delayed Post-tests of the Experimental Group and Control Group, the results were analyzed by using ANCOVA.

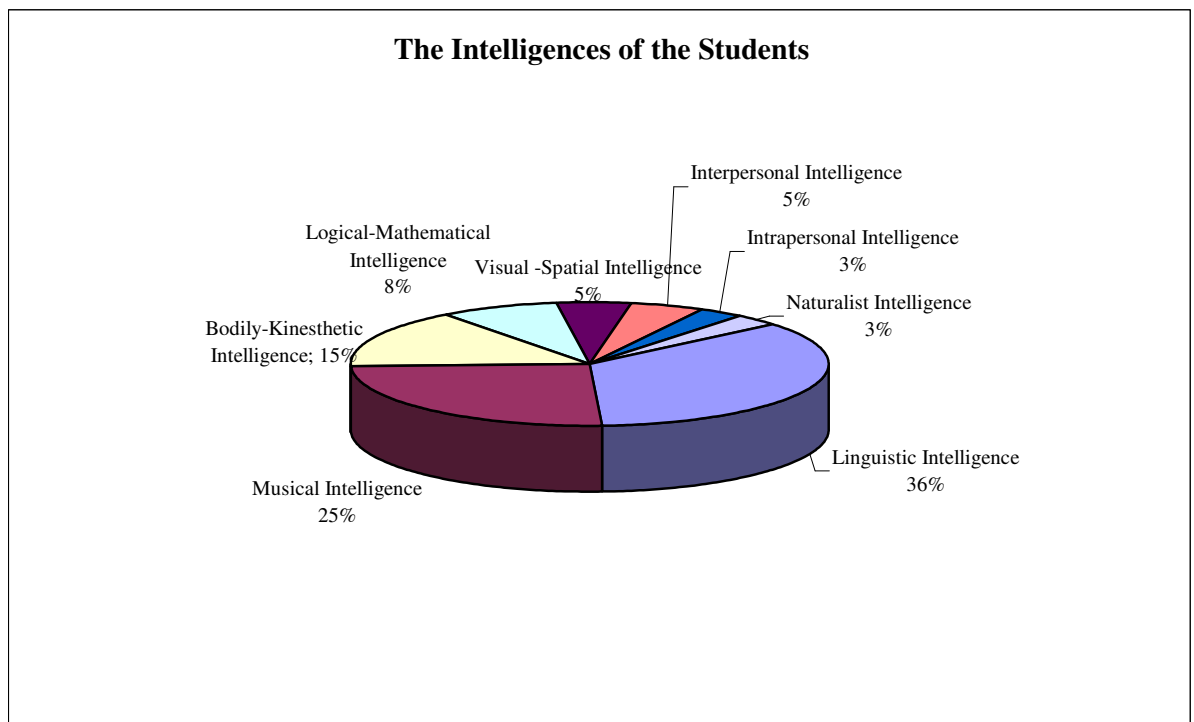
## CHAPTER 4

### FINDINGS AND INTERPRETATIONS

In this study, it is aimed to find out whether there is a significant difference between traditional teaching methods and Multiple Intelligence based activities in vocabulary learning and retention. Multiple Intelligence Inventory was used both for the teacher and the students. Their dominant intelligences can be seen in the diagrams below.

**Figure 1**

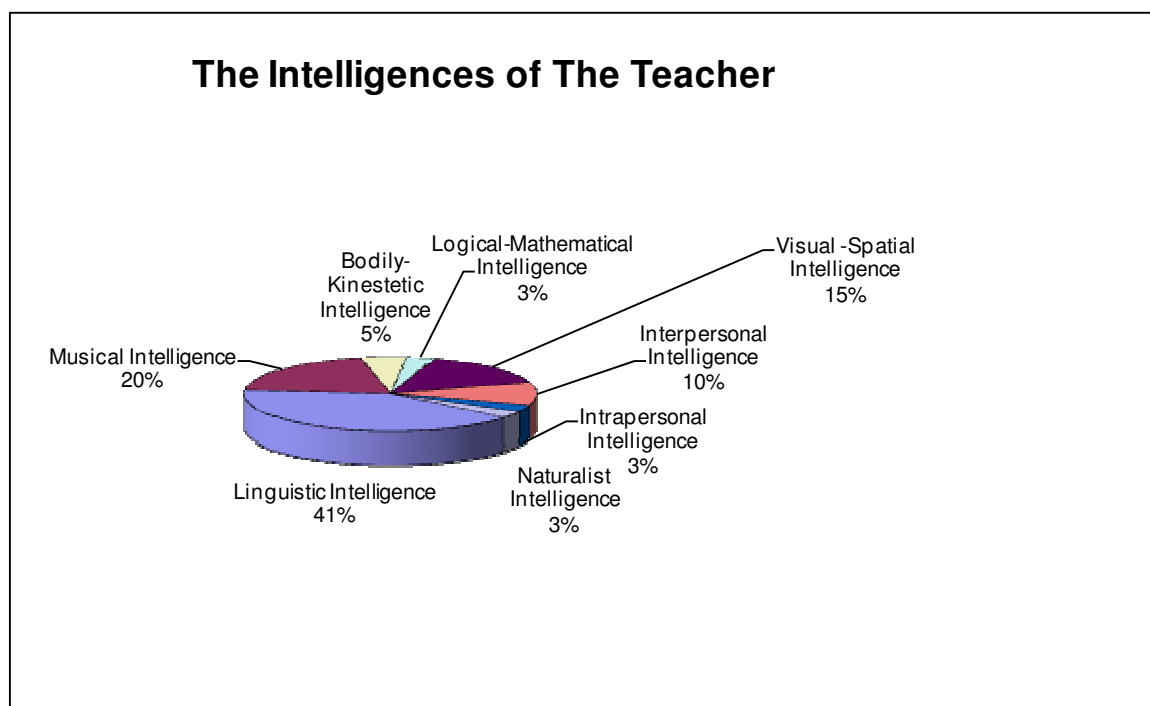
#### The Result of the Multiple Intelligence Inventory for Students



According to the students' Multiple Intelligences Inventory, the dominant intelligences of the students are Linguistic Intelligence, Musical Intelligence and Bodily-Kinesthetic Intelligence.

