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INSTITUTE OF EDUCATIONAL SCIENCES
DEPARTMENT OF ENGLISH LANGUAGE TEACHING

IDENTIFYING AND ADDRESSING
MULTIPLE INTELLIGENCES IN EFL
CLASSES: A CASE STUDY IN THE
ELT DEPARTMENT OF GAZI
UNIVERSITY

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M.A. THESIS

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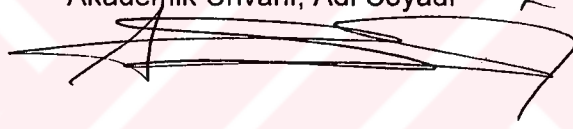
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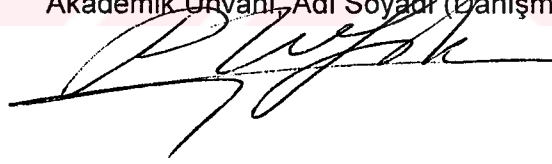
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CHAPTER I

1.0. Introduction

In this part, first the background to the study is presented. Then, the problem, aim and scope of the study are stated. Finally, some assumptions which have guided the research are presented.

1.1. Background to the Study

Every person is unique. They all have different physical features, different personalities and different capacities. Some are good at visual art, some are good at sports, some are good at music, some are good at numbers and some are good at words. Taking this into consideration, Howard Gardner (1983) developed a new theory called multiple intelligences which would help teachers know their students better. According to the theory, there are at least eight types of intelligences that each individual possesses in varying degrees. These are verbal-linguistic intelligence, logical-mathematical intelligence, bodily-kinesthetic intelligence, visual-spatial intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence and naturalistic intelligence. Up to the development of the theory, the students were judged by a test called Intelligence Quotient which only measures the verbal-linguistic intelligence and the logical-mathematical intelligence levels of the students. But what about the ones who excel in other areas such as sports, music, etc.? Therefore, teachers should implement the theory of multiple intelligences in their classes in order to recognize the personal differences in their students. This theory has been widely used all over the world and has revealed very effective results. But it has not been applied so much to foreign language teaching yet. Thus, while implementing the theory, teachers should focus on the students' varying needs which are based on their various intelligence types because their interests are different. Therefore, teachers should provide opportunities for

the students in order to meet their needs and when their needs are met, they can be motivated easily because the supplementary materials and activities that the teachers present are well-designed according to their various intelligence types.

1.2. Problem

Students who are learning English are said to have different tendencies, capacities, talents, skills and the most important of all different intelligences. But the problem is how to find out the various intelligence types of the students and how to make use of the theory of multiple intelligences in English language teaching.

This study will focus on how the students' tendencies and intelligences could be revealed and how the lessons could be more effective by using the eight different intelligence types identified by Gardner.

Moreover, various types of activities related to the eight different intelligence categories will be suggested in the following chapters. Hopefully, these activities will help both the ELT students and teachers to be more effective and sufficient in their classes.

1.3. Aim and Scope of the Study

The aim of this study is to find out the various intelligence types of the ELT students by administering them an inventory. This inventory helps teachers realize what their students' needs are. Then, helps them to implement the theory of multiple intelligences in English Language Teaching after the students' intelligence types have been identified. Another purpose of this study is to supply different types of activities addressing their intelligence types, which will arouse their interest.

This study is carried out in the ELT Department of Gazi Education Faculty, Gazi University. An inventory will be administered to the first year and the fourth year students in order to collect data. The subjects will be selected at random among the first and the fourth year students.

1.4. Method

First some theoretical knowledge will be given in order to reach the aim of the study. Then an inventory will be administered to the students who are in their first years and fourth years in the ELT Department of Gazi Education Faculty, Gazi University. The results of the inventories will be evaluated and interpreted by using statistical methods. The findings will be presented in charts and graphs. After the evaluation and the interpretation of the data are gathered, some activities will be offered in the following chapters.

1.5. Assumptions

The following assumptions are taken into consideration throughout the stages of this study.

1. The intelligence types of the students have not been discovered in the ELT Department of Gazi Education Faculty, Gazi University yet.
2. With the help of an inventory, the students' intelligence types could be revealed.
3. According to the various intelligence types of the students, different activities related to their intelligences should be provided.
4. The Theory of Multiple Intelligences can be applied to English language teaching.

CHAPTER 2

REVIEW OF LITERATURE

2.0. Introduction

This chapter deals with the meanings of intelligence, what the theory of multiple intelligences is and how it was developed. Then, some criteria are given for an intelligence. After that, the classification of the intelligences according to the theory of multiple intelligences is presented. In the next part, the relationship between the education and multiple intelligences theory is revealed. And finally, its impact on English language teaching is presented.

2.1. What is Intelligence?

Not everyone is the same in the world. They all have different capacities, different reactions to different or same situations and different approaches while handling problems. So, the thing which makes people different from each other in every situation is the intelligence. Therefore, it would be better to give the meaning of intelligence at first.

The word "intelligence" is used in various situations and thus takes on various meanings depending upon the particular situation. Pyle (1981:3) suggests that when using the word intelligence, then, we may be referring to a number of situations:

1. Intelligence might be taken to mean ability -what a person can do at this moment. This might be decided upon by just looking at how a person behaves in certain situations. Thus, intelligence here is taken to mean present levels of performance.

2. Intelligence might be taken to mean the speed at which a child is developing mentally. The processes of intellectual development are the ones which enable a child to understand and know what the world is all about, and at various stages of growing up these processes undergo quite revolutionary changes.

3. Intelligence may refer to the ability to profit from experience. That means being effective or adequate or capable in some general way.

Howard Gardner (1993:14) defines intelligence as a general ability that is found in varying degrees in all individuals. It is the key to success in solving problems.

When one is asked to consider the question "What makes a person intelligent?", the most common responses will often note a person's ability to solve problems, utilize logic, and think critically. A person's intelligence, traditionally speaking, is contained in his or her general intellect; in other words, how each and every one of us comprehend, examine, and respond to outside stimuli. Our intelligence, therefore, is our singular, collective ability to act and react in an ever-changing world.

Pyle (1981:22) expresses that intelligence is often considered how well you score on tests or what your grades are in school. At the turn of the century, in the 1900's, the educators of Paris asked the French psychologist Alfred Binet to formulate a test that could be used to analyze a child's intelligence in order to uncover his or her weaknesses. Therefore he tried to come up with some kind of measure that would predict the success or failure of children in the primary grades of schools. That was a test that could be given to adults and children of varying ages. By determining which questions an average child could answer at a specific age, Binet was able to determine which children were performing below average and which were performing

above average. Then, intelligence has come to be operationally defined as the number of questions a person can answer correctly on this objective test (mental age- MA), divided by the average number of correct answers someone that same age (chronological age- CA) can answer. The result, known as an Intelligence Quotient (IQ), is found by the following formula:

$$\text{Intelligence Quotient (IQ)} = \text{Mental Age (MA)} / \text{Chronological Age (CA)} \times 100$$

Instead of looking for a correlation between tests; we should look into how people develop skills that are pertinent in their culture. When a child learns to play the piano, he is learning several skills. Will the training he received learning the piano skills enhance his mathematical skills, or vice versa? The standard IQ test measures how intelligent a person is based, traditionally, on maths and language. All other areas that a person may excel in or have natural ability in are not taken into consideration. Each individual is unique. We all have different physical features -we are not all blue eyed, brown-haired, five-foot tall men. We each have different personalities -some people are jokesters and comedians while others are quiet, reserved and serious. We all have our own set of talents, gifts, and abilities. Not everyone will excel in math and language. Why should we compare how smart children are or how successful they will be based on a test that measures only two aspects of who that little child is? Such tests do nothing to judge a student's potential -they merely demonstrate that a student is or is not good at standardized tests. Students should not be judged by what they cannot do, but what they can do, and education should focus on bringing out the individual's potential. Until recently, this view was considered utopian and unrealistic, but now a new theory of learning and intelligence has finally forced educators to reconsider the pedagogical methods of the last century; the theory of Multiple Intelligences.

2.2. The Theory of Multiple Intelligences

The theory of Multiple Intelligences was researched, developed, and published by a team of researchers at Harvard University, led by Dr. Howard Gardner. According to Gardner, as presented in his book *Frames of Mind: The Theory of Multiple Intelligences*, human intelligence has the following characteristics:

"-A set of skills that enable a person to resolve genuine problems encountered in life.

-The ability to create an effective product or offer a service that is valued in a culture.

-The potential for recognizing or creating problems, thereby establishing the necessity for the new knowledge."
(Gardner, 1983:10)

Gardner's research led him to conclude that the traditional view of intelligence was inadequate. Therefore he (1983:70) claimed that there are at least seven different intelligences that each person possesses. He has classified these intelligences as verbal-linguistic intelligence, logical-mathematical intelligence, bodily-kinesthetic intelligence, visual-spatial intelligence, musical intelligence, interpersonal intelligence and intrapersonal intelligence. Later on he added another type of intelligence which deserves to be called an intelligence -the naturalistic intelligence. However, Gardner has never ruled out the possibility that additional intelligences may also exist, for multiple intelligences research is still in its infancy. He has also added that there can never be a single irrefutable and universally accepted list of human intelligences.

Gardner (1983:48) argued that human beings possess varied kinds of mental strengths or intelligences. But the verbal-linguistic and the mathematical-logical are the only two kinds of intelligence that the educational system encourages, while it tends to neglect other forms of intelligence.

He (1993:9) also claims that the list of the seven intelligences is a preliminary list. Obviously, each form of intelligence can be subdivided, or the list can be rearranged. The real point is to make the case for the plurality of intellect. Also, he believes that individuals may differ in the particular intelligence profiles with which they are born, and that certainly they differ in the profiles they end up with. He thinks of the intelligences as raw, biological potentials, which can be seen in pure form only in individuals who are, in the technical sense, freaks. In almost everybody else the intelligences work together to solve problems.

Gardner (1983:39) states that the multiple intelligences theory is a pluralized way of understanding the intellect. Recent advances in cognitive science, developmental psychology and neuroscience suggest that each person's level of intelligence, as it has been traditionally considered, is actually made up of autonomous faculties that can work individually or in concert with other faculties.

According to Howard Gardner's multiple intelligences theory, we all have different intellectual strengths or intelligences and we use them all to varying degrees to acquire knowledge, understand the world, engage in problem solving, create, and to meet the challenges in our daily lives. However, not all of them are developed equally. Because of this, we do not use them effectively. One or two intelligences may be stronger and more fully developed than the others. But this does not need to be a permanent condition because the dominant intelligences may support the weaker ones.

2.2.1. Some Key Points in the Multiple Intelligences Theory

Armstrong (1992:86) gives some key points in the multiple intelligences theory:

1. Every person has all eight intelligences. Even though each person has all eight intelligences, they are developed in varying degrees of functioning in each individual. Most people have some intelligences that are highly developed; others that are moderately developed; and still others relatively underdeveloped.

2. Most people can develop each intelligence to an adequate level of competency. Virtually everyone has the capacity to develop all eight intelligences to a reasonably high level of performance if given the appropriate encouragement, enrichment, and instruction.

3. Intelligences usually work together in complex ways. No intelligence exists by itself in life (except perhaps in very rare instances in savants and brain-injured individuals). They rarely work in isolation, but usually interact with each other. To cook a meal, one must read the recipe (verbal-linguistic), possibly divide the recipe in half (logical-mathematical), develop a menu that satisfies all members of a family (interpersonal). Similarly, when a child plays a game of kickball, he needs bodily-kinesthetic intelligence (to run, kick, and catch), visual-spatial intelligence (to orient himself to the playing field), and linguistic and interpersonal intelligences (to successfully argue a point during a dispute in the game).

4. There are many ways to be smart within each intelligence. Each intelligence offers a range and variety of ways for persons to excel. For example, a person with a high degree of logical-mathematical intelligence may struggle with calculus, but be extremely proficient in the logic required for computer programming. Or another person may be illiterate, yet be considered highly verbal because of his/her use of the oral language and storytelling ability. Multiple intelligences theory emphasizes the rich diversity of ways in which people show their gifts within intelligences as well as between intelligences.

5. Each intelligence meets the eight criteria identified by Dr. Howard Gardner. More than eight intelligences may be discovered as further study is conducted. However, these original eight intelligences all share common characteristics.

2.2.2. Eight Distinct Criteria for an Intelligence

Building upon the definition of the intelligence, and drawing especially on biological and anthropological evidence, Gardner (1983:62) introduces eight distinct criteria for an intelligence:

1. Potential isolation by brain damage:

If damage to a particular area of the brain causes a person to lose a particular capacity, then it seems likely that the capacity is relatively independent from other human capacities -a key criterion for an intelligence.

2. The existence of idiot savants, prodigies, and other exceptional individuals:

Occasionally, a capacity appears to be particularly strong in an individual whose other capacities are only average or even severely impaired. Conversely, a particular intellectual skill may be absent in a competent person. Such cases lend support to the idea that the capacity in question is indeed independent of other capacities, and so is a good candidate for the label "intelligence."

3. An identifiable core operation or set of operations:

For example, sensitivity to pitch is a core operation of musical intelligence; the ability to imitate movement by others is a core operation of bodily-kinesthetic intelligence.

4. A distinctive developmental history, along with a definable set of expert "end-state" performances:

To qualify as an intelligence, a particular ability must have an identifiable series of stages through which all individuals (whether normal or gifted) progress as they develop into greater levels of skills.

5. An evolutionary history and evolutionary plausibility:

Gardner (1983:16) explains that the roots of our current intelligences reach back millions of years in the history of the species. The more clearly one can identify the evolution of a particular ability, the more reasonable it becomes to consider that ability an intelligence.

6. Support from experimental psychological tasks:

Experimental studies help to establish the relative autonomy of particular capacities, particularly experiments that show how a particular skill does or does not transfer across contexts.

7. Support from psychometric findings:

To the extent that standard tests seem to measure the same ability correlate with one another, they lend support to the idea that a particular ability is discrete and independent from other abilities, making it a better candidate for an intelligence.

8. Development of a relevant symbol system:

For example, mathematical symbols support the logical-mathematical intelligence, musical notation grows out of and supports the musical intelligence, and so on. Gardner (1983:26) points out that a human

intelligence may well develop without such a symbol system, but still suggests that a natural gravitation toward embodiment in a symbolic system may be a key feature of an intelligence.

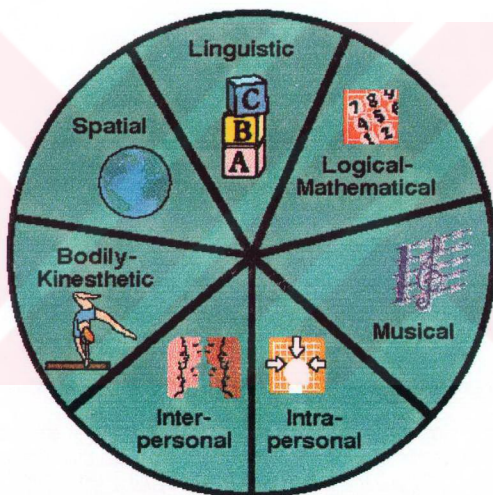
In an interview with Extra (1999), Gardner gives a shorthand version of his theory of multiple intelligences stating that it is a psychological theory about the mind. It is a critique of the notion that there is a single intelligence which we are born with, which cannot be changed, and which psychologists can measure. It is based on a lot of scientific research in fields ranging from psychology to anthropology to biology. It is not based on test correlations, which most other intelligence theories are based on.

Gardner (1993:48) makes two claims. The first claim is that all human beings have all of these intelligences. It is part of our species' definition. The second claim is that, both because of our genetics and our environment, no two people have exactly the same profile of intelligences, not even identical twins, because their experiences are different.

In an interview with Checkley (1997), Gardner reveals the experiences that led him to the study of human intelligence; the most important result was actually learning about brain damage and what could happen to people when they had strokes. When a person has a stroke, a certain part of the brain gets injured, and that injury can tell you what that part of the brain does. Individuals who lose their musical abilities can still talk. People who lose their linguistic ability still might be able to sing. This was really the seed that led him to the theory of multiple intelligences. As long as you can lose one ability while others are spared, you cannot just have a single intelligence. You have to have several intelligences. And these intelligences are classified in the following section.

2.3. Various Types of Intelligences

According to the theory of multiple intelligences, there are at least eight types of intelligences and these are verbal-linguistic intelligence, logical-mathematical intelligence, bodily-kinesthetic intelligence, visual-spatial intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence and naturalistic intelligence (which has recently been proposed, hence not shown in the following figure).



2.3.1. Verbal-Linguistic Intelligence



Perhaps the most universal of the multiple intelligences is the verbal-linguistic intelligence, since everyone learns to speak and most people can read and write. When we begin to interact with the primary language of our environment, the brain can already recognize all of the sounds of the language. Usually we will fully develop only one or two of these potential languages into full-blown, sophisticated language systems. All people from all cultures possess the ability to utilize language.

For years, researchers have recognized the connection between language and the brain. Damage to one portion of the brain, Broca's Area, will cause a person to lose the ability to express himself/herself in clear grammatical sentences, though that person's understanding of vocabulary and syntax remains intact.

Gardner (1993:21) explains that a specific area of the brain, called "Broca's Area," is responsible for the production of grammatical sentences. A person with damage to this area can understand words and sentences quite well but has difficulty putting words together in anything other than the simplest of sentences. At the same time, other thought processes may be entirely unaffected. Furthermore, he notes that even young children and deaf individuals will begin to develop their own unique language when they are not

offered an alternative. A person's ability to construct and comprehend language may vary, but as a cognitive trait it is still universal.

According to Gardner (1983:75), verbal-linguistic intelligence is the capacity to use language, your native language, and perhaps other languages, to express what is in your mind and to understand other people. It deals with abilities in the complex acquisition, formation and processing of language. Thinking symbolically and reasoning abstractly fall under this category, as does the ability to create conceptual verbal patterns. Reading, writing, the development of symbolic writing and language skills -anagrams, metaphors, similes, puns, and analogies come under this heading. Children who talk early, those who enjoy making sounds and rhyming patterns; children who are prolific readers and have good memories for poetry, lyrics, tongue twisters, and verse may have a tendency in this area. These individuals love words, both spoken and written, and often think in words. They learn by verbalization, by seeing and hearing words and usually enjoy word games.

People having verbal-linguistic intelligence often think in words and are generally referred as word smart. They like reading, playing word games, making up poetry and stories, getting involved in discussions, debating, formal speaking, creative writing, and telling jokes. They tend to be precise in expressing themselves, they love learning new words, they do well on written assignments, and their comprehension of what they have read is high. They are responsible for the production of language and all the complex possibilities that follow, including poetry, humor, storytelling, abstract reasoning, and the written word. They are generally elegant speakers. They think in words rather than pictures.