Figure 2

### The Result of the Multiple Intelligence Inventory for the Teacher



According to the result of the Multiple Intelligence Inventory for teachers, the teacher's dominant intelligences are Linguistic Intelligence, Musical Intelligence and Visual-Spatial Intelligence. In this study, teacher's and students' dominant intelligences showed similarity. Linguistic Intelligence and Musical Intelligences were the dominant intelligences both for the students and the teacher. This can be helpful for the teacher but the teacher who has different intelligences can also use the Multiple Intelligence Theory based activities when he/she knows the intelligences of the students as the activities are easier to apply.

#### 4.1. Research Question 1

Does vocabulary teaching through traditional teaching contribute positively to the 11th grade students' achievement and retention of English vocabulary learning?

**Table 2**  
**Pre-Test and Post-Test Results of the Control Group**

	N	M	SD
Pre- Test	23	10.48	4.220
Post –Test	23	12.96	4.139
Delayed Post – Test	23	11.17	4.158

The mean score of the Control Group was 10.48 out of 40 questions at the end of the Pre-test. The mean score in Post – test of the control group was 12.96 out of 40. 10 questions out of 40 were answered when the vocabulary test was first applied. After the instruction in traditional language teaching approximately 13 questions out of 40 questions were answered. After two weeks, when the vocabulary test was applied for retention 11 questions out of 40 were answered.

#### **4.2. Research Question 2**

Does vocabulary teaching through activities based on Multiple Intelligence theory contribute positively to the 11th grade students' achievement and retention of English vocabulary learning?

**Table 3**  
**Pre-Test and Post-Test Results of the Experimental Group**

	N	M	SD
Pre- Test	26	13.46	5.368
Post –Test	26	29.73	4.754
Delayed Post –Test	26	28.08	4.640

The mean score of the Experimental Group is 13.46 out of 40 questions. The mean score in post – test of the Experimental Group was 29.73 in 40. Thirteen questions

out of 40 were answered when the vocabulary test was first applied. After the instruction by activities based on Multiple Intelligence Theory approximately 29 questions out of 40 questions were answered. After two weeks, when the vocabulary test was applied for retention 28 questions out of 40 were answered. There was a big difference in the post-test and delayed post-test mean scores of the students' in the Experimental Group when compared with the post-test and delayed post-test mean scores of the students' in Control Group. Vocabulary teaching through activities based on Multiple Intelligence theory contributed positively to the 11th grade students' achievement and retention of English vocabulary learning.

### 4.3. Research Question 3

Is there a significant difference between the high school 11th grade students' achievement and retention of English vocabulary learning who received teaching through activities based on Multiple Intelligence Theory and traditional vocabulary teaching?

**Table 4**  
**Analysis of Covariance of MI Vocabulary Achievement**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	642,820a	2	321,410	48,829	,000
Intercept	739,549	1	739,549	64,280	,000
Covariate	43,066	1	43,066	1,591	,213
Treatment	181,762	1	2181,762	30,621	,000
Error	244,854	46	27,062		
Total	425,000	49			
Corrected Total	3887,673	48			

When the results at Table 4 were evaluated, it can be seen that there is a significant difference in Post-test scores of the groups when ANCOVA (Analysis of Covariance) was applied. ( $p = ,213 < .0001$ ). After two weeks, the Post – test was applied to get the long- term retention. This two-week waiting period was necessary. The literature suggested a very sudden loss of learning during the first several days after

instruction and a gradual loss after learning. Therefore, the 2-week period between the Post-test and the retention test was seen as appropriate according to theory concerning retention (Creswell & Vaughn, 1979). The mean score in post – test of the control group is 11.17 out of 40. The mean score in Post – test of the Experimental group is 28.08 out of 40. In the Experimental Group, the score is higher than the Control Group. Table 7 shows us that  $p = ,000 < .0001$ . There is a significant difference between the high school 11th grade students' achievement and retention of English vocabulary learning who received teaching through activities based on Multiple Intelligence Theory and traditional vocabulary teaching.

**Table 5**  
**Analysis of Covariance of Vocabulary Retention**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	3464,604	2	1732,302	87,433	,000
Intercept	2509,186	1	2509,186	126,644	,000
Covariate	30,676	1	30,676	1,548	,220
Treatment	2946,339	1	2946,339	148,708	,000
Error	911,396	46	19,813		
Total	27785,000	49			
Corrected Total	4376,000	48			

Results of the study reveal that Multiple Intelligence based activities in English vocabulary teaching have a positive effect on the academic achievement and retention of the 11th grade students. On the whole, after achievement and retention scores were analyzed it was found out that there were significant differences in favour of Experimental Group.

## **CHAPTER 5**

### **CONCLUSION, DISCUSSION AND SUGGESTIONS**

In this chapter, Conclusions and Discussions related to the effects of activities based on Multiple Intelligence Theory on 11th grade students' learning and retention of English vocabulary are presented. Finally, suggestions for further research are presented.

#### **5.1. Summary of the Study**

In this study, traditional vocabulary teaching and vocabulary teaching through activities based on Multiple Intelligence Theory are compared. At the end of 6 weeks, when the results are compared, we can see that activities based on Multiple Intelligence Theory have positive effect on vocabulary teaching. When the post-test mean scores of the students in Experimental Group and Control Group are compared, it is clear that the mean score of the students in Experimental Group are higher than the mean scores of the students in Control Group. The mean score of the students in Experimental Group increased fifteen questions more than their pre-test mean scores.

When the Delayed Post-test was applied, the mean scores of the students in the Experimental Group show that the students in the Experimental Group retain more words in their minds than the students in Control Group. When the traditional vocabulary teaching methods are used, the students do not learn much vocabulary. There is not a big increase in the mean scores of the students. On the other hand, when Multiple Intelligence Theory based activities are used, the mean scores of the students increased and they do not forget much of them. It can be said that there is an important difference between the results of Control Group and Experimental Group. The results of the experimental study carried out in Sandıklı Anatolian High School have confirmed that teaching vocabulary by using activities based on multiple intelligence theory have increased the achievement and retention level of the students. It is more effective than traditional vocabulary teaching. Students can learn the words and they do not forget the words easily.



## 5.2. Discussion

The purpose of this study was to define whether the vocabulary teaching through Multiple Intelligence based activities was effective or ineffective when compared to vocabulary teaching of traditional method. As a result of this study, Multiple Intelligence Theory based activities proved to be more helpful in achievement and retention of English vocabulary. Students liked the activities, and the teacher who carried out the study in his classroom found the Multiple Intelligence Theory based activities easy to apply in his lesson.

The findings of the study are consistent with previous studies (Anderson, 1998; Servi, 2004; Erdir, 2005). They have similar results. Multiple Intelligence Theory was seen to be helpful in all of these studies. One of the studies is applied to seventh and eighth grade Latin students, in the other one, the participants are second cadets in Army Academy and university students are chosen as the participants in another study. In this study, it is applied to 11th grade students. Multiple Intelligence Theory based activities can be applied to different age groups. Anderson (1998) studied on the improvement of retention in foreign language vocabulary. In this study, there is an experiment for increasing retention of foreign language vocabulary by using Multiple Intelligence Theory and Memory Enhancement Tools are focused. The population of the study is 100 seventh and eight grade Latin students. Owing to the implementation of Multiple Intelligence activities, the scores of the students improved. The research indicates that using Multiple Intelligence skills in the learning and retention of vocabulary can be a helpful tool.

Servi (2004) studied on the relationship between learning and teaching vocabulary and Multiple Intelligences. It is a comparative study on vocabulary teaching regarding and disregarding Multiple Intelligences. Participants in the study included 40 students from School of Foreign Languages at Selçuk University. The results of the study indicated that teaching vocabulary regarding Multiple Intelligence Theory has positive effects on students' learning vocabulary.

Vocabulary teaching is studied in Erdir's doctoral thesis (2005). This study is

aimed to find the benefits of Multiple Intelligence theory in terms of vocabulary teaching to improve reading and listening skills. This research is carried out in the army academy to the second year cadets. The students have difficulties in learning military vocabulary. At the end of these studies, Multiple Intelligence Theory proved to be helpful.

### **5.3. Pedagogical Implications**

The aim of this study is to find a better way to teach vocabulary. Multiple Intelligence Theory based activities are suggested to increase the achievement and retention of English vocabulary. It is compared with traditional teaching techniques. Multiple Intelligence Theory based activities proved to be helpful in the achievement and retention of English vocabulary as a result of the study.

Students have different intelligences and they learn everything in a different way. Multiple Intelligence Theory emphasizes the importance of intelligences in each individual. When the intelligences of the students are known, the teaching and learning of any subject including vocabulary teaching and learning can be quite easy. Teachers can benefit from Multiple Intelligence Theory in vocabulary teaching. They can create a good classroom atmosphere and students can both enjoy the lesson and learn easily.

Retention is another important term in this study. One difficulty of teaching-learning period is students' forgetting the new-learned subjects. Multiple Intelligence Theory based activities can involve the students into the lesson so when they are involved in the lesson, they can remember more. In recent years, English books which are used in public schools have been formed by benefiting from Multiple Intelligence Theory. If the teachers are more informed about this theory, they can also create new activities.

### **5.4. Conclusion**

This study was conducted to compare the effectiveness of the traditional method and MI based activities on the learning and retention of English vocabulary. Two groups

were chosen. Pre- test / Post- test were formed to collect data from the students. At first, Pre-test was applied to students to see their current vocabulary level. This Pre-test was analyzed. After the teaching period, Post- test was applied and then analyzed. After two weeks, Post-test was applied again to see the long-term retention. As a result teaching vocabulary through activities based on Multiple Intelligence Theory was proved to be valuable in students' learning and retention of English vocabulary.

### **5.5. Suggestions for Further Study**

Using Multiple Intelligence Theory based activities can be helpful in teaching vocabulary. It can also be helpful in English lessons as a whole so it can be used to teach all subjects not only in English lessons but also in any other lessons because activities can attract the attention of the students and it can appeal to their needs. In further studies, Multiple Intelligence Theory based activities can be used in different age groups. This research is applied in Anatolian High School students. It can be studied in public schools, vocational schools. It can be studied to learn its effect for other skills such as reading, writing, speaking and listening. In this study, dominant intelligences of the teacher and the students are similar; the question of what happens when the intelligences of the students and the teacher are different can be a question of other studies.

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## **APPENDICES**

**A. Multiple Intelligence Inventory**

**B. Vocabulary Test**

**C. A Sample Lesson Plan**

**D. Reading Texts**



## APPENDIX A

### Multiple Intelligences Inventory for English Language Teachers

**Directions:** Rank each statement below 0, 1, or 2. Write 0 next to the number if the statement is not true. Write 2 in the blank if you strongly agree with the statement. A score of 1 places you somewhere in between. Compare your scores in different intelligences. What is your multiple intelligence profile? Where did you score highest? lowest?

#### Verbal/Linguistic Intelligence

- \_\_\_ 1. I write and publish articles.
- \_\_\_ 2. I read something almost every day that isn't related to my work.
- \_\_\_ 3. I pay attention to billboards and advertisements.
- \_\_\_ 4. I often listen to the radio and cassette tapes of lectures and books.
- \_\_\_ 5. I enjoy doing crossword puzzles.
- \_\_\_ 6. I use the blackboard, the overhead projector, or charts and posters when I teach.
- \_\_\_ 7. I consider myself a good letter writer.
- \_\_\_ 8. If I hear a song a few times, I can usually remember the words.
- \_\_\_ 9. I often ask my students to read and write in my classes.
- \_\_\_ 10. I have written something that I like.