Verbal-linguistic intelligence involves all forms of working with language, including the ability to read the newspaper, a novel, or labels on various

products, the ability to write essays, poetry, reports, and letters, formal speaking before an audience, and informal conversation with a friend. It also deals with listening to the words of another person and being able to understand what they are both saying and intending to communicate. It may be exercised through reading interesting books, playing word, board or card games, listening to recordings, using various kinds of computer technology, and participating in conversation and discussions. Verbal-linguistic learner is also called the word player. Students who enjoy playing with rhymes, who pun, who always have a funny story to tell, who quickly acquire other languages, including sign language, and who write copious notes to their friends in class all exhibit linguistic intelligence.

If someone has strength in verbal-linguistic intelligence, then s/he:

asks lots of questions
Enjoys talking
has good vocabulary
can pick up a new language easily
enjoys playing with words
enjoys reading
likes to write
understands the functions of language
can talk about language skills
is good at memorizing names, places, dates and trivia

His/Her best products are:

Novels
Speeches
Stories
Lyrics
Poems

Instructions
Manuals
Newspapers
Magazines
Plays
Arguments
Debates
Jokes
Crosswords
Scrabble/word games

S/he learns best by:

Saying
Hearing and seeing words
Talking, writing and reading

Students having verbal-linguistic intelligence have always been successful in traditional classrooms because their intelligence lends itself to traditional teaching. In order to nurture the verbal-linguistic intelligence in the classroom, teachers have to ensure that their programs are rich with language opportunities and that students' linguistic expression is listened to and appreciated.

"Classrooms in every subject matter area, at every grade level, must be language-rich environments in which students frequently speak, discuss, and explain. Interest in learning grows when students feel secure enough to ask questions and debate viewpoints. Self-confidence grows when students learn to defend their position in discussions and debates. They understand their lessons more deeply when they have opportunities to discuss or teach others what they have learned." (Campbell and et.al., 1996:3)

Verbal-linguistic intelligence is highly developed in writers, orators, poets, journalists, essayists, administrators, salespersons, counselors,

lawyers, professors, philosophers, playwrights, advertising copywriters, novelists, teachers, translators, story-tellers, politicians, editors, authors, reporters, speakers, attorneys, talk-show hosts, lecturers, radio and TV personalities. Some famous examples of this type are Charles Dickens, Abraham Lincoln, T.S. Eliot and Sir Winston Churchill. So if you have verbal-linguistic intelligence, then you have the ability to think in words and use language to express ideas.

2.3.2. Logical-Mathematical Intelligence



Logical-mathematical intelligence is the pattern-seeking intelligence. We start doing maths very early in our human development. The first stage of the development of logical-mathematical intelligence is our manipulation of and play with a variety of concrete objects in the real physical world around us. It is most often associated with what we call scientific reasoning, this intelligence easily recognizes logical patterns, makes connections and masters symbols and concepts.

According to Gardner (1983:131), people with a highly developed logical-mathematical intelligence understand the underlying principles of some kind of a causal system, the way a scientist or a logician does; or manipulate numbers, quantities, and operations, the way a mathematician does. Logical-mathematical intelligence is the most popularly understood cognitive faculty. This intelligence is our ability to mentally process logical problems and equations, the type most often found on multiple choice

standardized tests. Logical-mathematical intelligence often does not require verbal articulation, for we can churn a complex problem in our head, only to articulate it out loud once the problem has been solved (The "Aha!" phenomenon, as Gardner puts it). Additionally, individuals who have high logical-mathematical abilities are able to process logical questions at an unusually rapid rate.

Gardner (1983:132) claims that logical-mathematical intelligence, as the name implies, is logical and mathematical ability, as well as scientific ability. Jean Piaget, the great developmental psychologist, thought he was studying all intelligences, but Gardner believes he was studying the development of logical-mathematical intelligence. Although Gardner (1993:8) names the verbal-linguistic and logical-mathematical intelligences first, it is not because he thinks they are the most important -in fact, he is convinced that all eight of the intelligences have equal claim to priority.

Logical-mathematical intelligence deals with the ability to think logically; inductively, and to some degree deductively; categorically; to recognize patterns, both geometric and numerical; as well as the ability to see and work with abstract concepts. It is the ability to use numbers to compute and describe, to use mathematical concepts to make inferences, to apply mathematics in personal daily life, to apply mathematics to data and construct arguments, to be sensitive to the patterns, symmetry, logic, and aesthetic of mathematics, and to solve problems in design and modeling. It involves numbers and computing skills, and the ability to solve different kinds of problems through logic. It may be exercised through classifying and sequencing activities, playing number and logic games, and solving various kinds of puzzles.

Children who possess this form of developed intelligence may be constant questioners; they may easily grasp games that involve

sophisticated strategies like chess, or they may devise experimental formats to test their ideas. Also, they may be fascinated with computers or with puzzles that involve logic and reasoning abilities. Those who display an aptitude for numbers, reasoning and problem solving are strong in this type of intelligence. This is the other half of the children who typically do well in traditional classrooms where teaching is logically sequenced and students are asked to conform.

"Youngsters strong in this form of intelligence think conceptually. Before adolescence, these children explore patterns, categories, and relationships by actively manipulating the environment and experimenting with things in a controlled and orderly way. In their teen years, they are capable of highly abstract forms of logical thinking. Children gifted in this area are constantly questioning and wondering about natural events. These are the youngsters who love hanging around computers or chemistry sets, trying to figure out the answer to a difficult problem. They often love brain teasers and logical puzzles that require reasoning abilities." (Armstrong, 1987)

People having logical-mathematical intelligence are generally referred as number smart. They like to experiment, solve puzzles and other problems, ask cosmic questions, and think. They generally enjoy working with numbers and mathematical formulas and operations. They love the challenge of a complex problem to solve. They tend to be systematic and analytical, and they always have a logical rationale or argument for what they are doing or thinking. They are good at figuring things out, analyzing things, and solving problems in subjects like maths and science. Logical-mathematical learner is also called the questioner.

If someone has strength in logical-mathematical intelligence, then s/he:

enjoys solving puzzles
plays with numbers
wants to know how things work
is oriented towards rule-based activities

is interested in "if then" logic
is analytical in approach to problems
is good at mathematics, reasoning, logic and problem solving

His/Her best products are:

Computer programs
Mathematical proofs
Flow charts
Pie graphs
Inventions

S/he learns best by:

Categorizing
Classifying
Working with abstract patterns and relationships

In order to nurture the logical-mathematical intelligence in the classroom, teachers should provide manipulatives to help children experiment with numbers and should use simple machines to help children think about cause and effect. Logical-mathematical intelligence is highly developed in mathematicians, tax accountants, statisticians, scientists, computer programmers, logicians, engineers, physicists, researchers, astronomers, philosophers, inventors, and designers. Albert Einstein is a famous example of this type.

So if you have a logical-mathematical intelligence, then you like to use numbers and reasoning to solve problems. You also like to do puzzles, brain-teasers, and other maths or science related activities.

2.3.3. Bodily-Kinesthetic Intelligence



Of all the intelligences, bodily-kinesthetic intelligence is probably the most taken-for-granted part of our lives. We perform a wide variety of complex bodily-kinesthetic tasks in our lives every day. This intelligence deals with the full range of movement that is possible in and through the body. It involves the control and interpretation of muscular and other physical sensations to set one's relationship with the world. It is also one of the most controversial of Gardner's intelligences. Each person possesses a certain control of his or her movements. It has also been long known that each hemisphere of the brain controls the opposite side of the body's movements, and in cases of apraxia or other conditions, some people lack the ability to voluntarily control muscles, though they continue to move involuntarily. Some people, however, argue that physical control does not constitute a designation as a form of intelligence. But the work of Gardner and other multiple intelligence researchers maintain that bodily-kinesthetic ability does indeed deserve such a recognition.

According to Gardner (1983:208), bodily-kinesthetic intelligence is the capacity to use your whole body or parts of your body, your hand, your fingers, your arms, to solve a problem, make something, or put on some kind of a production. It involves physical coordination and dexterity, using fine and motor skills, and expressing oneself or learning through physical activities. It may be exercised by playing with blocks and other construction materials, dancing, playing various active sports and games, participating in plays, and using various kinds of manipulatives to solve problems or to learn.

Campbell and et.al. (1996:67) state that bodily-kinesthetic intelligence includes the ability to unite body and mind to perfect physical performance. Beginning with the control of automatic and voluntary movements, kinesthetic intelligence progresses to using our bodies in highly differentiated and skilled ways. All talented performances require an acute sense of timing and the transformation of intention into action. Bodily-kinesthetic intelligence is the foundation of human knowing, since it is through our sensory-motor experiences that we experience life.

Children having bodily-kinesthetic intelligence are the movers of the universe, and frequently they squirm, rock, even fall off their chairs when required to sit still for extended periods of time. These children are good at creating and interpreting gestures. They may even have a need to enter the personal space of others or to touch them while communicating. This group of children needs to learn by acting and moving. These children were often labeled overly active in traditional classrooms where they were told to sit and be still.

"These children squirm at the breakfast table and are the first ones to be excused as they zoom out the door and head for the neighborhood playground. They process knowledge through bodily sensations. Some are primarily graced with athletic abilities or the skills of a dancer, actor, or mime -they are great at mimicking your best and worst qualities. Others are particularly gifted with excellent fine-motor coordination and can excel in typing, drawing, fixing things, sewing, crafts, and related activities. These children communicate very effectively through gestures and other forms of body language. Sometimes they can be labeled hyperactive at home and school if there are not appropriate outlets for them. They need opportunities to learn by moving or acting things out." (Armstrong, 1987)

Bodily-kinesthetic intelligence is the ability to use the body to express emotion as in dance, body language, and sports; the ability to learn by doing. People having this type of intelligence are generally referred as body smart. They are good at working with their hands. They are likely to have good body

control and coordination. They like things like dancing, exercising, swimming, skating, riding bicycles, running, and building things. These people have a keen body awareness. They communicate well through body language and other physical gestures. They can often perform a task only after seeing someone else do it. They generally like physical games of all kinds and demonstrating how to do something. They are easily bored if they are not actively involved in what is going on around them.

Gardner (1983:235) claims that the body is more than simply another machine, indistinguishable from the artificial objects of the world. It is also the vessel of the individual's sense of self, his most personal feelings and aspirations, as well as that entity to which others respond in a special way because of their uniquely human qualities. From the very first, an individual's existence as a human being affects the way that others will treat him; and very soon, the individual comes to think of his own body as special. He comes to form a sense of self which he will perpetually modify, and which will in turn come to influence his thoughts and behavior as he comes to respond to others in his environment in terms of their special traits and behavior.

Bodily-kinesthetic learner is also called the mover. Bodily-kinesthetic intelligence involves using the body to solve problems, to create products, and to convey ideas and emotions. The capacity is also evident in students who relish gymnasium classes and school dances, who prefer to carry out class projects by making models rather than writing reports, and who pitch their crumpled papers with annoying accuracy and frequency into waste baskets across the room.

If someone has strength in bodily-kinesthetic intelligence, then s/he:

has a good sense of balance
has a good sense of rhythm
is graceful in movement

reads body language
has good hand-eye co-ordination
can solve problems through doing
can communicate ideas through gestures
is good at physical activities such as sports, dancing, acting

His/Her best products are:

Games
Sculptures
Dances
Mimes
Performances

S/he learns best by:

Touching
Moving and interacting with space
Processing knowledge through bodily sensations.

In order to nurture the bodily-kinesthetic intelligence in the classroom, teachers should provide opportunities for physical challenges throughout the day, not just outdoors. Bodily-kinesthetic intelligence is highly developed in actors, mimes, athletes, dancers, sculptors, mechanics, surgeons, swimmers, acrobats, instrumentalists, physical therapists, carpenters, jewelers, trainers, craftspeople, tool and dye makers, coaches, counselors, salespersons, sports analysts, dance critics, choreographers, puppeteers, clowns, basketball players, football players. Some famous examples of this type are Charlie Chaplin and Michael Jordan.

So, if you are the bodily-kinesthetic type, then you like to use your hands and body to do your work.

2.3.4. Visual-Spatial Intelligence



In some ways it could be said that visual-spatial intelligence is the first language of the human brain. The brain naturally thinks in images and pictures before it even has words to attach to them. Visual-spatial intelligence deals with everything we see: all conceivable shapes, specific patterns and designs (both regular and irregular), concrete and abstract images, and the entire spectrum of color and texture. These things exist not only in the real, concrete, external world (which we observe with our physical eyes), but also in the deep recesses of our imagination where we see with our mind's eyes including our capacities to visualize and dream about the possible, to enter worlds of fantasy, to go on imaginary journeys to imaginary places, and to create or invent things which have never been before. On the spatial side, this intelligence deals with the relationships and placement of objects in the space/time continuum. Thus, where one object is in relation to another is at the heart of this spatial aspect of the visual-spatial way of knowing. This includes directionality; namely, knowing where you are in relation to objects that inhabit the space and environment in which you are living, and being able to successfully move from one place to another.

"Visual-spatial thinking underlies moving figures in a chess game, organizing one's schedule for a day, moving furniture within a room, or reading maps on a trip. Not all visually-capable learners exhibit the same skills. Some may be talented in painting, others at building three-dimensional models, and still others at critiquing fine art." (Campbell and et.al., 1996:97)

Visual-spatial intelligence is our ability to comprehend shapes and images in three dimensions. Whether it is trying to put together a puzzle, mold a sculpture or navigate the seas with only the stars as a guide, we utilize our spatial intelligence to perceive and interpret that which we may or may not physically see.

Gardner (1983:170) gives an example; navigation around the Caroline Islands in the South Seas is accomplished without instruments. The position of the stars, as viewed from various islands, the weather patterns, and water color are the only sign posts. Each journey is broken into a series of segments; and the navigator learns the position of the stars within each of these segments. During the actual trip the navigator must envision mentally a reference island as it passes under a particular star and from that he computes the number of segments completed, the proportion of the trip remaining, and any corrections in heading that are required. The navigator cannot see the islands as he sails along; instead he maps their locations in his mental picture of the journey.

Advances in neuroscience have now provided researchers with clear-cut proof of the role of spatial intelligence in the right hemisphere of the brain. In rare instances, for example, certain brain injuries can cause people to lose the ability to identify where they are or even to recognize their closest relatives. Though they may see the other person or place perfectly well (some patients have demonstrated this with unusually keen drawing ability), they are unable to comprehend who they see or where they are. Additionally, cases of the seeing impaired draw the distinction between spatial ability and visual acuity. A blind person may feel a shape and identify it with ease, though they are unable to see it. Because most people use spatial intelligence in conjunction with sight, its existence as an autonomous cognitive attribute may not seem readily apparent, but recent scientific

advances do suggest that it is clearly an independently performing portion of the intellect.

According to Gardner (1983:174), visual-spatial intelligence refers to the ability to represent the spatial world internally in your mind; the way a sailor or airplane pilot navigates the large spatial world, or the way a chess player or sculptor represents a more confined spatial world. Spatial intelligence can be used in the arts or in the sciences.

Visual-spatial intelligence deals with the ability to perceive images. Children having spatial intelligence think in images and are usually the ones who are able to find missing objects due to their tremendous powers of visual recall. They may be the first to notice things that have been changed or rearranged. Many are earlier drawers -delighted with shapes, lines and colors. They are attracted to jigsaw puzzles, mazes, find the hidden picture puzzles and they love to construct things with blocks. They have an early sense of proportion and perspective. They are also good at reading and constructing maps and discerning objects as they might appear in three dimensional space. They like to see what you are talking about in order to understand. They enjoy charts, graphs, maps, tables, illustrations, art, puzzles, costumes -anything eye catching.

"These children seem to know where everything is located in the house. They think in images and pictures. They are the ones who find things that have been lost or misplaced. If you should rearrange the interior of your home, these children will be highly sensitive to the change and react with joy or panic. They spend their free times drawing, designing things, building with Lego blocks, or simply daydreaming. Many of them develop a fascination with machines and contraptions, sometimes coming up with inventions of their own." (Armstrong, 1987)

People having this type of intelligence are generally referred as picture smart. Therefore, they perceive the world through its spatial arrangements:

line, shape, positive and negative shape, volume, balance, light and shade, harmony and color. They think in images and pictures. They are very often very aware of objects, shapes, colors, and patterns in their environment. They like to draw, paint, make interesting designs and patterns and work with clay, colored construction paper, and fabric. They love reading maps and finding their way around new places. They have strong opinions about such things as colors that go together, textures that are appropriate and pleasing, and decorating. They are extremely good at performing tasks that require seeing with the mind's eye (for example, visualizing, pretending, imagining, and forming mental images).

Visual-spatial learner is also called the visualizer. The students who turn first to the graphs, charts and pictures in their textbooks and who fill the blank space around their notes with intricate patterns are using their spatial intelligence.

If someone has strength in visual-spatial intelligence, then s/he:

likes to draw
likes to take things apart
likes to build things
enjoys puzzles
has a keen eye for detail
has a good sense of parts to the whole
remembers places by description or image
can interpret maps
is good at imagining things and sensing changes

His/Her best products are:

Paintings
Sculptures

Diagrams
Plans
Models
Mazes
Jigsaw puzzles
Drawings
Photographs
Maps
Cartoons
Flow charts
Origami
Film/video

S/he learns best by:

Visualizing
Dreaming
Using the mind's eye
Working with colors and pictures

In order to nurture the visual-spatial intelligence in the classroom, teachers should provide many opportunities for mapping of the classroom and should explore new spaces and encourage students to vary the arrangements of materials in the space.

Campbell and et.al. (1996:96) reveal that in elementary and secondary classrooms, many visually-oriented learners respond well to movies, television, slides, posters, charts, diagrams, computers, and color-coded materials. Besides observation, learning can also be enhanced with visual tools such as computers, telescopes, video cameras, signs, and buildings. Some visually-capable learners arrive at unique, unconventional solutions to artistic problems through tools that allow them to express their unique vision.

Classroom environments can be made more supportive and inviting when visual humor is part of the setting. Cartoons and humorous pictures, or photographs related to the subject matter convey pleasant messages about learning to students. Visual-spatial intelligence can also be developed when students are encouraged to try their hand at cartooning or other humorous illustrations.

People such as guides, interior designers, architects, artists, inventors, sailors, engineers, surgeons, sculptures, painters, navigators, air traffic controllers, illustrators, photographers, clothing designers, builders, art critics, mechanics, graphic designers, decorators, film directors, chess players may exhibit highly developed visual-spatial intelligence. Pablo Picasso is a famous example of this type. So if you have high visual-spatial intelligence, then you are able to think in pictures and see and create images or designs with shape, color and size.