#### Musical Intelligence

- \_\_\_ 1. I have no trouble identifying or following a beat.
- \_\_\_ 2. When I hear a piece of music, I can easily harmonize with it.
- \_\_\_ 3. I can tell if someone is singing off-key.
- \_\_\_ 4. I have a very expressive voice that varies in intensity, pitch, and emphasis.
- \_\_\_ 5. I often use chants and music in my lessons.
- \_\_\_ 6. I play a musical instrument.
- \_\_\_ 7. I listen to music frequently in the car, at work, or at home.

- \_\_\_ 8. I know the tunes to many songs.
- \_\_\_ 9. I often hum or whistle a tune when I am alone or in an environment where I feel comfortable.
- \_\_\_ 10. Listening to music I like makes me feel better.

### **Logical-Mathematical Intelligence**

- \_\_\_ 1. I feel more comfortable believing an answer is correct if it can be measured or calculated.
- \_\_\_ 2. I can calculate numbers easily in my head.
- \_\_\_ 3. I like playing card games such as hearts, gin rummy, and bridge.
- \_\_\_ 4. I enjoyed math classes in school.
- \_\_\_ 5. I believe that most things are logical and rational.
- \_\_\_ 6. I like brain-teaser games.
- \_\_\_ 7. I am interested in new developments in science.
- \_\_\_ 8. When I cook, I measure things exactly.
- \_\_\_ 9. I use problem-solving activities in my classes.
- \_\_\_ 10. My classes are very consistent; my students know what to expect.

### **Visual/Spatial Intelligence**

- \_\_\_ 1. I pay attention to the colours I wear.
- \_\_\_ 2. I take lots of photographs.
- \_\_\_ 3. I like to draw.
- \_\_\_ 4. I especially like to read articles and books with many pictures.
- \_\_\_ 5. I am partial to textbooks with illustrations, graphs, and charts.
- \_\_\_ 6. It is easy for me to find my way around in unfamiliar cities.
- \_\_\_ 7. I use slides and pictures frequently in my lessons.
- \_\_\_ 8. I enjoy doing puzzles and mazes.
- \_\_\_ 9. I was good at geometry in school.
- \_\_\_ 10. When I enter a classroom, I notice whether the positioning of the students and teacher supports the learning process.

**Bodily/Kinesthetic Intelligence**

- \_\_\_ 1. I like to go for long walks.
- \_\_\_ 2. I like to dance.
- \_\_\_ 3. I engage in at least one sport.
- \_\_\_ 4. I like to do things with my hand such as carve, sew, weave, build models, or knit.
- \_\_\_ 5. I find it helpful to practice a new skill rather than read about it.
- \_\_\_ 6. I often get my best ideas when I am jogging, walking, vacuuming, or doing something physical.
- \_\_\_ 7. I love doing things in the outdoors.
- \_\_\_ 8. I find it hard to sit for long periods of time.
- \_\_\_ 9. I often do activities in my classes that require the students to move about.
- \_\_\_ 10. Most of my hobbies involve a physical activity of some sort.

**Intrapersonal Intelligence**

- \_\_\_ 1. I regularly spend time meditating.
- \_\_\_ 2. I consider myself independent.
- \_\_\_ 3. I keep a journal and record my thoughts.
- \_\_\_ 4. I would rather create my own lessons than use material directly from the book.
- \_\_\_ 5. I frequently create new activities and materials for my classes.
- \_\_\_ 6. When I get hurt or disappointed, I bounce back quickly.
- \_\_\_ 7. I articulate the main values that govern my life and describe the activities that I regularly participate in that are consistent with these values.
- \_\_\_ 8. I have hobbies or interests that I enjoy doing on my own.
- \_\_\_ 9. I frequently choose activities in the classroom for my students to work on alone or independently.
- \_\_\_ 10. I encourage quiet time and time to reflect in my classes.

**Interpersonal Intelligence**

- \_\_\_ 1. I prefer going to a party rather than staying home alone.
- \_\_\_ 2. When I have problems, I like to discuss them with friends.
- \_\_\_ 3. People often come to me with their problems.
- \_\_\_ 4. I am involved in social activities several nights a week.
- \_\_\_ 5. I like to entertain friends and have parties.
- \_\_\_ 6. I consider myself a leader and often assume leadership roles.
- \_\_\_ 7. I love to teach and show someone how to do something.
- \_\_\_ 8. I have more than one close friend.
- \_\_\_ 9. I am comfortable in a crowd or at a party with many people I don't know.
- \_\_\_ 10. My students help decide on the content and learning process in my classes.

**Naturalist Intelligence**

- \_\_\_ 1. I am good at recognizing different types of birds.
- \_\_\_ 2. I am good at recognizing different types of plants.
- \_\_\_ 3. I like to garden.
- \_\_\_ 4. I enjoy having pets.
- \_\_\_ 5. It's easy for me to tell the make and year of most cars.
- \_\_\_ 6. I often look at the sky and can tell you the different types of clouds and what kind of weather they bring.
- \_\_\_ 7. It's easy for me to tell the weeds from the plants.
- \_\_\_ 8. I like to spend time in the outdoors.
- \_\_\_ 9. I enjoy learning about rocks.
- \_\_\_ 10. I have plants in my home and office. ( Reproduced from Christison, 1998.)

**An MI Inventory For Students**

**Directions:** Check those statements that apply in each intelligence category. Space has been provided at the end of each intelligence for you to write additional information not

specifically referred to in the inventory items.

### **Linguistic Intelligence**

- \_\_\_ 1. Books are very important for me.
- \_\_\_ 2. I can hear words in my head before I read or speak or write them down
- \_\_\_ 3. I get more out of listening to the radio or a spoken word cassette than I do from television or films.
- \_\_\_ 4. I am good at word games like Scrabble, Anagrams, or Password.
- \_\_\_ 5. I enjoy entertaining myself or others with tongue twisters, nonsense rhymes, or puns.
- \_\_\_ 6. Other people sometimes have to stop and ask me to explain the meaning of words I use in my writing and speaking.
- \_\_\_ 7. English, social studies, and history were easier for me in school than math or science.
- \_\_\_ 8. Learning to speak or read another language (e. g. French, Spanish, German) has been relatively easy for me.
- \_\_\_ 9. My conversation includes frequent references to things that I've read or heard.
- \_\_\_ 10. I've written something recently that I was particularly proud of or that earned me recognition from others.

### **Logical/Mathematical Intelligence**

- \_\_\_ 1. I can easily compute numbers in my head.
- \_\_\_ 2. Math and/or science were among my favourite subjects in school.
- \_\_\_ 3. I enjoy playing games or solving brainteasers that require logical thinking.
- \_\_\_ 4. I like to set up little "what if" experiments (for example, "What if I double the amount of water I give my rosebush each week?")
- \_\_\_ 5. My mind searches for patterns, regularities, or logical sequences in things.
- \_\_\_ 6. I'm interested in new developments in science.
- \_\_\_ 7. I believe that almost everything has a rational explanation
- \_\_\_ 8. I sometimes think in clear, abstract, wordless, imageless concepts.
- \_\_\_ 9. I like finding logical flaws in things that people say and do at home and work.
- \_\_\_ 10. I feel more comfortable when something has been measured, categorized,

analyzed, or quantified in some way.

### **Spatial Intelligence**

- \_\_\_ 1. I often see clear visual images when I close my eyes.
- \_\_\_ 2. I'm sensitive to colour.
- \_\_\_ 3. I frequently use a camera or camcorder to record what I see around me.
- \_\_\_ 4. I enjoy doing jigsaw puzzles, mazes, and other visual puzzles.
- \_\_\_ 5. I have vivid dreams in the night.
- \_\_\_ 6. I can generally find my way around unfamiliar territory.
- \_\_\_ 7. I like to draw or doodle
- \_\_\_ 8. Geometry was easier for me than algebra in school.
- \_\_\_ 9. I can comfortably imagine how something might appear if it were looked down upon from directly above in a bird's eye view.
- \_\_\_ 10. I prefer looking at reading material that is heavily illustrated.

### **Bodily/Kinesthetic Intelligence**

- \_\_\_ 1. I engage in at least one sport or physical activity on a regular basis.
- \_\_\_ 2. I find it difficult to sit still for long periods of time.
- \_\_\_ 3. I like working with my hands at concrete activities such as sewing, weaving, carving, carpentry, or model building.
- \_\_\_ 4. My best ideas often come to me when I'm out for a long walk or a jog, or when I'm engaged in some other kind of physical activity.
- \_\_\_ 5. I often like to spend my free time outdoors.
- \_\_\_ 6. I frequently use hand gestures or other forms of body language when conversing with someone.
- \_\_\_ 7. I need to touch things in order to learn more about them.
- \_\_\_ 8. I enjoy daredevil amusement rides or similar thrilling physical experiences.
- \_\_\_ 9. I would describe myself as well coordinated.
- \_\_\_ 10. I need to practice a new skill rather than simply reading about it or seeing a video that describes it.

**Musical Intelligence**

- \_\_\_ 1. I have a pleasant singing voice.
- \_\_\_ 2. I can tell when a musical note is off-key.
- \_\_\_ 3. I frequently listen to music on radio, records, cassettes, or CDs.
- \_\_\_ 4. I play a musical instrument.
- \_\_\_ 5. My life would be poorer if there were no music in it.
- \_\_\_ 6. I sometimes catch myself walking down the street with a television jingle or other tune running through my mind.
- \_\_\_ 7. I can easily keep in time to a piece of music with a simple percussion instrument.
- \_\_\_ 8. I know the tunes to many different songs or musical pieces.
- \_\_\_ 9. If I hear a musical selection once or twice, I am usually able to sing it back fairly accurately.
- \_\_\_ 10. I often make tapping sounds or sing little melodies while working, studying, or learning something new.

**Interpersonal Intelligence**

- \_\_\_ 1. I'm the sort of person that people come to for advice and counsel at work or in my neighbourhood.
- \_\_\_ 2. I prefer group sports like badminton, volleyball, or softball to solo sports such as swimming and jogging.
- \_\_\_ 3. When I have a problem, I'm more likely to seek out another person for help than attempt to work it out on my own.
- \_\_\_ 4. I have at least three close friends.
- \_\_\_ 5. I favour social pastimes such as Monopoly or bridge over individual recreations such as video games and solitaire.
- \_\_\_ 6. I enjoy the challenge of teaching another person, or groups of people, what I know how to do.
- \_\_\_ 7. I consider myself a leader (or others have called me that).
- \_\_\_ 8. I feel comfortable in the midst of a crowd.
- \_\_\_ 9. I like to get involved in social activities connected with my work, church, or

community.

- \_\_\_ 10. I would rather spend my evenings at a lively social gathering than stay at home alone.

### **Intrapersonal Intelligence**

- \_\_\_ 1. I regularly spend time alone meditating, reflecting, or thinking about important life questions.
- \_\_\_ 2. I have attended counselling sessions or personal growth seminars to learn more about myself.
- \_\_\_ 3. I am able to respond to setbacks with resilience.
- \_\_\_ 4. I have a special hobby or interest that I keep pretty much to myself.
- \_\_\_ 5. I have some important goals for my life that I think about on a regular basis.
- \_\_\_ 6. I have a realistic view of my strengths and weaknesses (borne out of feedback from other sources).
- \_\_\_ 7. I would prefer to spend a weekend alone in a cabin in the woods rather than at a fancy resort with lots of people around.
- \_\_\_ 8. I consider myself to be strong willed and independent minded.
- \_\_\_ 9. I keep a personal diary or journal to record the events of my inner life
- \_\_\_ 10. I am self-employed or have at least thought seriously about starting my own business.