Gardner (1983:170) challenges your visual-spatial intelligence by presenting some tests;

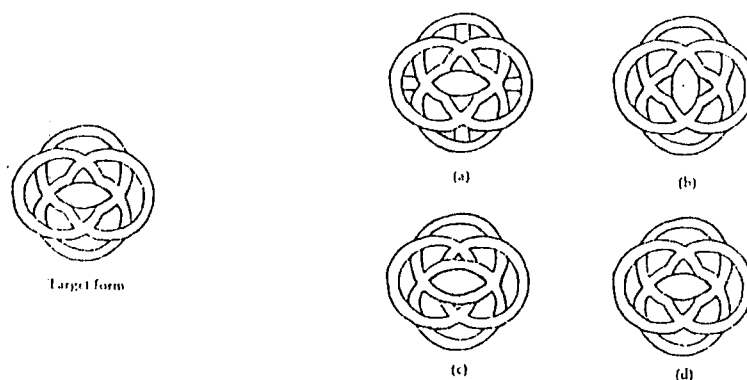


FIGURE 1

Instruction: From the array of four, choose that form that is identical to the target form.

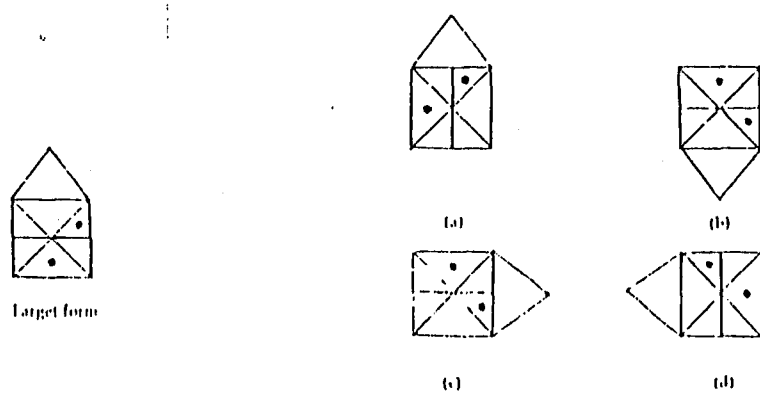


FIGURE 2

Instruction: From the array of four, choose that form which is a rotation of the target form.

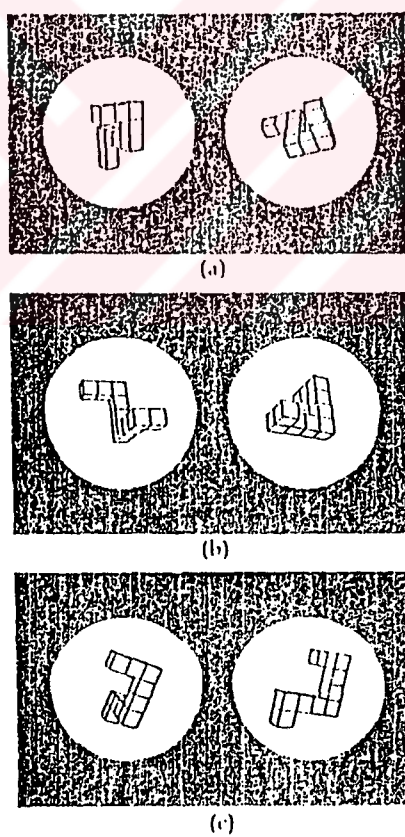


FIGURE 3

Instruction: (For *a, b, c*) Indicate whether the second form in each pair is a rotation of the first or is a different form.

2.3.5. Musical Intelligence



Of all the gifts with which individuals may be endowed, none emerges earlier than musical talent. From a neurological perspective, musical-rhythmic intelligence is the first of our intelligences to develop. It is the power of music, rhythm, sound, and vibration to shift our moods, express deep love for another, or deep loss and grief. Their power helps us anticipate what will happen next when we are watching TV or a movie, it enhances and amplifies the action in a scene, and it helps us understand the aspects of the characters.

According to Gardner (1993:101), musical intelligence is the capacity to think in music, to be able to hear patterns, recognize them, remember them, and perhaps manipulate them. People who have a strong musical intelligence do not just remember music easily and they cannot get it out of their minds. Musical intelligence obviously deals with the ability to create or interpret music.

Campbell and et.al. (1996:133) give a definition of the musical intelligence that music is undoubtedly one of the oldest art forms, utilizing the human voice and body as natural instruments and means of self-expression. It is an art that comes into the world with us. We live with our mother's heartbeat for nine months before we are born. We live with the rhythms of our own heartbeat and respiration and the more subtle rhythms of metabolic and brain wave activity. We are all inherently musical and can develop this capacity in ourselves and in others.

Children having musical intelligence may need music while they are studying, and they are continually humming, singing, tapping out tunes rhythmically, or whistling. They have keen ears for distinguishing sounds and subtle nuances in music and in the sounds in their environment. These children can also be excellent mimics and can easily discern differences in speech patterns or accents. They learn well through songs, patterns, rhythms, instruments and musical expressions. It is easy to overlook children with this intelligence in traditional education.

Musical intelligence is the ability to understand and develop musical technique, to respond emotionally to music and to work together to use music to meet the needs of others, to interpret musical forms and ideas, and to create imaginative and expressive performances and compositions. Gardner (1993:17) states that a brief consideration of the evidence suggests that musical skill which may fail the traditional IQ test can pass other tests which measure this type of intelligence. For example, certain parts of the brain play important roles in perception and production of music. These areas are characteristically located in the right hemisphere, although musical skill is not as clearly localized, or located in a specifiable area, as language. Although the particular susceptibility of musical ability to brain damage depends on the degree of training and other individual differences, there is clear evidence for the loss of musical ability.

People having musical intelligence are generally referred as music smart and they think in sounds, sing, hum, whistle to themselves, they immediately respond to music, they perform and appreciate music and they have strong opinion of others' music. These people love music and rhythmic patterns. They are very sensitive to sounds in the environment; the chirp of a cricket, rain on the roof, varying traffic patterns. They can often reproduce a melody or rhythmic pattern after hearing it only once. Various sounds, tones, and rhythms may have a visible effect on them. They like to create music.

They enjoy singing and listening to a wide variety of music. They are often quite skilled at mimicking sounds, language accents, and others' speech patterns, and recognizing different musical instruments in a composition. They like things like singing, playing musical instruments, beating drums, humming, writing songs, and performing. This intellectual capacity is often revealed in people who appear to easily remember the lyrics of songs, the beat of popular tunes, or are easily given to humming tunes and composing melodies. Paul McCartney is strong in this intelligence. Musical learner is also called the music lover.

If someone has strength in musical intelligence, then s/he:

has sensitivity to sound patterns
hums tunes
tapes or sways in rhythm
discriminates among sounds
has a good sense of pitch
moves rhythmically
captures the essence of a beat and adjusts movement patterns according to changes
remembers tunes and sound patterns
seeks and enjoys musical experiences
plays with sounds
is good at picking up sounds, remembering melodies, noticing pitches and rhythms

His/Her best products are:

Songs
Performances
Jingles

S/he learns best by:

Rhythm
Melody
Music
Playing instruments
Inventing songs, tunes

In order to nurture the musical intelligence in the classroom, teachers should incorporate music daily. They should use a tape recorder for listening, singing alone, and recording songs and rhythmic and melodic instruments.

Campbell and et.al. (1996:133) state that because of the strong connection between music and the emotions, music in the classroom can help create a positive emotional environment which helps learning. Music can also be used to heighten the suspense, sadness, tragedy or joy of stories from literature and history. Music can even be used or created to express humor. Humorous songs can also add warmth and a welcoming atmosphere in the classroom.

Possible vocations that use musical intelligence include musical performers, singers, composers, instrumentalists, conductors, violinists, composers, performers, musicians, choirs, orchestras, bands, disc jockeys, dancers, studio engineers, music teachers, instrument makers, music critics, and those who enjoy, understand, use, create, perform, and appreciate music. Some famous examples of this type are Mozart and Ray Charles. So if you are the musical-rhythmic type, then you are able to hear and use pitch, rhythm and tone.

2.3.6. Interpersonal Intelligence



Can you think of some great experiences you have had being part of a team, whether it was a sports team, a team in the work place, or a group project in an organization? Can you think of some important things you have learned from working with others? When has another person spent time with you helping you understand or teaching you something? Can you remember completing a task or project that you could not have completed on your own; where you had to rely on another person or people?

Interpersonal intelligence is the human relationships, collaboration with others, and learning from and about other people. In some ways this may seem to be the most obvious of the intelligences, since we spend a large amount of everyday working with, communicating with, and relating to other people. Yet, how skillful are we really? How much do we really value and understand everything that is involved in depth cooperation and collaboration with others?

This intelligence finds the nuance in feelings, motivations, intentions, and moods of other people. Further, it involves the ability to work cooperatively with others; which, in turn, involves the ability to communicate, verbally and non-verbally.

Campbell and et.al. (1996:160) mention that the interpersonal intelligence enables us to understand and communicate with others, noting differences in moods, temperaments, motivations, and skills. It includes the

ability to form and maintain relationships and to assume various roles within groups such as group members or leaders. Though people have the physical ability to exist individually and alone, we are also social beings who thrive and grow when involved with others. This ability to interact with others, understand them, and interpret their behavior is known as interpersonal intelligence.

According to Gardner (1983:237), interpersonal intelligence is seen in how we notice distinction among others; in particular, contrasts in their moods, temperaments motivations and intentions. Interpersonal intelligence allows us to affect others by understanding others; without it, we lose the ability to exist socially.

Gardner (1983:239) states that the interpersonal intelligence turns outward, to other individuals. The core capacity here is the ability to notice and make distinctions among other individuals and, in particular, among their moods, temperaments, motivations, and intentions. Examined in its most elementary form, the interpersonal intelligence entails the capacity of the young child to discriminate among the individuals around him and to detect their various moods. In an advanced form, interpersonal knowledge permits a skilled adult to read the intentions and desires of many other individuals.

Children having interpersonal intelligence are highly empathetic, and they can arbitrate differences between people or groups. They can easily pick up on the vibrations, the feelings of others. These children enjoy cooperative learning experiences and learn best in cooperative settings. They are noticeably people oriented and outgoing. These children may have typically been identified as talkative or too concerned about being social in a traditional setting.

Because interpersonal intelligence is the ability to relate and understand others, people having this type of intelligence are generally referred as people smart. They try to see things from other people's point of view in order to understand how they think and feel. Generally, they try to maintain peace in group settings and encourage co-operation. They use both verbal (e.g. speaking) and non-verbal language (e.g. eye contact, body language) to open communication channels with others. These people learn through person-to-person interaction. They generally have lots of friends, show a great deal of empathy for other people and understand different points of view. They love team activities of all kinds and are very good team members. They are sensitive to other people's feelings and ideas, and are skilled at drawing others out in a discussion. They think and process by relating, co-operating and communicating with others, they are leaders among peers, they have an uncanny ability to sense feelings and intentions of others, they understand people, they are organizers, communicators, at times manipulative, they are street smarts, they have many friends. They prefer paired sharing, role-playing, interactive games and exercises, group and peer teaching, group brainstorming sessions, social gatherings, and simulations. Interpersonal learner is also called the socializer. Students exhibit this intelligence when they thrive on a small-group work, when they notice and react to the moods of their friends and classmates, and when they tactfully convince the teacher of their need for extra time to complete the assignment.

If someone has strength in interpersonal intelligence, then s/he:

demonstrates empathy towards others
is admired by peers
relates well to peers and adults alike
displays skills of leadership
works co-operatively with others

is sensitive to the feelings of others
acts as a mediator or counselor to others
is good at understanding people
is good at organizing, communicating and sometimes manipulating people

His/Her best products are:

Group work
Plays
Dialogues

S/he learns best by:

Sharing
Comparing
Relating
Co-operating
Interviewing

"The interpersonally-skilled students enjoy interacting with others of similar or diverse ages. With a capacity to influence their peers, they often excel at group work, team efforts, and collaborative projects. Interpersonal intelligence is also exhibited through humor whenever students make their friends and teachers laugh, when they create amusing skits." (Campbell and et.al., 1996:160)

In order to nurture the interpersonal intelligence in the classroom, teachers should give the students lots of opportunities to talk about one another and their social interactions, and to problem-solve conflicts together and should play games in which one has to figure out the knowledge or intention of other players.

Possible vocations that use interpersonal intelligence include politicians, religious leaders, those in the helping professions, salesmen, counselors, political leaders, teachers, psychologists, administrators, managers, social workers, doctors, nurses, public relations specialists, therapists, sociologists, psychotherapists, consultants, charismatic leaders, business people, community organizers. Some famous examples of this type are Gandhi, Ronald Reagan and Oprah Winfrey.

2.3.7. Intrapersonal Intelligence



As far as we know, human beings are the only creatures who process self-consciousness. This is the ability to step back from ourselves and to reflect on the self and to learn from our reflection. It is notable if you can recognize this process in your own life: When you are alone, what non-work related thinking do you really enjoy? What do you do for personal renewal? When you are stressed, angry, or anxious, what practices do you use to alter your consciousness or awareness? In the last year, what new discoveries have you made about yourself that in some way altered your previous self-understanding? If you had to answer the question "Who am I really?" and you could not talk about external appearances, skills you've acquired, relationships you have with others, or your work, what would you say? What do you do when you need inspiration or when you need to spark your own creativity? What is the process you use to evaluate yourself and your goals? What personal growth and development things are you currently doing and/or what have you tried recently?

Intrapersonal intelligence is based on the knowledge of the self. It includes metacognition (thinking about thinking), emotional responses, self reflection and an awareness of metaphysical concepts. According to Gardner (1983:239), intrapersonal intelligence refers to having an understanding of yourself, of knowing who you are, what you can do, what you want to do, how you react to things, which things to avoid, and which things to be attracted. We are drawn to people who have a good understanding of themselves because those people tend not to screw up. They tend to know what they can do. They tend to know what they cannot do. And they tend to know where to go if they need help.

To know one's self and trust one's intuition are aspects of this intelligence. The person with this dominant intelligence tends to process individually rather than in groups. This intelligence has the keen ability to watch oneself as if an outside observer.

Campbell and et.al. (1996:195) claim that at the heart of our inner world are the strengths that we rely on to understand ourselves and other people, to imagine, plan, and solve problems. There as well lie qualities such as motivation, determination, ethics, integrity, empathy, and altruism. Without these inner resources, it is difficult to live a productive life in the fullest sense. It is our cognitive ability to understand and sense our self. It allows us to tap into our being; who we are and what feelings we have. They name this type of intelligence as intrapersonal intelligence. A strong intrapersonal intelligence can lead to self-esteem, self-enhancement, and a strength of character that can be used to solve internal problems. Conversely, a weak intrapersonal intelligence, as is the case of autistic children, prevents even a recognition of the self as a separate entity from the surrounding environment.

"Intrapersonal intelligence fosters the ability to know oneself and assume responsibility for one's life and learning. The individual with a strong intrapersonal intelligence is able to understand his or her range of emotions and draw on them

to direct his or her behavior. This individual thrives on time to think, to reflect, and complete self-assessments. The need for such introspection makes this intelligence the most private." (Bellanca:1994)

Campbell and et.al. (1996:195) claim that young children are often curious about their inner experiences and can benefit from a variety of intrapersonal activities. Such activities include self-directed, independent learning approaches, opportunities to imagine, and private places and time to work and reflect. In addition, they can benefit by learning ways to process their feelings, set and achieve goals, and gain self-knowledge and self-esteem. Posing questions about life and personal ambition, and then finding answers to such mysteries is rewarding for children and adults. It is the ability to assess one's own strengths, weaknesses, talents, and interests. They use them to set goals, to understand oneself to be of service to others, to form and develop concepts and theories based on an examination of oneself, and to reflect on one's inner moods, intuitions, and temperament and to use them to create or express a personal view.

Gardner (1993:24) states that a person with good intrapersonal intelligence has a viable and effective model of himself or herself. Since this intelligence is the most private, it requires evidence from language, music, or some other more expressive form of intelligence if the observer is to detect it at work. People having this type of intelligence are generally referred as self smart. Therefore, they are good at understanding other people's feelings; focusing and concentrating, and thinking things through. They may be particularly good at things like closing their eyes and reflecting about how they feel about things; focusing, concentrating, and understanding how other people feel. They like to work alone and are sometimes shy away from others. They are self-reflective and self-aware and thus tend to be in tune with their inner feelings, values, beliefs, and thinking processes. They are frequently bearers of creative wisdom and insight, are highly intuitive, and

are inwardly motivated rather than needing external rewards to keep them going. They are often strong willed, self-confident, and have definite opinions on almost any issues. Other people will often come to them for advice and counsel, but other people will also sometimes view them as distant and weird. They are skilled in inner focusing, they display a strong personality, they have deep awareness of inner feelings, dreams and ideas, they are reflective and analytical, they tend to shy away from team activities. They recognize self-strengths and weaknesses, they require private space and time and prefer individualized instruction, independent study, self-paced learning, private time for study, options for working on own, reflection and journal keeping time, personal connections, and self-esteem activities. Intrapersonal learner is also called the individual. Intrapersonal intelligence is the ability to gain access to understand one's inner feelings, dreams and ideas. The two personal intelligences (interpersonal and intrapersonal) are, perhaps, the hardest to observe and at the same time, are the most important to success in any societal domain.

If someone has intrapersonal intelligence, then s/he:

can express strong like or dislike of particular activities
can communicate feelings
is aware of strengths and weaknesses
is confident of his/her own abilities
sets appropriate goals
works toward ambition
is good at understanding himself/herself and focusing inward on feelings and dreams
is good at following his/her instincts
is good at pursuing his/her interests and goals
likes being original

S/he likes to:

Write poems
Family histories
Diaries
Can do art works
Autobiography

S/he learns best by:

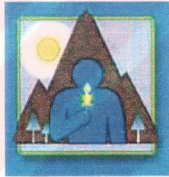
Working alone
Individualized projects
Self-paced instruction
Having own space

Campbell and et.al. (1996:195) reveal that intrapersonal intelligence includes our thoughts and feelings. The more we can bring them into consciousness, the better we can relate our inner world to the outer world of experience. Occasionally, when we find ourselves doing something automatically, it is useful to interrupt this pattern and begin again what we were doing, carefully and thoughtfully observing our own behavior. Such critical self-observation is one way to become more conscious of our inner world, an awareness as important for teachers as it is for students. Intrapersonal intelligence need not be a solemn quality. In fact, the ability to understand ourselves better by being able to laugh at our mistakes is a non-threatening way to greater self-understanding. Students will be well-served by realizing that making an honest mistake should not automatically lead to self-depreciation or shame or anger. When we are able to laugh at ourselves, we are much better able to start over again. When teachers model this ability in front of students, they model a basic survival skill. In order to nurture the intrapersonal intelligence in the classroom, teachers should let their students express their own unique emotions, preferences,

and strategies and should help them understand their own wishes and fears and how best to deal with them.