### **Naturalist Intelligence**

- \_\_\_ 1. I like to spend time backpacking, hiking, or just walking in the nature.
- \_\_\_ 2. I belong to some kind of volunteer organization related to nature and I am concerned about helping to save nature from further destruction.
- \_\_\_ 3. I thrive on having animals around the house.
- \_\_\_ 4. I am involved in a hobby that involves nature in some way (e.g. bird watching).
- \_\_\_ 5. I've enrolled in courses relating to nature at community centers or colleges (e.g. botany, zoology).
- \_\_\_ 6. I'm good at telling the difference between different kinds of trees, dogs, birds or other types of flora or fauna.
- \_\_\_ 7. I like to read books and magazines, or watch television shows or movies that



feature nature in some way.

- \_\_\_ 8. When on vacation, I prefer to go off to a natural setting ( park , campground, hiking trail ) rather than to a hotel / resort or city / cultural location.
- \_\_\_ 9. I love to visit zoos, aquariums, or other places where the natural world is studied.
- \_\_\_ 10. I have a garden and enjoy working regularly in it.

(Armstrong, T. (2000) Multiple Intelligences in the classroom, Alexandria, V A  
ASCD.)

**APPENDIX B**  
**PRE-TEST AND POST- TEST QUESTIONS**

**VOCABULARY TEST**

1. There are weather changes in.....
  - A) Cycles
  - B) Follow
  - C) Return
  - D) Kind
  - E) Turn
  
2. I have to go to hospital for my ..... medical examination.
  - A) Annual
  - B) After
  - C) Abound
  - D) About
  - E) Adamant
  
3. Years ..... from the previous and they lead on to the next.
  - A) Flee
  - B) Fly
  - C) Flow
  - D) Flew
  - E) Free
  
4. The water .....on to the ground from the ceiling.
  - A) Falls
  - B) Drops
  - C) Ski

- D) Send
- E) Calculate

5. I ..... my high school friend when I first saw him.

- A) Restored
- B) Realize
- C) Refused
- D) Reject
- E) Recognized

6. The fortune-teller ..... about my future.

- A) Forget
- B) Forgive
- C) Forgot
- D) Foretold
- E) Found

7. When the weather is cold, we ..... to go inwards.

- A) Try
- B) Tend
- C) Tell
- D) Teach
- E) Talk

8. We, as human beings ..... the beauty of the nature.

- A) Appreciate
- B) Thankful
- C) Tell
- D) Tend
- E) Talked

9. In spring, flowers ..... and everywhere becomes colourful.

- A) Bloom
- B) Blow
- C) Blows
- D) Blooms
- D) Get

10. In every new year, we have new .....

- A) Wished
- B) Hopeful
- C) Prospects
- D) Joke
- E) Kind

11. Weather conditions ..... the mood of people.

- A) Effect
- B) Affect
- C) Affection
- D) Effective
- E) Affective

12. The ..... affects the climate.

- A) Weight
- B) High
- C) Altitude
- D) Thick
- E) Light

13. In some oceans, there are strong .....

- A) Rise
- B) Seas
- C) Swells
- D) Currents
- E) Wave

14. The frozen leaves ..... in the street.

- A) Rejoiced
- B) Remained
- C) Restart
- D) Replayed
- E) Request

15. I am..... to pass the examination.

- A) Decide
- B) Determination
- C) Decision
- D) Decisive
- E) Determined

16. The bush near the fence .....quickly.

- A) Flew
- B) Tallen
- C) Wide
- D) Shorten
- E) Flourished

17. The..... of a foreign country can be seen easily in the language the natives speak.

- A) Influence
- B) Empower
- C) Encourage
- D) Defect
- E) Effect

18. The snow ..... the whole city.

- A) Covered
- B) Check
- C) Detect
- D) Delayed
- E) Constituted

19. To prevent the congestion of this these, an urgent ..... must be taken.

- A) Premonition
- B) Prediction
- C) Protection
- D) Predominate
- E) Pretask

20. Before sending the letter, don't forget to ..... the necessary documents.

- A) Attach
- B) Attack
- C) Attacked
- D) Attaching
- E) Attacks

21. To take..... from life, you should not think hard about every detail.

- A) Advantage
- B) Pleasure
- C) Joke
- D) Kind
- E) Profitable

22. The results of the earthquake have not been ..... yet.

- A) Measured
- B) Take
- C) Made
- D) Took
- E) Maden

23. My brother ..... with me about this subject.

- A) Bored
- B) Interested
- C) Deal
- D) Disagreed
- E) Dismiss

24. In Spring, the trees are in .....

- A) Blossom
- B) Fire
- C) Anger
- D) Danger
- E) Time

25. The trees are ..... with fruits.

- A) Interested
- B) Bored
- C) Laden
- D) Dangered
- E) Empty

26. The nature has a ..... beauty.

- A) Little
- B) Sure
- C) Awkward
- D) Graceful
- E) Misleading

27. You should not eat the peach , it is not.....

- A) Comfortable
- B) Cosy
- C) Custom
- D) Fresher
- E) Ripe

28. You should take into ..... all details before accepting the job.

- A) Interest
- B) Account
- C) Deal
- D) Administer
- E) Abbreviation



29. Nowadays, I am not in a good .....

- A) Hunger
- B) Tasteful
- C) Mood
- D) Mute
- E) Made

30. He is ..... on the sofa all day.

- A) Laying
- B) Affecting
- C) Visiting
- D) Destroying
- E) Lounging

31. It is raining a lot , this means a ..... change on the level of dams.

- A) Enough
- B) Comfy
- C) Mood
- D) Considerable
- E) Measure

32. There is a ..... famine problem in the South Africa.

- A) Urgent
- B) Select
- C) Drop
- D) Severe
- E) Troop

33. The water is wavy, the ship may .....

- A) Sink
- B) Up
- C) Down
- D) Stay
- E) Rise

34. The plane .....in a jungle.

- A) Went in
- B) Went by
- C) Went on
- D) Went away
- E) Went down

35. The doctors did their best to ..... the life of an old man.

- A) Receive
- B) Rescue
- C) Refuse
- D) Reject
- E) Regard

36. The Abolishment of slavery was a ..... change in the society.

- A) Disagree
- B) Drought
- C) Drastic
- D) District
- E) Dream

37. The early blossoms of the trees are the result of a..... of nature.

- A) Downpour
- B) Fight
- C) Freak
- D) Crew
- E) Battered

38. An earthquake occurred last night. People had to be ..... from their homes.

- A) Take
- B) Placed
- C) Took
- D) Employed
- E) Evacuated

39. Her decision has many depressing .....

- A) Remembrance
- B) Consequences
- C) Start
- D) Consult
- E) Recent

40. In this town, there is a ..... downpour in winter.

- A) Easy
- B) Large
- C) Enlarge
- D) Frequent
- E) Endanger

## **APPENDIX C**

## LESSON PLANS

### Lesson Title 1: Seasons

**Student Outcomes:** They will be able to learn vocabulary items.

**New Words:** Cycles, Annual, Flow, Drop, Recognize, Foretell, Tend, Appreciate , Bloom, Prospect

**Activities:**

**Linguistic:** The students will read newspaper articles about seasons. We can discuss how weather affects people.

**Visual - Spatial:** They may be asked to draw a chart about seasons and their effects to the world or what the changes are in each season.

**Musical:** Vivaldi's four seasons – Ferde Grafe's The Grand Canyon Suite

**Logical – Mathematical:** The students are asked to bring thermometer and they record the temperatures.

**Kinesthetic:** Pantomime. When it is windy, what do you do – guessing activity (they guess how the weather is.)

**Interpersonal:** They are asked to write unknown words on the board, then each in turn asks each other or I will give one group the meaning, the other group the word they match.

**Intrapersonal:** They can mention about their favourite weather condition, season how they are affected.

**Natural:** I want them to look at outdoor and describe the weather or I tell them a story and want them to draw it.

**Assessment:** Pictures can be given them they write, or describe the picture.

**Materials – Resources:** Pictures, newspaper.

**Sequence of events:** Reading, Listening, Speaking, Writing.

### Lesson Title 2: Eskimos

**Student Outcomes:** They will be able to learn vocabulary items.

**New Words:** Affect – Cover – Protection – Attach – Altitude – Remain – Determine – Flourish – Current – Influence.

**Activities:**

**Linguistic:** .An article about Eskimo sor an anecdote about them.

**Visual - Spatial:** Map can be used to find the places of Eskimos, where they live

**Musical:** Songs of Eskimos can be found.

**Logical – Mathematical:** Snow Igloos, a miniature can be formed.

**Kinesthetic:** Unknown words can be used as a word game, drama, role – playing

**Interpersonal:** Organizing them in groups. Each group chooses one country or geographical region to study.

**Intrapersonal:** If you were Eskimos, what would be the changes in your life ?

**Natural:** Pictures of snow can be shown

**Assessment:** They can make a collection of pictures of snow, Eskimos. It should depict at least ten characteristics of winter.

**Materials – Resources:** Pictures

**Sequence of events:** Reading, Listening, Speaking, Writing.

**Lesson Title 3:** My Favourite Seasons

**Student Outcomes:** They will be able to learn vocabulary items.

**New Words:** Pleasure, Blossom, Graceful, Mood, Bloom, Measure, Laden, Ripe Lounge, Disagree.

**Activities:**

**Linguistic:** . Students read the passage and try to sequence them.

**Visual - Spatial:** Students draw the Picture of their season, colour, and paint them.

**Musical:** Musics about seasons

**Logical – Mathematical:** Causes – Effect chart are prepared.

**Kinesthetic:** Drama – sons, they rehearse the scenes.

**Interpersonal:** working in groups, they play word game by using the unknown words

**Intrapersonal:** They write essays about the father’s answers.

**Natural:** They observe the changes in the nature. They make comparison between the changes in people and in the nature.

**Assessment:** They write compositions about their ideas.

**Materials – Resources:** Chart.

**Sequence of events:** Reading, Listening, Speaking, Writing.

**Lesson Title 4:** Natural Disasters and Global Warming.

**Student Outcomes:** They will be able to learn vocabulary items.

**New Words:** Go down, Freak, Sink, Severe, Drastic, Considerable, Rescue, Evacuate  
Collapse, Frequent, Consequence.

**Activities:**

**Linguistic:** A newspaper article and presentation of students.

**Visual - Spatial:** They can create maps which show natural disasters happening habitually in the world – charts.

**Musical:** a little bit harsh music.

**Logical – Mathematical:** Frequency rate of disasters in Turkey are calculated. Effects of global warming are listed.

**Kinesthetic:** Drama – They placed their charts on the walls and made presentations.

**Interpersonal:** In groups, they can prepare a Project, a research about the findings of natural disasters.

**Intrapersonal:** They begin to write an essay about disaster they saw or they used their imagination to write a composition.

**Natural:** They observe their environment. They talk about any disaster they saw.

**Assessment:** They collect different pictures of natural disasters.

**Materials – Resources:** Pictures, Charts.

**Sequence of events:** Reading, Listening, Writing, Speaking.

## **APPENDIX D**

### **THE READING TEXTS**

#### **1ST PASSAGE**

##### **SEASONS**

Weather changes in cycles. Cycles of weather changes are called seasons. There are four seasons: Winter, spring, summer, and autumn. In the annual calendar, the seasons never “end”. Autumn is followed by winter, which is followed by spring. After summer we are in the autumn again and so on. There is never a point in time when the seasons have ended. They just change. Each of the seasons has a meaning which flows from the previous and which lead on to the next.

Autumn is the season in which we experience loss. Fruits drop to the ground and the flowers disappear. We recognize that summer is no longer with us. Some enjoy the beautiful colours and crisp weather of the fall while for others; fall foretells the arrival of winter.