People such as novelists, therapists, psychologists, philosophers, people with detailed accurate self-knowledge, psychotherapists, religious leaders, diarists, artists, planners, small business owners, writers, self-employed people, researchers, and theorists may exhibit highly developed intrapersonal intelligence. Some famous examples of this type are Sigmund Freud, Eleanor Roosevelt and Plato. So if you are a person that knows yourself and can understand your feelings and you know where you are in the world, then you have an intrapersonal intelligence.

2.3.8. Naturalistic Intelligence



We all know those who like plants and animals better than people but the naturalist is drawn into all elements of the physical world. This intelligence has the ability to see organic systems and their inter-relatedness; in the process, using the natural world as the central organizing principle of life. Gardner added the naturalistic intelligence to his list in 1996. It is the first addition to the original seven multiple intelligences and it is certainly possible that he (or others) might add more in the future. This intelligence has to do with observing, understanding and organizing patterns in the natural environment. A naturalist is someone who shows expertise in the recognition and classification of plants and animals.

Gardner thought about whether the capacity to classify nature might be a separate intelligence. So, he presented a couple of reasons: First, it is an ability we need to survive as human beings. We need, for example, to know which animals to hunt and which to run away from. Second, this ability is not restricted to human beings. Other animals need to have a naturalistic intelligence to survive. Finally, the brain evidence supports the existence of the naturalistic intelligence. There are certain parts of the brain particularly dedicated to the recognition and the naming of what are called "natural" things.

This intelligence is directly related to our recognition, appreciation, and understanding of the natural world around us. We often head for nature when we want to relax or find inner renewal. We react to powerful displays of nature's force in such things as the weather, a so-called "natural disaster". The naturalistic intelligence refers to the ability to recognize and classify plants, minerals, and animals, including rocks and grass and all variety of flora and fauna. Everybody can do this to a certain extent -we can all recognize dogs, cats, trees. But, sometimes people from an early age are extremely good at recognizing and classifying things. For example, we all know children who, at the age of three or four, are better at recognizing dinosaurs than most adults. Darwin is probably the most famous example of a naturalist because he saw so deeply into the nature of living things and because his ability to identify and classify insects, birds, fish, and mammals, resulting in his theory of evolution, ranks as perhaps the major intellectual contribution of the nineteenth century.

People having naturalistic intelligence are good at things like identifying things like rocks, plants, cloud patterns, and other things relating to the natural environment. People who are smart in this type of intelligence are keenly aware of their surroundings and changes in their environment, even if these changes are at minute or subtle levels. Often this is due to their highly-

developed levels of sensory perception. Their heightened senses may help them notice similarities, differences and changes in their surroundings more rapidly than others. People with naturalistic intelligence may be able to categorize or catalogue things easily too. Frequently, they may notice things others might not be aware of. These people often like to collect, classify, or read about things from nature; rocks, fossils, butterflies, feathers, shells, and the like. They innately sense appropriate categories based on the characteristics they observe and are able to group items accordingly. They like to collect items from nature, study them, and group them. They tend to be aware of subtleties in appearance, texture, and sounds that those weaker in this intelligence may not grasp. They like hiking, camping, fishing, digging for fossils, or other activities relating to the natural environment.

People who are strong in this type of intelligence are generally referred as nature smart and prefer:

Field trips and time outdoors
Expeditionary activities
Classification and activities that find the connections
Hands-on experiments
Activity write-ups

Children possessing this type of intelligence may have a strong interest in the outside world or to animals, and this interest often begins at an early age. They may enjoy subjects, shows and stories that deal with animals or natural phenomena, or they may show unusual interest in subjects like biology, zoology, botany, geology, meteorology, paleontology, or astronomy. In fact, the traditional classroom has not been accommodating to these children.

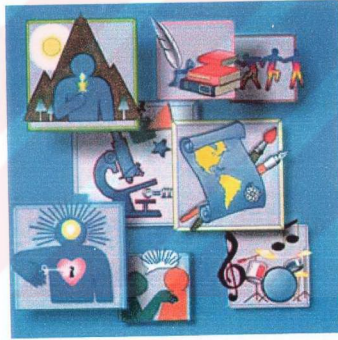
According to Wilson (1998), children having naturalistic intelligence may exhibit some of the following characteristics:

They may:

1. Have keen sensory skills; sight, sound, smell, taste and touch.
2. Use their heightened sensory skills to notice and categorize things from the natural world.
3. Like to be outside or like outside activities like gardening, nature walks to observe nature or natural phenomena.
4. Notice patterns easily from their surroundings.
5. Be interested and care about animals or plants.
6. Notice things in the environment others often miss.
7. Create, keep or have collections, logs, or journals about natural objects -these may include written observations, drawings, pictures and photographs or specimens.
8. Be very interested, from an early age, in television shows, videos, books, or objects from or about nature, science or animals.
9. Show heightened awareness and concern of the environment and/or for endangered species.
10. Easily learn characteristics, names, categorizations and data about objects or species found in the natural world.

In order to nurture the naturalistic intelligence in the classroom, teachers should play games in which children recognize fine distinctions among members of a plant or animal group; explore the outdoors regularly and bring the outdoors in and should provide ample books, and visualism related to the natural world. Possible vocations that use naturalist intelligence include nature writers, anthropologists, biologists, physicians, natural healers, farmers, hunters, gardeners, animal handlers, trackers.

2.4. Implementing The Theory of Multiple Intelligences in Education



Do you have some who can create beautiful pieces of visual art? Are others gifted in sports, making complex series of physical movements appear graceful and effortless? Some may play a musical instrument so well that listening touches chords within. A few may thrill to the challenge of mathematical precision. Others may love writing and have already learned the excitement of seeing their own stories or poems in print. Several may be natural leaders offering positive role models and trusted guidance to their classmates. And a few may possess penetrating personal insights about who they are and what they stand for, while pursuing important life goals. Among

the students mentioned, who would be the most intelligent? The question is impossible to answer because each of the examples represents students who have developed different intelligences. Each student is unique and all in individual ways offer valuable contributions to human culture.

Each of us use eight (or more) intelligences. All intelligences need to be equally valued. All intelligences can be taught, nurtured and strengthened. Not all students are well-served by schools that focus primarily on the verbal-linguistic intelligence and the logical-mathematical intelligence. Everyone learns in different ways at different rates for different reasons. Stronger intelligences may be used to awaken and strengthen weaker ones.

Gardner (1993:9) gives his view on the purpose of a school that is to develop intelligences and to help people reach vocational and avocational goals that are appropriate to their particular spectrum of intelligences. People who are helped to do so, feel more engaged and competent, and therefore more inclined to serve the society in a constructive way. The design of his ideal school of the future is based upon two assumptions. The first is that not all people have the same interests and abilities; not all of us learn in the same way. The second assumption is the one that hurts; it is the assumption that nowadays no one can learn everything there is to learn.

Haggerty (1995) has developed five principles that should be kept in mind as educators attempt to bring Gardner's theory of multiple intelligences into the institution of education. They are:

1. Education should address the entire range of intellectual abilities.
2. Education should be highly individualized to match the distinctive combination of intelligences possessed by each person.

3. Education should encourage students, as much as possible, to establish their own learning goals and construct their own learning programs.
4. Intelligences should be assessed directly in contexts in which they are applied.
5. Education should not be confined to the school.

In addition, Haggerty (1995) has developed seven steps that will help teachers who wish to make their classrooms more open to the insights of multiple intelligences research:

1. Spend the time required to understand what the theory of multiple intelligences actually proposes and the bases for these proposals.
2. Examine your own teaching styles.
3. Begin to understand the intellectual profiles of your students, to discover what their intellectual strengths and weaknesses are.
4. Consider specific teaching approaches and methods that appeal to particular intelligences or combinations of intelligences.
5. Approach planning specific lessons or classes with multiple intelligences theory in mind.
6. Recognize the distributed nature of intelligences.
7. Focus on assessment rather than testing.

Wilson (1998) has given some specific reasons why teachers are drawn to use multiple intelligences in their classes:

Because multiple intelligences theory:

1. Aids teachers in easily creating more personalized and diversified instructional experiences
2. Offers teachers assistance in helping students become empowered learners by extending and promoting cognitive bridging techniques based on the eight intelligences; by fostering deep metacognitive understanding; and by advancing suggestions for a broad array of diversified study skills techniques.
3. Helps teachers explain and promote understanding at intrapersonal, interpersonal and cultural levels.
4. Taps into students' intrinsic levels of motivation through natural talents, thus helping teachers construct self-motivating educational experiences and ones which help promote the concept of flow in the classroom.
5. Often validates teachers' insightful and intuitive assessments of students' natural talents and offers them justifications and assistance in creating related personalized educational accommodations and experiences.
6. Provides teachers, parents and students with a more extensive conceptualization of giftedness.

Multiple intelligences theory is a natural way to structure learning. All the aspects of the person are taught to, meaning can be extracted, and

applications can be made to life. The students in our classrooms are multifaceted and have many abilities. Teachers need to give them the skills and the opportunity to use their abilities and enhance them throughout their life. They have the capacity to activate all these intelligences for the students, and in so doing, new worlds of sensing, feeling, and knowing are opened to them. Students must be taught to think and to solve problems. As teachers, we need to help our students discover and develop their talents to become self-motivated and competent lifelong learners.

In an interview with Checkley (1997), Gardner presents his idea about how thoughtful educators should implement the theory of multiple intelligences. Although there is no single multiple intelligence route, it is very important that a teacher take individual differences very seriously. You cannot be a good multiple intelligence teacher if you do not want to know each child and try to gear how you teach and how you evaluate that particular child. The bottom line is a deep interest in children and how their minds are different from one another, and in helping them use their minds well. Children can be great informants for teachers. For example, a teacher might say, "Look, Benjamin, this obviously is not working. Should we try using a picture?" If Benjamin gets excited about that approach, that is a pretty good clue to the teacher about what could work.

When using multiple intelligences in teaching, students get the whole picture, they understand at different degrees that each of us possesses all eight intelligences and we have the ability to develop them all. This knowledge empowers students, and such support allows them to take risks and to be open to exploring new areas. They need to know that you respect and support their own particular strengths.

In an interview with Checkley (1997), Gardner explains how we can strengthen our intelligences. We can all get better at each of the

intelligences, although some people will improve in an intelligence area more readily than others, either because biology gave them a better brain for that intelligence or because their culture gave them a better teacher. Teachers have to help students use their combination of intelligences to be successful in school, to help them learn whatever it is they want to learn, as well as what the teachers and society believe they have to learn.

It is nonsensical to say that everything should be taught in seven or eight different ways. That is not the point of the multiple intelligences theory. The point is to realize that any topic of importance, from any discipline, can be taught in more than one way. There are things people need to know, and educators have to be extraordinarily imaginative and persistent in helping students understand things better.

In addition to supporting the concept of everyone having all eight intelligences, Chapman (1993) indicates that several applications of Gardner's theory are relevant to teachers:

1. Intelligences can be taught.
2. Everyone has intelligences of strength.
3. Everyone has some weak areas that can cause discomfort.
4. Weaknesses can be strengthened -moving from an area of discomfort to comfort.
5. One's brain is as unique as a fingerprint.

2.5. Common Curriculum References To Multiple Intelligences

The theory of multiple intelligences, in and of itself, is not going to solve anything in our society, but linking the multiple intelligences with a curriculum focused on understanding is an extremely powerful intellectual undertaking. Students will need to see education as a continuing process in their lives; a way of solving problems creatively and planning effectively for the future. They will need to be able to use many different learning methods, both old and new, and to develop transferable skills. In general, the curriculum emphasizes learning experiences and approaches to learning that develop and foster these skills and habits of mind. It is designed for all students; that is, it recognizes that programs must reflect the abilities, needs, and interests of the students. The expected outcomes allow for the use of a wide range of teaching approaches. It also promotes integrated learning through programs and activities that help students to see connections and relationships among ideas, among people, and among things in the real world.

The ability to see the links among different areas of learning will enable students to use the knowledge and skills developed in one field to learn in another and to relate their learning to real-life situations. Students need the ability to apply existing knowledge in new situations in order to function effectively in an environment of continuous change.

Curriculum must respond to students' varying strengths and abilities. Teachers' assessment of student progress will indicate the kinds of adjustments that will be needed to meet the particular needs of individuals or groups as they work towards achieving the common outcomes.

A flexible curriculum allows and encourages the use of varied content and a range of teaching and learning methods and resources so that

students can develop their personal strengths and pursue their own particular interests:

- a. Set appropriate goals for their learning, make realistic plans and keep track of and evaluate their progress.
- b. Clarify their ideas by reflecting on their own thinking and the responses of others.
- c. Describe the connections among various ideas and concepts.

Students must be able to assess their learning needs, to set themselves appropriate goals, to access and analyze information, to apply what they have learned in various contexts, and to evaluate their progress. They must also become aware of how they learn and be able to explore and assess various learning methods.

Dickinson (1998) states that Gardner believes that the eight intelligences he has identified are independent, in that they develop at different times and to different degrees in different individuals. They are, however, closely related, and many teachers and parents are finding that when an individual becomes more proficient in one area, the whole constellation of intelligence may be enhanced.

For this reason, we believe that it is important to encourage the students to explore and exercise all of their intelligences. Creating a rich, nurturing, and stimulating environment filled with interesting materials, toys, games, and books lays the foundation for healthier, happier, brighter students. Students who have these kinds of experiences know many ways to learn almost anything.

Gardner (1993:71) claims that accepting that individuals have potential in a variety of intelligences has significant implications for education. In order to meet the needs of students with diverse intelligence profiles, teachers must provide opportunities for them to work in a variety of ways. Instruction in accounting, for example, might be approached mathematically, linguistically, and kinesthetically, by providing students with numerical examples, linguistic explanation, and opportunities to enact solutions. Working from their strengths, students can then better the areas in which they are weaker. Students who are more skilled interpersonally than mathematically can learn accounting principles through their exemplification in social contexts. In addition, given opportunities to use their strengths and to work in a variety of areas, students engage more fully in the educational process.

2.6. Implementing the Theory of Multiple Intelligences in English Language Teaching

English Language can be taught by implementing the theory of multiple intelligences. This can be done by keeping some points in mind. First of all, EFL teachers should know the categories of the multiple intelligences because this will help them be aware of their students' own profiles of multiple intelligences. Then, the students should be encouraged to use their preferred intelligences in learning. The assessment of learning should measure multiple forms of intelligences and finally instructional activities should appeal to different forms of intelligences. Because there are different students in the class whose backgrounds, tendencies and intelligences differ widely. In order to deal with this situation, EFL teachers should take into consideration all the students in the class and present various activities that will cater for all the intelligences. For example, the verbal-linguistic intelligence can be developed by presenting activities and games related to word and sentence building and storytelling in EFL classes. Logic puzzles,

problem solving and guided discovery could be used for the logical-mathematical intelligence. Relaxation exercises and craft work can be helpful for the bodily-kinesthetic intelligence. Charts, graphs, pictures, diagrams, and visualizations could be used to develop the visual-spatial intelligence. Songs and background music can be useful for the musical intelligence. Group work, pair work and peer teaching may be used for the interpersonal intelligence. So, the activities and games should mostly be based on role-plays. Also activities regarding cooperation fall under this type of intelligence. Project work, learner diaries, self-study and personal goal setting can be used to develop the intrapersonal intelligence. Finally, classifying, categorizing and background music, especially in the form of sounds created in the natural world help the students develop their naturalistic intelligence. Multiple intelligences theory enables the students to learn according to their own learning preferences no matter how they are taught. In addition, EFL teachers should run through a cycle of learning/teaching activities involving all types of intelligences so that everyone has an equal opportunity to learn. It is clear that unless teachers cater for all the intelligence types in each of their lessons, they will fail to reach all the students in the class, whichever approach to teaching they adopt. For example, students with highly developed visual-spatial intelligence will respond to the use of diagrams to record new vocabulary whereas this technique may have little or no impact on the rest of the class. So, incorporating various activities for various intelligence types will definitely enable teachers to teach more effectively and students to learn better and quickly.

CHAPTER 3

DATA COLLECTION AND THE ANALYSIS OF THE DATA COLLECTED

3.0. Introduction

This chapter deals with the analysis of the data collected and the interpretation of the data results. The first part gives an idea of how the data is collected and to whom the inventory is given. The second part is about the analysis of the data collected from the students, and the last part is about the interpretation of the collected data.

3.1. Data Collection

An inventory has been prepared and administered to the first year and the fourth year students in the ELT Department of Gazi Education Faculty of Gazi University. This inventory consists of 8 parts. Each part having 10 statements are ticked by either yes or no. (See appendix 1). The students do not have to tick all the statements. 220 inventories were given to the randomly chosen students who are in their first years and the ones in their fourth years. The first hundred inventories received for both the first and fourth year students were taken into consideration.

The first section of the inventory is about the verbal-linguistic intelligence. This type of intelligence is to detect whether books and words are important for the students or not.

The second section is the logical-mathematical intelligence. This intelligence is about numbers, strategy games, computers and deducing knowledge.

The third section is about the bodily-kinesthetic intelligence. Students who do not like to sit still for long periods of time, use gestures a lot while expressing themselves, and like to spend their times outdoors are said to have a strong bodily-kinesthetic intelligence.

The fourth section is the visual-spatial intelligence. This type of intelligence is about objects, colors, charts, diagrams, tables, pictures, and designs.

The fifth section is about the musical intelligence. This intelligence indicates to what extent music is important for the students.

The sixth section is the interpersonal intelligence. This intelligence is about having good relationships with others.

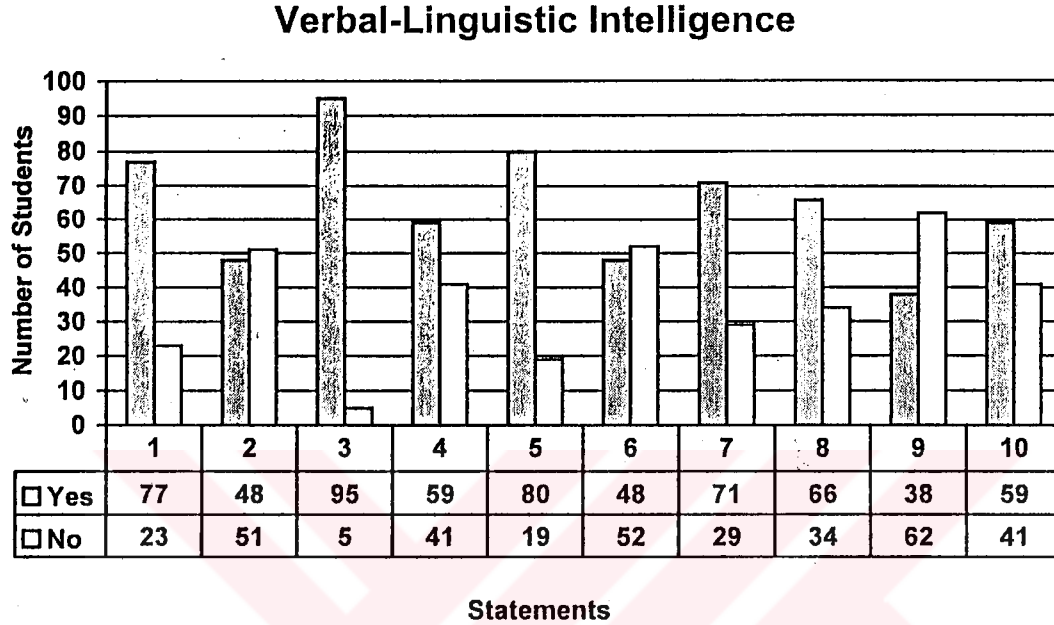
The seventh section is about the intrapersonal intelligence. This type of intelligence is being comfortable with the inner self.

The last section which is the naturalistic intelligence reveals whether the students like being close to nature or not.

3.2. Data Analysis

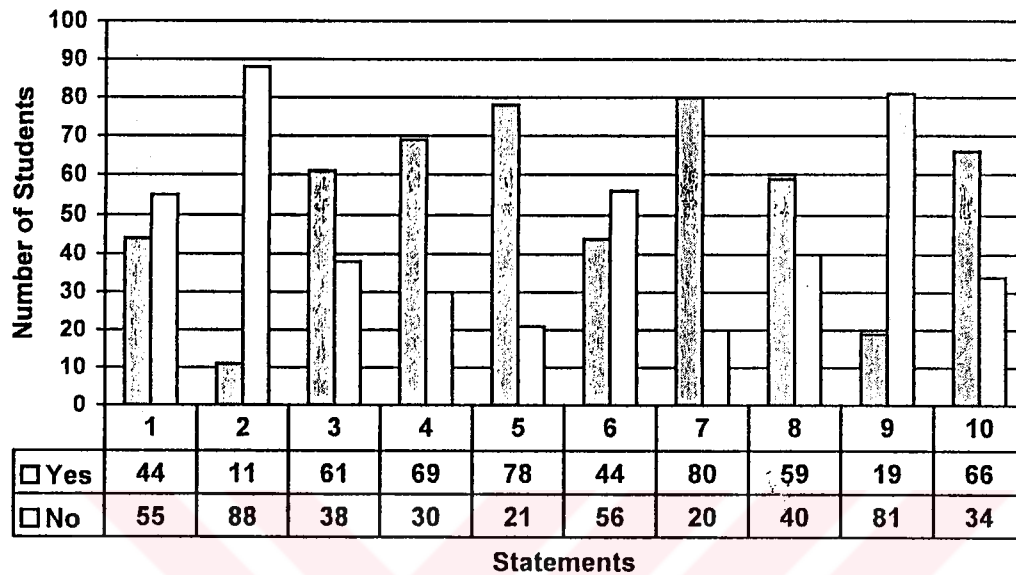
The data gathered from the students have been analyzed by using statistical methods. Firstly, the inventories given to the first year students were analyzed. This was done by counting YES and NO's separately. Secondly, the results of YES' and NO's were shown in graphs for each type of intelligence. Then, the same procedure was applied to the fourth year students in order to reveal their intelligence results. Finally, for each type of intelligence for both the first year students and the fourth year ones, the graphs were interpreted separately.

3.2.1. The Interpretation of the Data Collected from the First Year Students



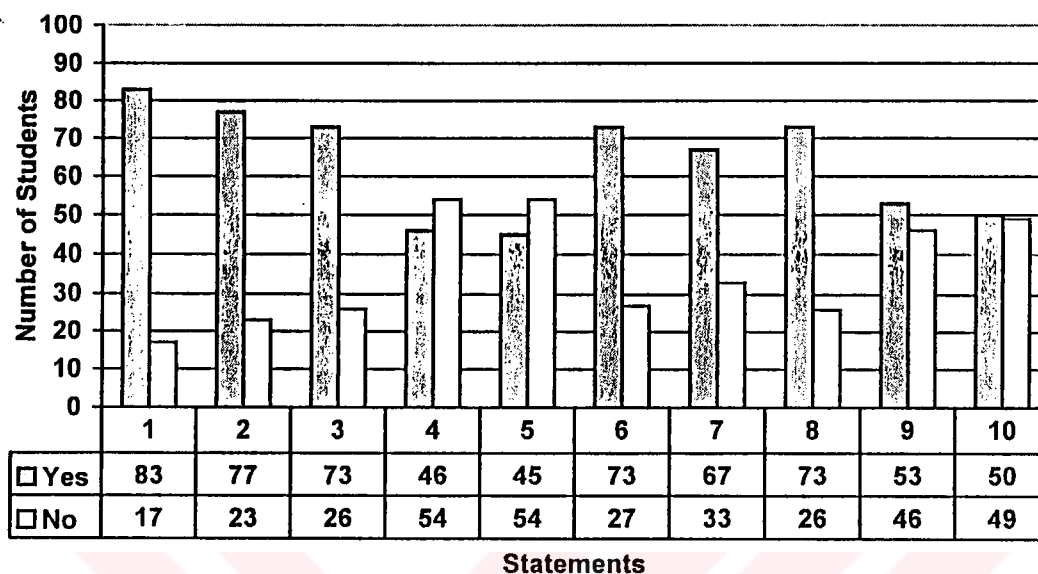
The first graph is about the verbal-linguistic intelligence. As it can be clearly seen in the graph, the third, the fifth and the first statements are the three leading figures. Therefore, it can be stated that the students could do well in English, social studies, and history than math and science when they were in high school. Their conversation frequently includes references to things that they have read or heard. Also books are very important to them. However, the ninth, the second and the sixth statements are the lowest figures. This shows that they do not have a good vocabulary, they do not show any aptitude for word games like scrabble, anagrams, or passwords. And they do not write well and enjoy putting their thoughts on paper or in the computer.

Logical-Mathematical Intelligence



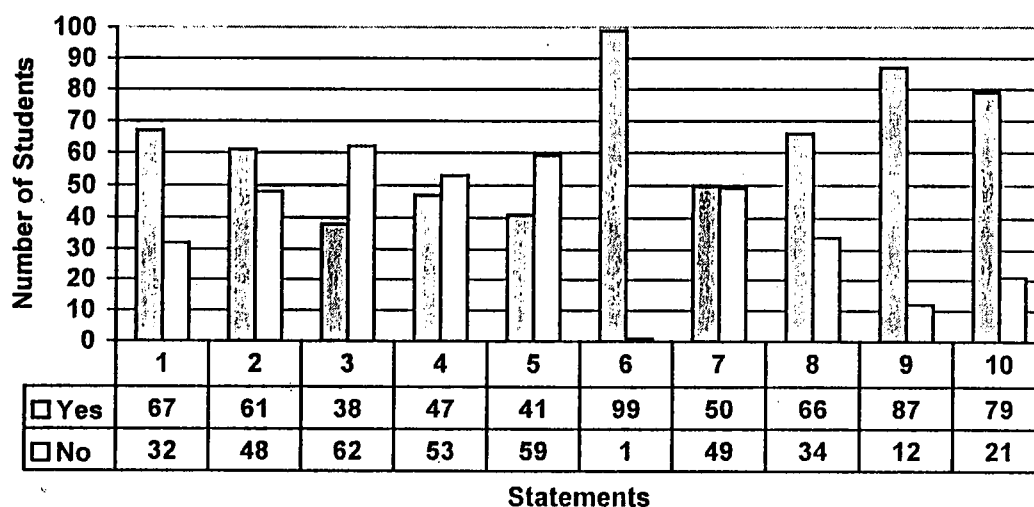
The second graph shows the results about the logical-mathematical intelligence level of the students. The leading figures, the seventh, the fifth and the fourth statements, reveal that the students can clearly see cause-effect relationships, they ask questions about how things work and they mostly believe that almost everything has a rational explanation. But the lowest figures come from the second, the ninth and the first statements. These statements, as in the verbal-linguistic intelligence, show that the students do not like maths and science. They do not think that they have a computer-like mind. Therefore, they cannot easily compute numbers in their heads.

Bodily-Kinesthetic Intelligence



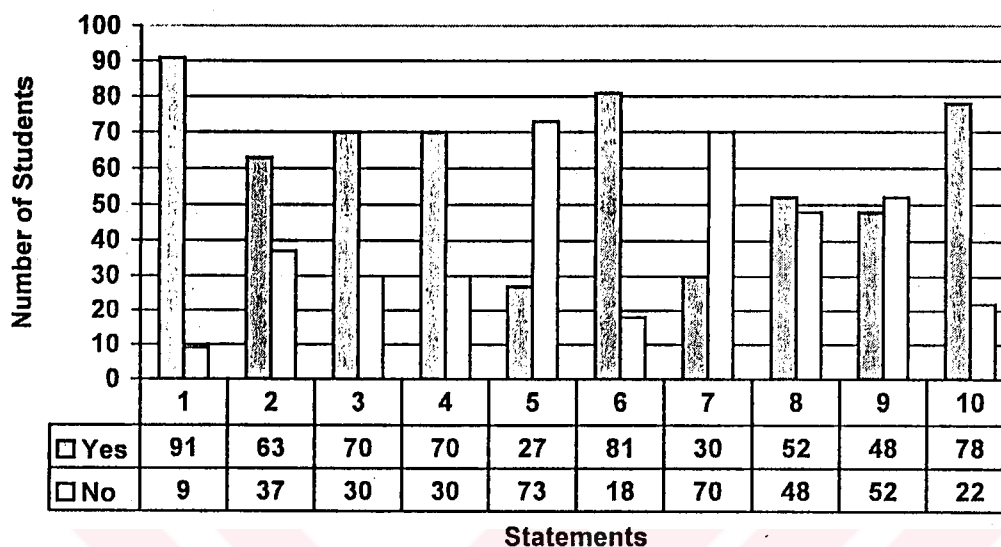
The graph which is about the bodily-kinesthetic intelligence shows that the first, the second and the third statements are the most ticked ones by the students. These statements indicate that the students mostly use many gestures or other forms of body language when conversing with someone. Because of being young and energetic, they find it difficult to sit still for long periods of time, therefore, often like to spend their times outdoors. On the other hand, the lowest figures are the fourth, the fifth and the tenth statements. Thus, it can be concluded from these statements that they are not good at mimicking other people's gestures, they do not like taking things apart and putting them back together and they stated that their best ideas do not come often to them while they are out for a long walk or jog.

Visual-Spatial Intelligence



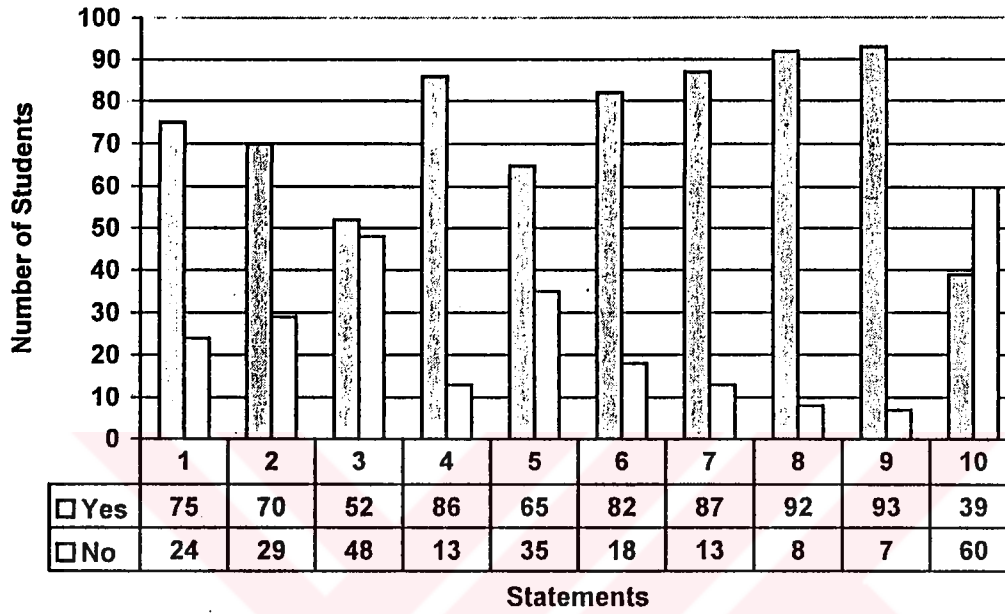
The graph of visual-spatial intelligence clearly shows that the most leading statement is the sixth statement, others are the ninth and the tenth statements. The sixth statement definitely reveals that almost all of the students like movies, pictures, and other visual presentations. They are usually sensitive to colors and they sometimes have vivid dreams at nights. However, the third, the fifth and the fourth statements are the lowest ones. Thus, it can be understood from these statements that the students could not do well in geometry when they were in high school. They are not good at drawing things and they prefer words rather than maps, charts, and diagrams.

Musical Intelligence



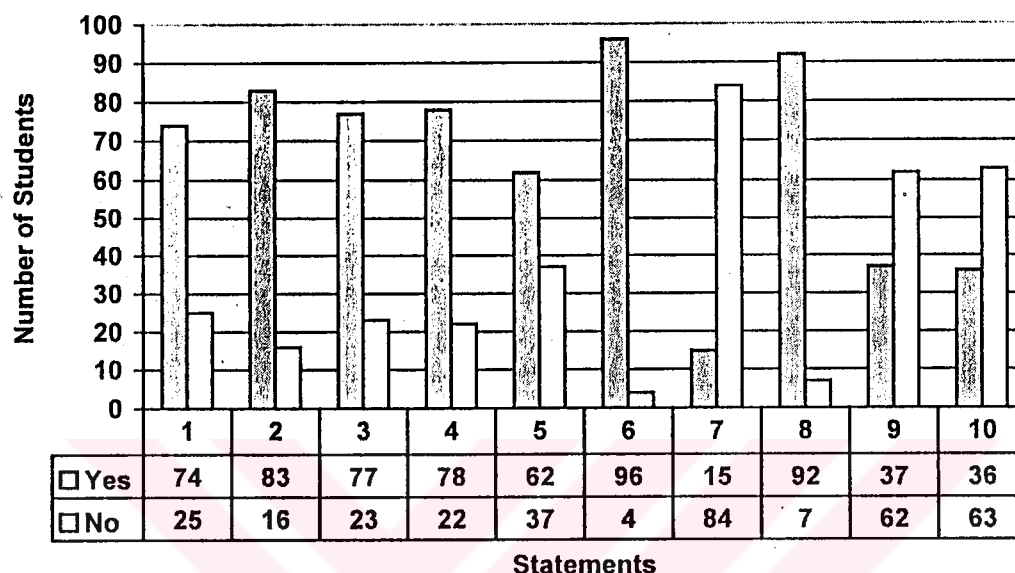
By looking at the graph related to the musical intelligence, it can be easily seen that the first, the sixth and the tenth statements are the most preferred ones by the students. Therefore, most of the students think music plays a very important role in their lives, their lives would be poorer if there were no music in them. And they are usually sensitive to noises, e.g., rain, traffic. They mostly prefer music while doing something, they often make tapping sounds or sing melodies while working, studying, or learning something new. On the other hand, the lowest figures in the graph are the fifth, the seventh and the ninth statements. The fifth statement shows that although they like music very much, most of them cannot play a musical instrument. The other lower statements indicate that they do not think they have a pleasant singing voice and they do not know the tunes to many different songs or musical pieces.

Interpersonal Intelligence



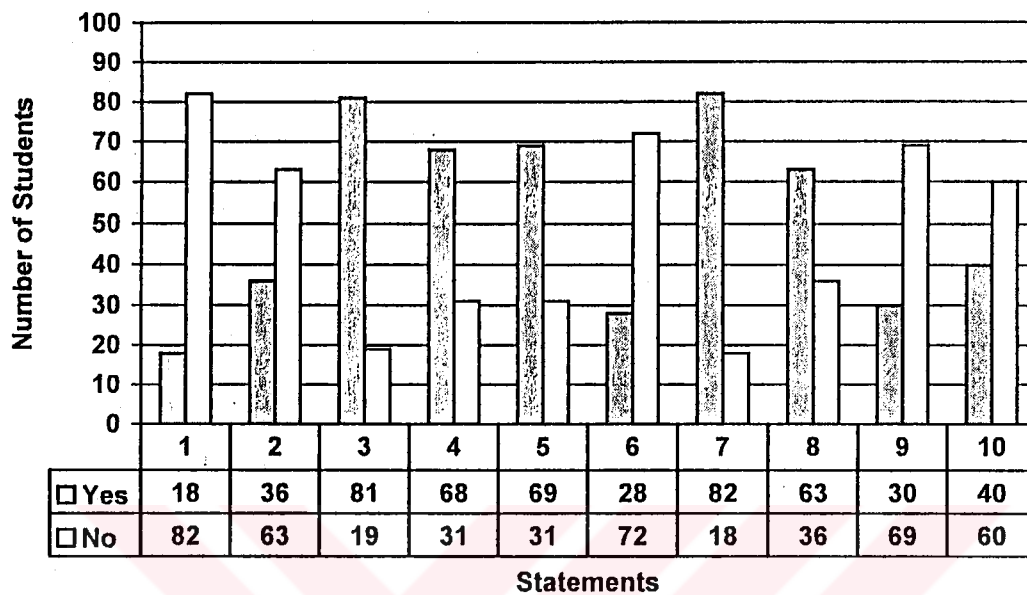
The graph related to the interpersonal intelligence makes it very clear that the ninth, the eighth and the seventh statements are the most ticked ones by the students. According to these statements, students enjoy exchanging ideas with others, they are usually good at seeing another person's point of view and they have many good friends and close acquaintances. However, the tenth, the third and the fifth statements are the least ticked ones. These statements show that the students do not feel comfortable in the middle of a crowd. When they have a problem, they try to work it out by themselves; they are not likely to seek out for another person's help. And they prefer to stay at home alone rather than spend their evenings at a lively social gathering.