Winter is the season in which we experience the pain of loss. Since it is cold, we tend to go inwards, keep warm in our thick clothes. We can't take those long anymore but can build snowmen. Only a few people recognize that winter is the mother of spring.

Spring is the season when we experience the rebirth of new life. We appreciate the beauty of nature through flowers blooming, birds chirping, and new creatures being born. We still remember the coldness of winter, but we also look ahead to the potential of new growth, new energy, and new prospects of life.

Summer is the season of enjoyment. It is delight and happiness. Maybe, it is your favourite time of the year! Schools are closed, the weather is warm; it is time to have fun. The high majority of people prefer to have at least a few days off in this time of the

year.

## **2ND PASSAGE**

The weather changes Alaska quite often. That means they have their own regular weather patterns. Climate is affected by altitude, ocean currents, wind, rain and topography and certain other conditions. Climate determines which plant and animal species will flourish, and greatly influences diet, dress, housing, customs and culture. People everywhere have adapted their lifestyles to suit the climactic zones in which they live. For instance: Eskimos. Ice and snow cover the tundra of Alaska most of the year.

The Eskimos who live in those regions wear multiple layers of coats , trousers and boots made of animal skins for protection against the extreme cold. They live in igloo houses, in structures built of blocks of snow and ice, or in tents made out of animal skins. In this way people can both keep themselves warm even in this bitterly cold parts of the world and have normal family nights as most of the families generally do.

How do they build Snow Igloos?

Snow Igloos are made by cutting hard- packed snow into evenly shaped blocks.

Next, the blocks are shaped to fit on top of each other in a spiral.

Then, the blocks are built up until just one space remains.

Finally, the last block is fitted into place at the top of the igloo.

A hole is made for air to enter and a wooden or fur door is attached.

If you touch the walls of an igloo, you will see that they are cold, but they keep out of the wind and snow. The inside of the house is kept warm by burning oil made from seal fat. Furs are laid on a raised part of the floor so people can sit down without feeling cold. It is so warm inside that babies can sleep naked in fur beds and feather quilts.

Today, not many Eskimos live in these houses of snow. Now they usually build



houses of stone or driftwood.

### **3RD PASSAGE**

#### **MY FAVOURITE SEASONS**

The seasons with changing weather conditions affect my mood very much. At this point I remember a story about a man who had four sons. He wanted his sons to learn not to judge things too quickly. So he sent each of them in turn to look at the pear tree that was a great distance away. It was funny because neither the young brothers nor the elder ones had any idea about what their father was up to.

The first son went in the winter, the second in the spring, the third in the summer, and the youngest son in the fall. When they had all gone and come back, he called them together to describe what they had seen. The first son said that the tree was ugly, bent, and twisted. The second son said no- it was covered with green buds and full of promise. The third son disagreed, he said it was laden with blossoms that smelled so sweet that and looked so beautiful and it was the most graceful thing he had ever seen. The last son disagreed with all of them; he said it was ripe and drooping with fruit, full of life and fulfilment. The man then explained to his sons that they were all right, because they had each seen one season in the tree's life and added on no account must this really be ignored.

He said “ You cannot judge a tree or a person, by only one season, and the essence of who they are, - and pleasure , joy , and love that come from that life – can only be measured at the end, when all the seasons are up. If you give up when it is winter, you will miss the promise of your spring, the beauty of your summer, the fulfilment of your fall. On no account should you let the pain of one season destroy the joy of all the rest.”

My absolute favourite time of the year is spring because I am able to enjoy and

appreciate the beauty of nature through flowers blooming, birds singing and new creatures being born. When it is a nice day out, you can always find me in a happy mood. Summer is one of my favourite seasons too because I love the beach! So does my best friend, Gordon. We love just lounging in beach chairs in the hot sand of the Aegean Sea while reading a book or watching the kids make sandcastles and play. I don't prefer to take sightseeing tours or go to parties. Nor does Gordon. However, unlike Gordon, I like winter because I love dressing in warm, comfy sweaters. Playing snowballs and building snowmen are the things that I enjoy doing in winter. Gordon stays indoor trying to keep himself warm most of the time. I have not mentioned autumn yet. That is because I like neither rainfall nor fallen leaves. But it is a great fun to watch people running around when it is raining cats and dogs.

#### **4TH PASSAGE**

#### **NATURAL DISASTERS AND GLOBAL WARMING**

Has climate of the world changed a lot recently? Do the frequent natural disasters such as hurricanes, droughts, floods are the effects of global warming? A considerable amount of the scientists agree that the world climate has changed a lot in the last fifty years and the natural disasters are severe consequences of this problem. The weather news taken from Turkey gives the signs of the drastic changes in climate.

The downpour began hitting the cities from morning and many districts flooded. Not only are there changes in the weather over long periods, but smaller changes in shorter periods occur, too.

Last weekend freak storms battered in Turkey. Floods, storms and blizzards hit the Black Sea Region over the weekend, sinking two ships and reportedly killing four people. Only in the west did they have a fine day.

Thirty villages in the Northwest were reported to have cut off by snows and

vehicles were stuck on roads. There was a hard frost last night and a 60-year-old man froze to death in Çanakkale.

All the other members of the 18 man crew were rescued by a passing Russian ship. On Monday, under the bad weather, the rescue workers gave up the search for a missing crew member from a Cambodian – flagged ship, which went down in the Black Sea 65 kilometres north of İstanbul.

Showers and thunderstorms brought flooding in Mersin, 500 people have been evacuated so far. Today it is still raining heavily. We can say that it is raining cats and dogs. On the other hand, at the weekend, a 10 year old girl died when she fell into a stream and was swept away and 26-year –old man was killed as the building was collapsed because of the flood.

The floods set off mudslides and damaged farmland. Roads were blocked and the power network was severely disrupted. Due to the flood all the farmlands were covered with mud and this caused a lot of damage to the crops. All the disasters prove that there has been a big change about the climate and it is obvious that we will suffer more from the changes in the future.