Intrapersonal Intelligence



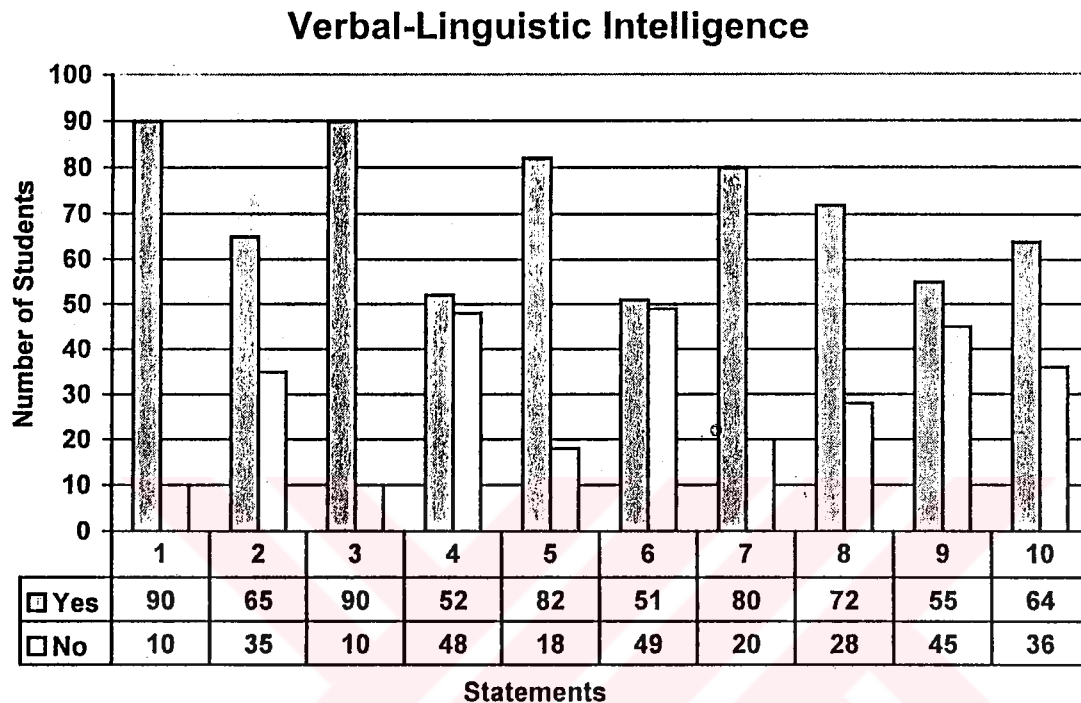
The graph showing the intrapersonal intelligence level of the students shows that the sixth, the eighth and the second statements are the leading figures. By looking at these statements, it can be understood that the students know themselves well and they are continually learning from their successes and failures. They know what they want from life and what they want to accomplish. They have a realistic view of their strengths and weaknesses. But according to the least ticked statements which are the seventh, the ninth and the tenth, most of the students usually feel bored or "down". They do not keep a personal diary or journal to record the events of their inner lives, and some of them prefer to spend their evenings at home than at a lively party.

Naturalistic Intelligence

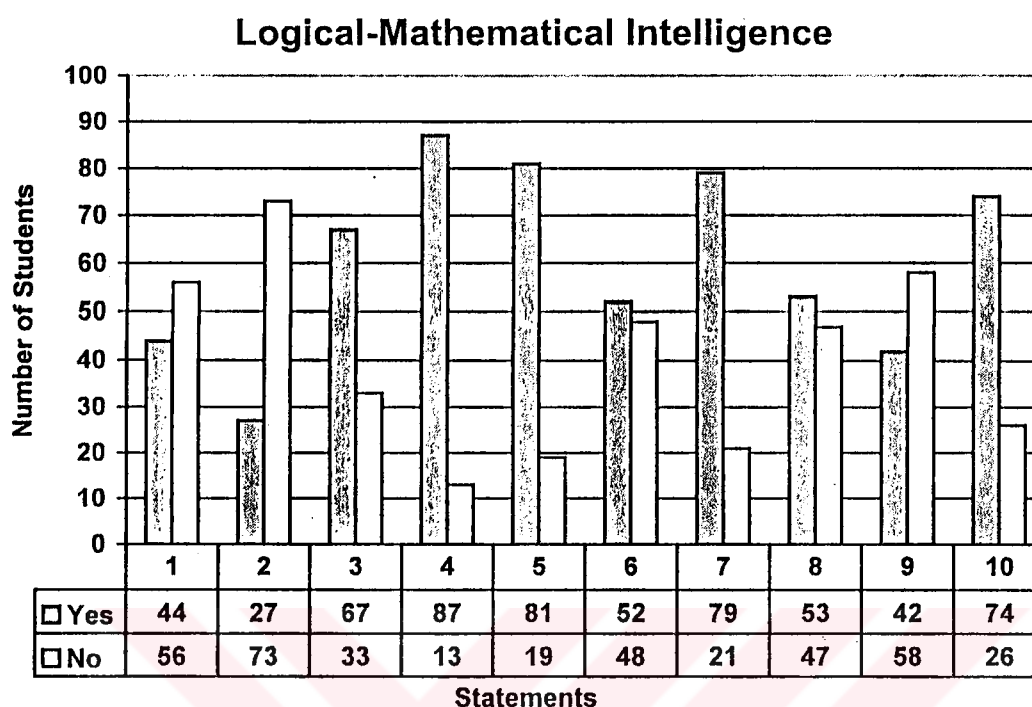


The last graph is about the naturalistic intelligence. The leading figures of this graph are the seventh, the third and the fifth statements. By looking at the results of this graph, it can be concluded that most of the students like being close to nature. They like camping, fishing, or other activities relating to the natural environment. Therefore, they can easily recognize, appreciate, and understand the natural world around themselves. They are keenly aware of their surroundings and the changes in their environment. On the other hand, the first, the sixth and the ninth statements are the lowest figures. These statements have not been preferred by the students because they like people better than plants and animals. They do not like to collect things from nature such as rocks, fossils, butterflies, feathers, shells, etc. And the ninth statement reveals that most of the students do not show great interest in subjects like biology, zoology, botany, geology, and astronomy.

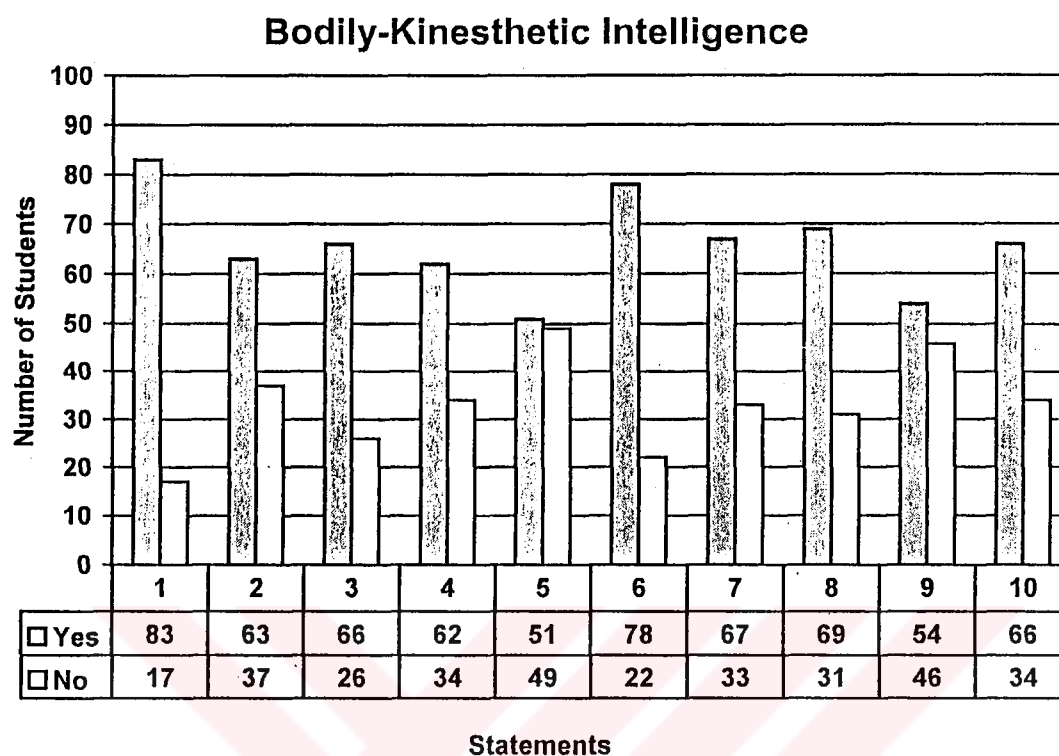
3.2.2. The Interpretation of the Data Collected from the Fourth Year Students



The graph is about the verbal-linguistic intelligence level of the students. The three leading figures come from the first, the third and the fifth statements. These statements show that books are very important to the students; perhaps that is why their conversations include frequent references to things that they have read or heard. Therefore, it can easily be understood that English, social studies, and history were easier for them in school than math and science. However, the sixth, the fourth and the ninth statements are not preferred by most of the students. This indicates that they cannot write well and enjoy putting thoughts on paper or in the computer. They also stated that they do not have good vocabulary and when they drive down a freeway, they pay more attention to the scenery than to the words written on billboards.

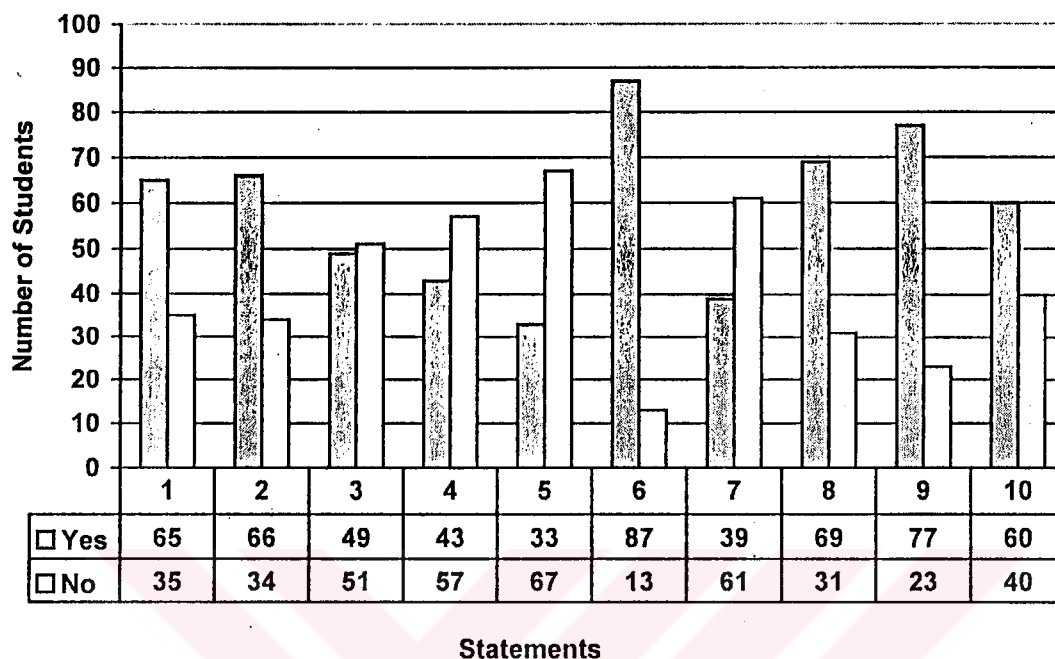


The second graph which is about the logical-mathematical intelligence level of the students clearly shows that the fourth, the fifth and the seventh statements are the most ticked ones. According to these statements, most of the students believe that almost everything has a rational explanation. They ask questions about how things work and they clearly see cause-effect relationships. On the other hand, the second, the ninth and the first statements are the lowest ones. Thus, it can be said that, as in the verbal-linguistic intelligence, maths and science were not among their favorite subjects in high school. And they think that they do not have computer-like minds, that is why they cannot easily compute numbers in their heads.



The graph related to the bodily-kinesthetic intelligence level of the students shows that the first three leading figures are the first, the sixth and the eighth statements. These statements reveal that the students find it difficult to sit still for long periods of time. They enjoy being active; running, jumping, moving, wrestling, etc. They use many kinds of gestures when expressing themselves. But the fifth, the ninth and the fourth statements are not preferred by most of the students. Therefore, it can be concluded that they do not like taking things apart and putting them back together. They do not regularly engage in at least one sport or physical activity, and they are not good at mimicking other people's gestures.

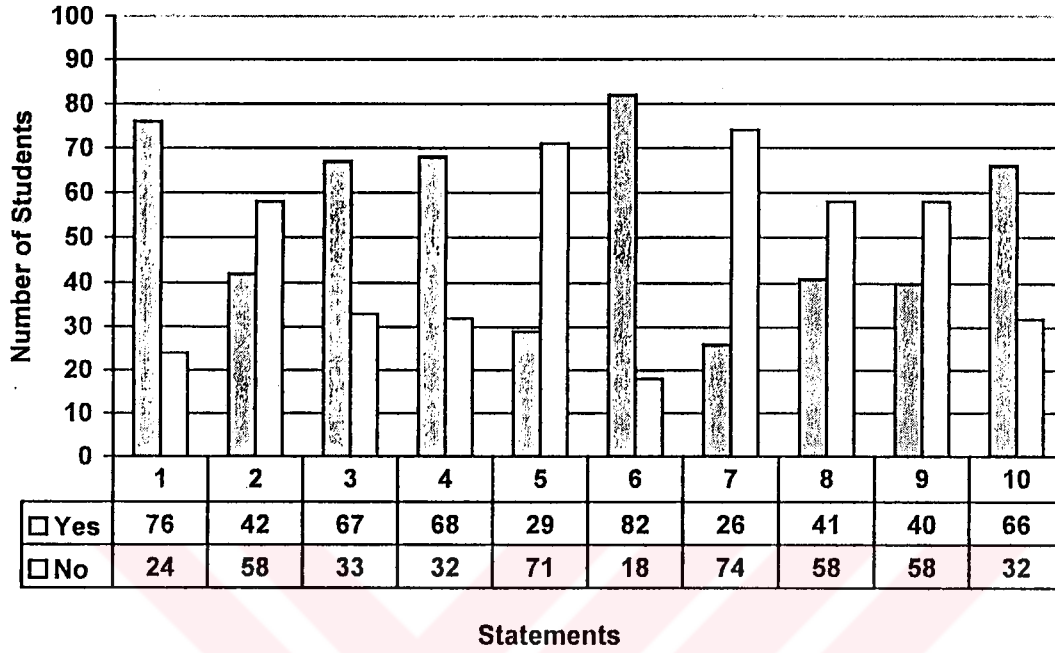
Visual-Spatial Intelligence



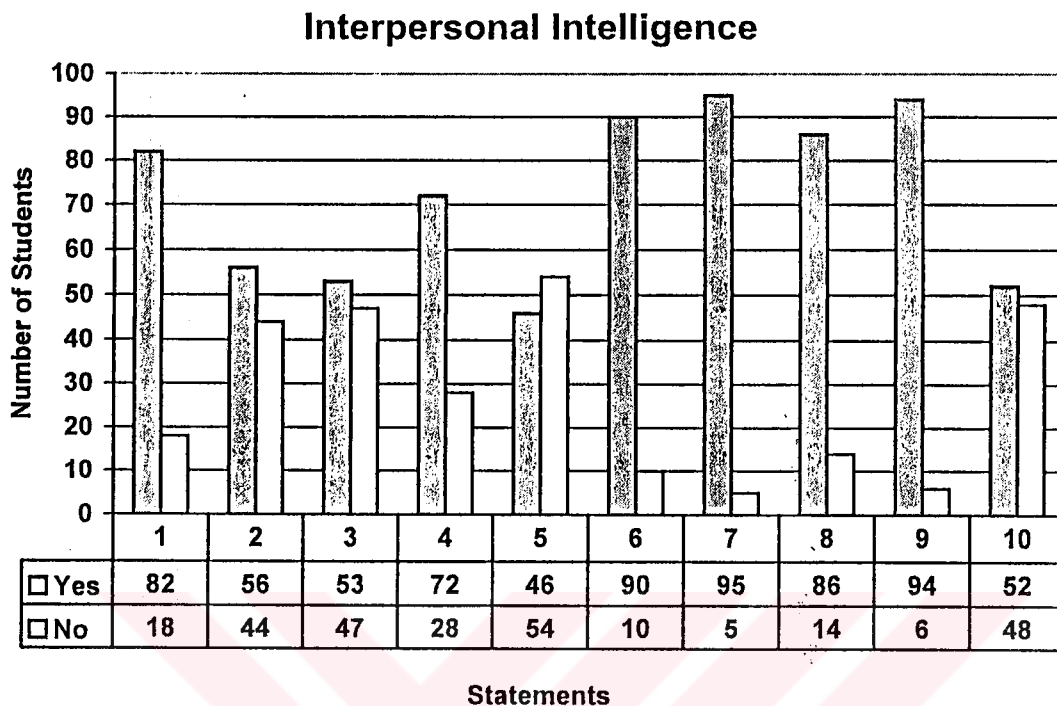
Statements

The graph which is about the visual-spatial intelligence level of the students shows that the sixth, the ninth and the eighth statements are the most preferred ones by the students. By looking at these statements, it can be concluded that almost all of the students like movies, pictures and other visual presentations. Also they are usually sensitive to colors. Finally, as it is clearly seen, they can remember in detail the layout and landmarks of places they have visited on vacations. However, the fifth, the seventh and the fourth statements are not ticked by many of the students. This shows that although they like pictures and visual presentations, they are not good at drawing things. Therefore, they do not enjoy creating designs on paper or by computer. Finally, they like words better than maps, charts and diagrams.

Musical Intelligence

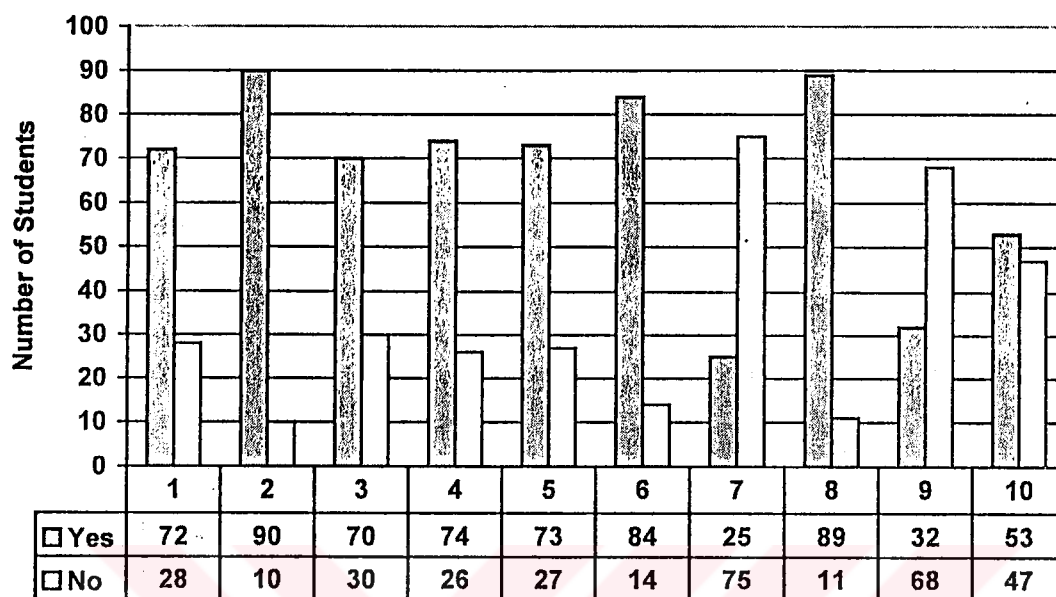


In the graph which is about the musical intelligence, the three leading figures come from the sixth, the first and the fourth statements. The students say that they are sensitive to noises, e.g., rain, traffic. Also they add that their lives would be poorer if there were no music in it. Because they like music very much, they can remember melodies easily. On the other hand, the seventh, the fifth and the ninth statements are the least chosen ones. These statements reveal that the students do not think that they have pleasant singing voice. Although they all like music very much, most of them admit that they cannot play a musical instrument. And by looking at the ninth statement, it can be understood that few of the students know the tunes to many different songs or musical pieces.



The graph is about the interpersonal intelligence level of the students. As it can easily be seen, the seventh, the ninth and the sixth statements are the most preferred ones by the students. So, according to the mostly ticked statements, it can be concluded that most of the students enjoy exchanging ideas with others. Therefore, they have many good friends and close acquaintances. They like teaching things to others. However, the least ticked figures come from the fifth, the tenth and the third statements. The fifth statement reveals that few of the students prefer to spend their evenings at a lively social gathering than stay at home alone. The other statements show that most of the students do not feel comfortable in the middle of a crowd and when they have a problem, they are more likely to work on their own than seek out for help.

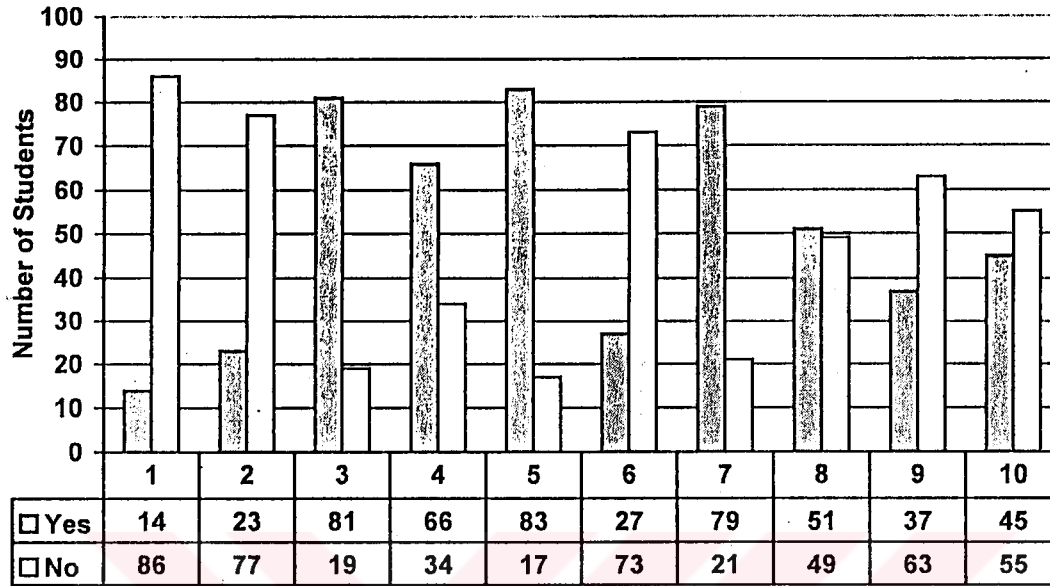
Intrapersonal Intelligence



Statements

The graph relating to the intrapersonal intelligence level of the students indicates that the second, the eighth and the sixth statements are the leading figures. Therefore, the students have a realistic view of their strengths and weaknesses. They think about what they want from life and what they want to accomplish. Finally, they are continually learning from their successes and failures. On the other hand, the seventh, the ninth and the tenth statements are show that they are not preferred by the students. These least ticked statements reveal that the students often feel bored or "down". Also they do not keep a personal diary or journal to record the events of their inner lives. Lastly, they would rather spend their evenings at a lively party than at home.

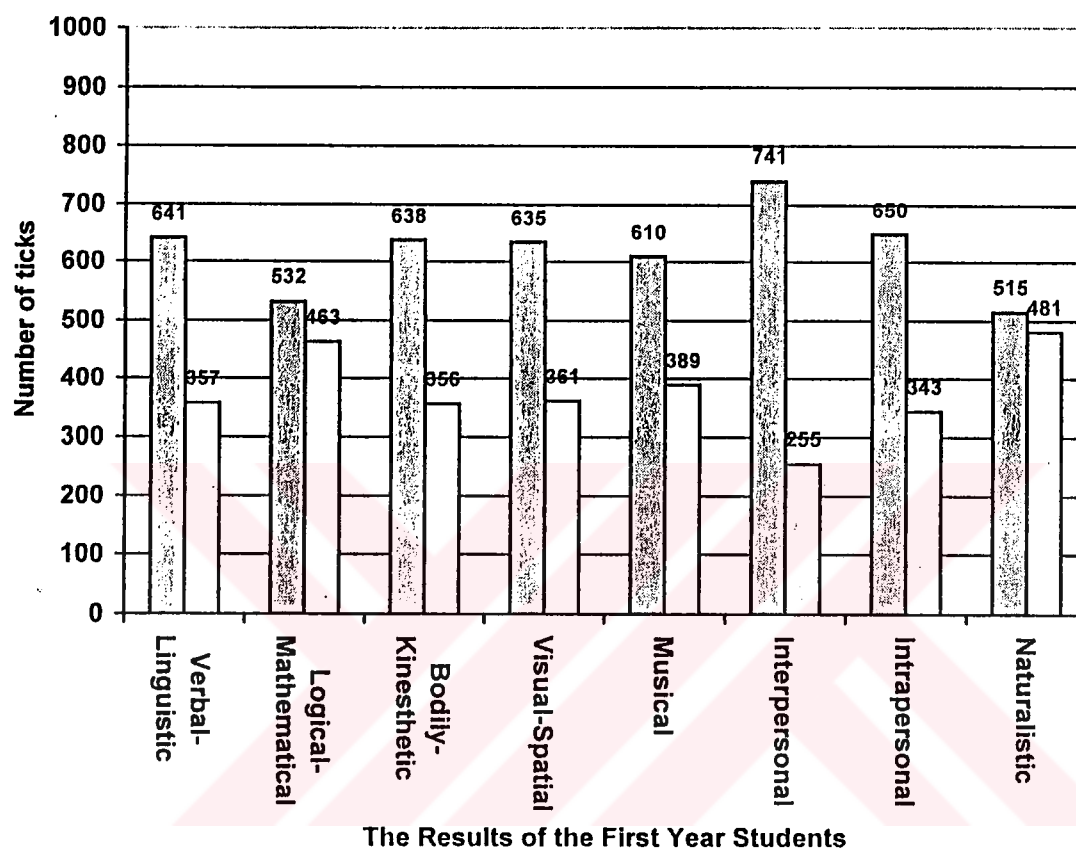
Naturalistic Intelligence



Statements

The graph shows the naturalistic intelligence level of the students. Most of them have ticked the fifth, the third and the seventh statements. So, these statements are the leading figures of the graph. When the results of these statements are considered, it can be clearly stated that the students are keenly aware of their surroundings and the changes in their environment. They easily recognize, appreciate, and understand the natural world around them. Moreover, they like activities such as camping and fishing which are related to the natural environment. However, they have not preferred the first, the second and the sixth statements very much. This indicates that the students like people better than the plants and animals. Therefore, they are not good at recognizing and classifying plants and animals and they do not like to collect things from nature; rocks, fossils, butterflies, feathers, shells, and the like.

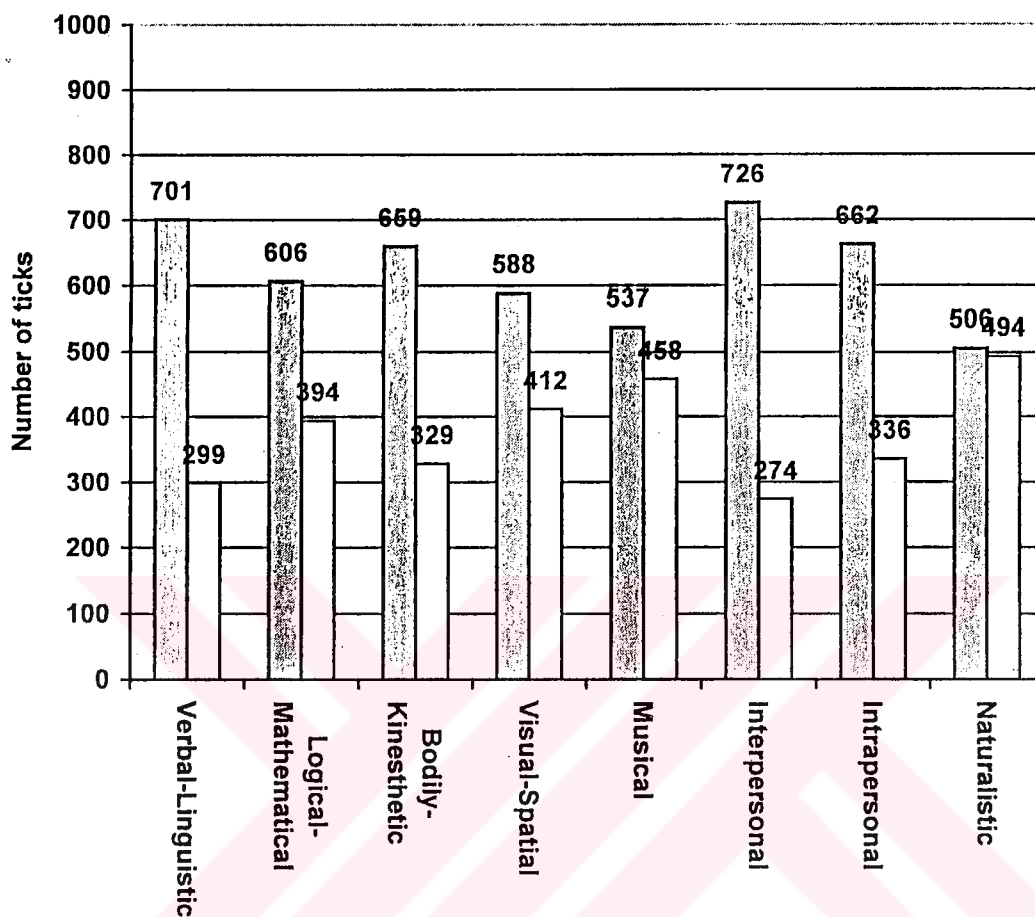
3.2.3. The Comparison of the First Year and the Fourth Year Students



As it is clearly seen in the graph which is about the first year students, the interpersonal intelligence is the leading figure. 741 of the students made the interpersonal intelligence the leading figure by ticking the statements as "yes". Then the intrapersonal intelligence comes as the second leading figure. Thus, it can be said that the students' relationships with other people and with their inner selves are highly developed. This is definitely related to their education; English Language Teaching, which is a type of social sciences. Finally, their verbal-linguistic intelligence is also one of the leading figures. The level of this type of intelligence is also high because they are learning a new language. Therefore, they are always in relation with lots of words. Moreover, they have stated that they like words. However, not many

students have chosen the statements relating to the naturalistic intelligence. Since they are not good at mathematics and they were not required to do the mathematics test at the university entrance examinations, their logical-mathematical intelligence has not developed well. They are not good at numbers, and also they are absolutely not skilled in science. The third lowest figure in the graph is about the musical intelligence. Although most of them like music very much, they are not professionally involved in; that is to say, they cannot play a musical instrument or they are not good at knowing or recognizing the tunes to many songs, pieces of music.





The Results of the Fourth Year Students

The graph which is about the fourth year students indicates that the leading figures come from the interpersonal intelligence, the verbal-linguistic intelligence and the intrapersonal intelligence. The students have preferred these intelligences because they understand each other and like to work cooperatively. They are good at seeing other people's point of view and therefore exchange ideas with them. They definitely do well in English and social studies rather than math and science. Because they are the fourth year students, they have good vocabulary and like to play with words. They give a lot of importance to their books. They also know themselves well; they are continually learning from their successes and failures and they know their strengths and weaknesses. On the other hand, most of them have not ticked the statements that are related to the naturalistic intelligence, the musical

intelligence and the visual-spatial intelligence. This reveals that they are not good at with nature; plants and animals. They give more importance to their books than to their cassettes. Although they claim that music is very essential to them, most of them cannot play a musical instrument. Finally, they would rather be engaged in words than maps, charts and diagrams as they are not good at creating designs.

When the two graphs are compared, it can be stated that the interpersonal intelligence, the intrapersonal intelligence and the verbal-linguistic intelligence are highly popular among the first year students of ELT. And most probably those favorable intelligences will remain the same when the students come to their fourth years. But, the order of the intelligences may change because of the classes given in the ELT department. The verbal-linguistic intelligence seems to get to the second position because the students will face mostly word-related classes such as linguistics and theoretical methodology. When the students become fourth year students, they are required to read more books than they used to. Thus, their verbal-linguistic intelligence level has to gain acceleration. However, by looking at the results of the statements, in their first years, the students have not shown much interest in the naturalistic intelligence, the logical-mathematical intelligence and the musical intelligence. Therefore, these intelligences are the least preferred ones among the eight. This indicates that the ELT students may not generally have to make use of these types of intelligences. For example, they may not have something to do with nature. And they are not good at, in fact they do not have to be, maths and science which are related to the logical-mathematical intelligence. Since ELT is a social science, the students do not need to be qualified in Natural Sciences. Also the musical intelligence is another type of the least preferred intelligence. Although the students like listening to music, they are not engaged in it professionally like singing or playing a musical instrument.

CHAPTER 4

SUGGESTED ACTIVITIES RELATED TO MULTIPLE INTELLIGENCES

4.0. Introduction

In this chapter, various activities that can be applied to each intelligence type are presented. The activities suggested for each type of intelligence can be used in different forms according to the conditions of the class, students' needs, levels, and interests in learning a new language and the teacher's approach. Activities presented in this chapter are merely examples which the teachers of EFL could make use of. At the end of the chapter, some activities related to four basic skills are taken from a widely used textbook and are adopted to the theory of multiple intelligences.

4.1. Verbal-Linguistic Intelligence Activities Related to Multiple Intelligences

These activities are suggested to develop the verbal-linguistic intelligence level of the students and help them to improve their use of words, playing with words and use of the language efficiently.

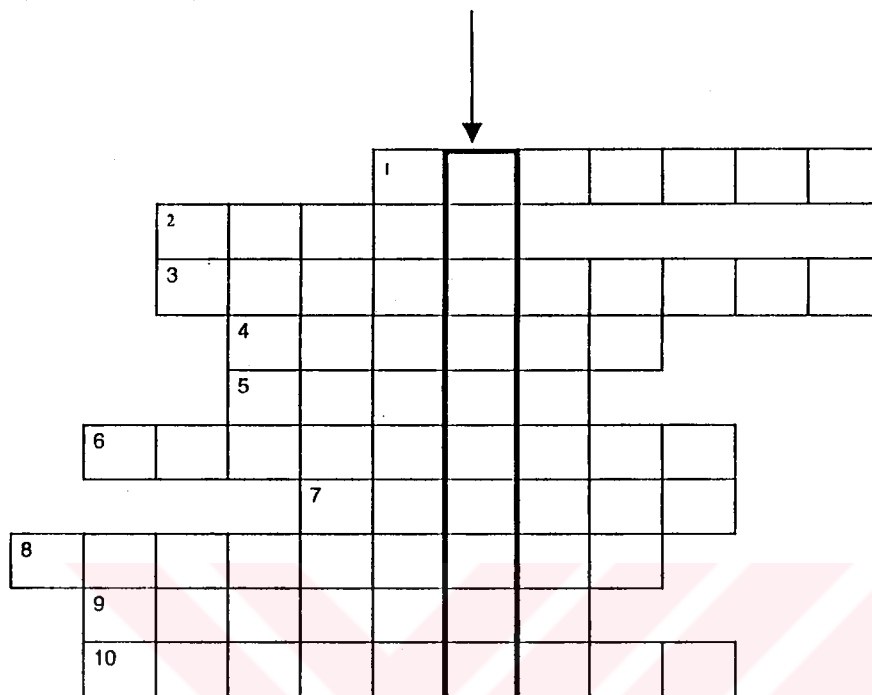
Activity 1

Level: Beginner

Skills involved: Reading, writing

Invite the students to solve the puzzle. Students write in the answers to the clues and find the vertical word. Then, they check the meanings of the new words in their dictionaries.

All these items are



1. When I was a child, I always rode to school on this.
2. I don't like reading when I travel by car, but I always read when I travel by...
3. Did you watch that interesting program on ... last night?
4. I forgot my ..., so I couldn't take any photographs.
5. A pilot flies this.
6. Most offices, banks, hotels, and schools have them now, but they didn't twenty-five years ago.
7. 100 years ago people didn't have one of these in their kitchen for milk and butter, so things were difficult in summer.
8. Alexander Graham Bell invented this.
9. Most people now have automatic ... machines for their clothes.
10. Charles Dickens didn't use this, but most writers now use a word

(Soars, 1993:44)

Answers:

bicycle
train
television
camera
plane
computers
fridge
telephone
washing
processor

All the items are "inventions".

Activity 2

Level: Beginner or early intermediate

Skills involved: Speaking

Choose one student to be the spy. The spy looks around the room and selects an object which he or she then whispers to the teacher. (With very young students, it might be better to have them tell a teacher outside the classroom.) He or she then announces to the class, "I spy with my eye something [color]." Students then take turns guessing what the spy has selected (i.e. "Is it the teacher's shirt?") Whoever guesses correctly becomes the next spy.

Activity 3

Level: Upper beginner or intermediate

Skills involved: writing, reading, speaking

The students are presented a list of scrambled words on the blackboard and are challenged to unscramble them. The first person, or team, to unscramble the entire list wins. The words are familiar to the students. For example:

SIFH OAPIN
POSA MECARA

The length of the list depends on the time available and the interest level of the students.

The list can occasionally be restricted to a category such as occupations, world capitals, political leaders, or furniture. And to introduce the game to students for the first time, start by having teams of 3 to 5 players each competing against one another. Working in teams enables individuals to learn from one another and helps to build self-confidence.

Activity 4

Level: Upper beginner or intermediate

Skills involved: Writing, reading, speaking

Write a list of five or more words. Divide students into teams, and give each team one copy of the list. Teams must work together to create a story

using all the words listed. Each student in the group should create at least one sentence containing at least one word to ensure that the final product is a group effort and not just the work of one member. Teams compete in the three following areas: (1) speed, (2) usage, and (3) creativity.

The first team to complete a story receives 20 points, the second 15, the third 10, and so on. However, two points are deducted for any words used incorrectly. After all stories are complete, each is read to the class. Students vote for each story's level or creativity by holding up one to five fingers. Fingers are counted, and the total divided by the number of students in the class. Points equal to the average number of fingers for a given story are awarded to the authoring team. After all calculations have been made, the team with the most points wins.

Activity 5

Level: Upper beginner or intermediate

Skills involved: Writing, speaking

Either:

Divide the class into teams of five. Give the teams the situations below and then give them five minutes to write down one sentence describing each situation using different verbs of perception. At the end of the five minutes, ask them to read out their sentences and give them one point for each correct sentence. Example: On a *beach* - *I can hear the wind in the palm trees. I can smell sun cream. I can see boats out at sea. I can taste salt on my lips.*

Situations: You are at a football match. You are at a rock concert. You are in a restaurant. You are at home. You are in a forest. You are at the doctor's. You are at school.

Or:

Tell students to think of a situation that they might find themselves in and to write down sentences using verbs of perception. The others should say where they are and what is happening.

Example: *I can smell cigarette smoke, perfume and aftershave. I can see flashing lights and moving people. I can hear loud music and people shouting to each other.*

Answer: *You are at a club or a party.*

Activity 6

Level: Intermediate

Skills involved: Reading, speaking, writing, listening

The idea is to go round the class and ask everyone to offer one line from a story they know. Then go round the class a second time, asking the students to add a second line to the first line from their tales. The students can then be invited to go over to the person whose lines they found the most interesting and listen to the whole story. It is a gentle and non-threatening way of encouraging the learners to tell tales to each other without being under the pressure of having to tell a story to the group as a whole. While the tales are being exchanged, you can circulate and make a note of the errors.

This can be flashed up on the board at the end of the activity and the students can be given the opportunity to self-correct.

Activity 7

Level: Intermediate

Skills involved: Writing, speaking

Create story cards to facilitate storytelling. Cut out twenty cards and divide into five categories -characters, events, actions, times and places. Draw a picture with a caption on each of the cards and mark the category on the back. To play the game, invite the students to choose one card from each category and then to prepare a story based on the prompts on the cards. Although games like this take a great deal of preparation, they can be recycled and are well worth the time and effort required.

Activity 8

Level: Intermediate

Skills involved: Reading, speaking

Tell the class that you are going to tell them a story. However you are going to stop after each sentence and they must prompt you to tell them what happened next by asking you questions.

Read the story, stopping after each sentence for them to prompt you. You must not continue until they do so.

I went to work yesterday afternoon as usual. / Unfortunately I felt a bit sick. The manager told me to go home and rest. I got home and went to bed.

I woke up with a fright. I heard somebody in the garden. I looked out of the window. I couldn't see very clearly. There was a man/woman (choose opposite sex to you) trying to open the living room window. I crept downstairs. I could see the man/woman dimly through the window. Suddenly, he/she broke the window and started climbing in. I phoned the police. I couldn't believe my eyes. It was my husband/wife. He/she had had his/her key stolen and had to break into his/her own house.

Activity 9

Level: Upper beginner, intermediate or advanced

Skills involved: Speaking, listening

Keep a box of vocabulary cards in the classroom. Write out each week's words on index cards at the beginning of a week, then add these to the box as you teach them. As, an end of the week review or a filler for those last five minutes of class, select a student, hand him or her the box and set a time limit of thirty to sixty seconds. This student draws a card from the box, then proceeds to describe the object, action, emotion, etc. As soon as the class guesses the word, the student proceeds to the next card, and so forth. One point is given for each word guessed by the class. If a student does not know the meaning of a word he or she draws, he or she may skip it; however, one point is deducted for each skipped card. This activity works well as either a team or an individual exercise. For added practice, you may randomly ask students to use reviewed words correctly in sentences at the end of each timed turn.

Activity 10

Level: Upper intermediate or advanced

Skills involved: Writing, speaking, reading

Divide the class into four teams and give each team the following words: *go, see, say, nice/good, bad, like*. Give them ten minutes to think of as many interesting alternatives as possible for these overused words.

Suggested answers:

go - leave, disappear

see - notice, stare, glimpse

say - express, tell, explain

nice/good - pleasant, appealing, wonderful, fantastic

bad - horrible, dreadful, unpleasant

like - fancy; be keen on, be interested in

Award them a point for each word they think of.

In the same teams, students have another ten minutes to use the words in sentences. For each correct use of the words, award them an extra two points.

4.2. Logical-Mathematical Intelligence Activities Related to Multiple Intelligences

Activities suggested in this section cater for the logical-mathematical intelligence. They help students to think logically, to make inferences, and to classify and sequence the events.

Activity 1

Level: Beginner or intermediate

Skills involved: Speaking

Fill a box with some items -a piece of blanket, a feather, a square of sandpaper, a rock, a small pillow, a bean bag, a coin, a ball, etc. Blindfold one student. Quietly choose one item from the box and show it to the rest of the class. They must then give the blindfolded student clues to help him or her find the object. For example, "It's small. It's round. It's cold. It's heavy," and so forth.

Activity 2

Level: Upper beginner or intermediate

Skills involved: Speaking

One student imagines an occupation. Then the class tries to guess that occupation (real or fictitious) of the challenger. Only questions requiring YES/NO answers may be posed by the guessers. For example:

Do you work with machines?

Do you wear a uniform?

Can a child do your job?

Do other people work with you?

Are you a supervisor?

Limit the number of questions asked to half the number of students in the group, or 20. If the occupation has not been guessed by then, it is revealed and a new challenger takes his turn.

Activity 3

Level: Upper beginner or intermediate

Skills involved: Speaking

The class is asked to imagine that they are going on a picnic. Their job is to suggest things to bring along. The teacher says yes or no to each suggestion. What the students do not know is that the teacher says yes when a student suggests something whose first letter is the same as the first letter of the name of the student. The teacher says no if the first letter of the suggested object and the first letter of the name of the student do not match. For example:

Alicia: I want to bring apples.

Teacher: You can bring apples, Alicia. Alicia can bring apples. What do you want to bring, Marco?

Marco: I want to bring a radio.

Teacher: Sorry, you cannot bring a radio.

If students need a hint after a while you can interject something like:

Maria: I want to bring bananas.

Teacher: Sorry, you cannot bring bananas. Why not ask Barbara to bring bananas?

Usually someone figures out the game. Knowing the secret forces them to narrow their suggestions to words beginning with the same letter as their name.

Activity 4

Level: Upper beginner or intermediate

Skills involved: Reading, listening, writing.

Photocopy pictures from the sporting pages of a newspaper or magazine. Cut out a part of each picture, enough to give a clue to the sort of sport being shown but not enough to be immediately obvious. Divide the class into pairs or small groups and give each group one or two cut-outs, explaining that each picture shows a sport. In their pairs/groups; they decide what the sports are. They should use language of deduction for this, e.g. *It may be a game of tennis / It must be a picture of somebody playing golf.* When they have done this, they should pass the pictures on to another pair or group. Continue until every group has had a chance to look at all the pictures.

Activity 5

Level: Intermediate

Skills involved: Reading, writing

Look at the following sentences reporting a police interview. Decide which sentences were said by the policeman, and which sentences were said by the man he was interviewing. The sentences are in the right order.

- A. I approached the suspect and asked him to identify himself and to state his destination.
- B. I asked him who he was and why he was asking.
- C. He claimed to be a policeman so I told him what he wanted to know.
- D. I requested him to accompany me to a telephone but he objected.

E. I warned him that he was under suspicion for offences in Wellington.

F. Eventhough I told him I'd never been to Wellington, he insisted that I had, and kept saying I had to get into the telephone box with him.

G. I refused and he arrested me.

After deciding who said what, try to add more sentences to the conversation.

4.3. Bodily-Kinesthetic Intelligence Activities Related to Multiple Intelligences

These activities are for the students who learn by acting and moving. Therefore, they serve for the bodily-kinesthetic intelligence.

Activity 1

Level: Upper beginner

Skills involved: Speaking, writing

Students are paired off. One names at least three parts of the body. When he has finished, the other must touch them in the order named. Then the roles are reversed. Assign one point for each correct response. For example:

"Touch your nose, knee and elbow."

Students could write down the body parts before the game is played in order to avoid confusion and arguments. For example:

(1) nose (2) knee (3) elbow

(1) ear (2) toes (3) shoulder (4) wrist

(1) chin (2) back (3) thumb (4) ankle (5) eye

(1) finger (2) arm (3) leg (4) shoulder (5) foot (6) mouth

Activity 2

Level: Upper beginner or early intermediate

Skills involved: Reading, writing, speaking

Prepare some cards on which sentences are written and cut up the cards into two. Give each member of the class a different card and ask them to find their missing halves. Encourage them to read their cards to their classmates rather than show them. Once they have found their partners, ask them to sit together and write the rule their sentence illustrates. Then invite each pair to write their own rule on the board for the whole class to see.

Activity 3

Level: Intermediate

Skills involved: Speaking

Divide the class into two groups. Ask each student to come to the front of the class and give them one of the jobs below. They have 30 seconds to elicit that job from their group by imagining they are that person and their group are the people they are helping or serving, e.g. pilot: "Good afternoon ladies and gentlemen and welcome aboard Olympic flight 210 to Rome."

They are allowed to mime. Their group can only make one guess and so will need to exchange ideas and persuade each other that their answer is the correct one.

Jobs: nurse / doctor / politician / orchestra conductor / tour guide / pilot / parent / policeman / woman / bank manager / driving instructor / waiter / waitress / hotel receptionist / photographer / film director / librarian.

4.4. Visual-Spatial Intelligence Activities Related to Multiple Intelligences

These activities are suggested in order to develop the visual-spatial intelligence and help the students to think in images and pictures, to find missing objects, to notice things which have been changed or rearranged. Students who like reading charts, graphs and maps enjoy these kinds of activities.

Activity 1

Level: Beginner

Skills involved: Listening

Prepare two identical city street maps listing sites such as school, post office, department stores, hospital, churches, police stations, etc. and two Matchbox cars.

Divide students into two groups. A student from each group places his car on the map at a prescribed location. Give directions to reach the destination. (Example: "Turn right on to Main Street. Go four blocks. Turn left at the church. Turn right onto the next street. Cross the railroad tracks. Take

the next left. The supermarket is two blocks down on your right.") Other students should monitor to see that the driver follows the prescribed route.

Activity 2

Level: Beginner or lower intermediate

Skills involved: Speaking, listening

Give cards of various people to the class. Clothing catalogs are ideal sources of pictures. Cards should reflect a wide assortment of ages, nationalities, clothing, hair styles, and eye and hair color.

Each student will need paper and colored pencils, markers, or crayons.

One student selects a card. He or she then describes the person on the card to the rest of the class. His or her description should be as detailed as possible. For instance,

"The person is a woman. She has long, wavy brown hair. She is European or North American. She has green eyes. She is wearing small gold glasses. She is wearing black pants. She is wearing a green blouse. She has a brown watch on her left arm. She is wearing black boots."

Or:

"The person is a man. He is Oriental. He has short, black hair. He is wearing a gray, three-piece suit. He is wearing black slip-on shoes. He is wearing a white and red shirt."

After the description is complete, the teacher evaluates the drawings. The student whose drawing comes closest to the original picture chooses the next card.

Activity 3

Level: Beginner or intermediate

Skills involved: Speaking

Choose a student to begin. Tell the student, "Look at _____. " Allow the student to examine the person or object for about five seconds, then direct the student, "Close your eyes!" After the student's eyes are closed ask him or her a question about the person or object examined. For example, you might ask, "What color is Jack's shirt?" or "Is there a box of crayons on my desk?" If the student responds incorrectly, direct him or her to open his or her eyes and inspect the object for five more seconds. Direct the student to close his or her eyes again and ask another question. Depending on the class size, you may allow students up to three turns. If the student correctly answers the question, he or she chooses a player and asks the next question.

Activity 4

Level: Beginner or intermediate

Skills involved: Speaking

Divide students into two teams. Send one team outside the classroom (with a co-teacher, if the students are very young.) Allow the other team a set period of time (two to five minutes depending on the students' ages) to make changes in the classroom (like hang a poster upside down, move books,

switch pictures, exchange chairs, etc.) or themselves (shoes on wrong feet, sweater inside out, socks off, jewelry traded, etc.) At the end of the time period, the opposing team returns to class and points out as many changes as its members detect. One point is given for each correct response. Teams then reverse roles and continue. The winning team is the team that describes the greatest number of changes correctly.

4.5. Musical Intelligence Activities Related to Multiple Intelligences

These activities are suggested to develop the musical intelligence. Every type of activity related to music caters for this intelligence. Students who have high musical intelligence level feel more engaged in the lesson when there is any piece of musical extract.

Activity 1

Level: Beginner

Skills involved: Listening, reading, writing, speaking

The song sheet is handed out to the students. After the tape is played once, the students try to fill in the blanks. Then, the students are invited to discuss it with their classmates for one minute. The song is played again and students complete the missing words. The teacher calls out the correct words. The students mark their papers themselves with a red pen, and record their scores. The students with a perfect score receive a round of applause. The song is played, one more time, with everybody singing.

Activity 2

Level: Upper beginner

Skills involved: Listening, reading, writing, speaking

You are going to hear a song written by Eric Clapton called "Wonderful tonight". Read the words of the song and put one of the words or phrases in the list into each gap. There are more words than gaps. Then, listen to the song once again to check. After you've done, sing the song all together.

feel / head / heart / eyes / all right / because / were / blond / light /
darling / everyone / morning / evening / home / bed / walking / beautiful /
clothes / puts / love / car keys / brushes / look

It's late in the

She's wondering what to wear.

She on her make-up,

Then her long hair.

And then she asks me,

"Do I look ?"

And I say, "Yes,

You wonderful tonight."

We go to a party

And to see

This lady

That's around with me.

And then she asks me,

"Do you feel all right?"

And I say, "Yes,
 I wonderful tonight."
 I feel wonderful
 I see
 The love light in your
 And the wonder of it all
 Is that you just don't realize
 How much I you.
 It's time to go now
 And I've got an aching
 So I give her the ,
 She helps me to bed.
 And then I tell her
 As I turn out the ,
 I say. "My, ... ,
 You wonderful tonight."

(Soars, 1993:81)

Answer:

It's late in the *evening*
 She's wondering what *clothes* to wear.
 She *puts* on her make-up,
 Then *brushes* her long *blond* hair.
 And then she asks me,

"Do I look *all right*?"

And I say, "Yes,

You *look* wonderful tonight."

We go to a party

And *everyone* turns to see

This *beautiful* lady

That's *walking* around with me.

And then she asks me,

"Do you feel all right?"

And I say, "Yes,

I *feel* wonderful tonight."

I feel wonderful

Because I see

The love light in your *eyes*.

And the wonder of it all

Is that you just don't realize

How much I *love* you.

It's time to go *home* now

And I've got an aching *head*.

So I give her the *car keys*,

She helps me to bed.

And then I tell her

As I turn out the *light*,

I say, "My *darling*,

You *were* wonderful tonight."

Activity 3

Level: Intermediate

Skills involved: Listening, writing

Either:

Record a selection of musical extracts such as classical, pop, country and western, rock, heavy metal, reggae and play them to students. They match the extracts with the kind of music.

Or:

Record a selection of musical extracts and take in the album covers from those extracts. Students identify the kind of music and match it with the album.

Activity 4

Level: Intermediate

Skills involved: Listening, writing, speaking

Record three or four one-minute extracts of songs from a selection of groups playing different sorts of music, e.g. rock, pop, heavy metal, dance. If possible, these should be the songs that students have probably not heard before. Tell students that they are going to choose one of these songs to enter a music competition. Play the extracts and, individually, students give

them a score from 1 to 5. In pairs, they then explain to each other why they awarded those scores.

Add up the total number of scores in the class for each song to find the winner.

4.6. Interpersonal Intelligence Activities Related to Multiple Intelligences

Activities suggested in this section are for the interpersonal intelligence. They all involve group or team work as this kind of work requires students to display this intelligence. Person-to-person interaction is so beneficial for them that they love activities requiring role-plays.

Activity 1

Level: Beginner or intermediate

Skills involved: Speaking, writing

The class is divided into any number of equal teams. The first player writes a word on the board, any word, and the first player on the next team must write a word which begins with the last letter of the previous word. This continues from team to team until someone cannot think of an original, suitable word. He, then, loses a point for his team, and the player of the next team gains 2 points for his team if he comes up with an acceptable word.

example: elephant-tree-eat-tongue...

To make the game more challenging, especially with intermediate classes, restrict the words into classes such as verbs, adjectives, adverbs. And try to enforce the rule that each word can be used only once.

Activity 2

Level: Upper beginner

Skills involved: Speaking

Divide the class into two teams and give them five minutes to think of famous tourist sites in cities around the world. They can test the other team's knowledge of these places. The first team begins by giving the second team the name of a city, e.g. Athens. The second team must use that city in a first conditional sentence, e.g. If you go to Athens, you will see the Acropolis.

If they are able to name a tourist attraction in that city, they receive one point. If they are unable to think of an attraction, the challenging team wins a point (provided that they are able to name that attraction).

Activity 3

Level: Beginner or intermediate

Skills involved: Speaking

Students imagine they are a famous person, e.g. an actor, a singer, a writer, a politician. That person can be either dead or alive. They should not say who they are. One student starts and the other students have two minutes to ask them questions about their plans for the week ahead, e.g. *What are you doing on Monday? What are you doing at the weekend?* The

first student to guess which famous person that student is representing wins one point.

Example: *What are you doing on Monday? I'm acting in a play in London. What are you doing on Tuesday? I'm meeting my publisher to discuss a play I'm writing. What are you doing at the weekend? I'm going to Stratford to spend some time with my family.*

Possible answer: *Shakespeare.*

Activity 4

Level: Upper beginner or intermediate

Skills involved: Writing, speaking

Divide the class into two teams, A and B. Tell each student to think of an animal and write five adjectives/verbs to describe that animal. They should not tell the other students in their team what those animals are. Each student then comes to the front of the class and writes their chosen words on the board. Give them a maximum time limit of one minute for this. The other students in their team must guess what animal is being described. They are only allowed to take one guess. If they are correct, they win a point.

Activity 5

Level: Intermediate

Skills involved: Speaking, writing

Give the students a grid in which there are four different letters across the top and four categories down the left side. The four letters can constitute a word, if you prefer.

Example:

	B	O	O	K
Colors	beige			
Animals				kangaroo
Adjectives			outrageous	
Cities		orlando		

Other possible categories include: drinks, song titles, cities, adjectives, verbs, languages, names, car parts, sports, professions, countries etc.

Students are presented with the grid and are challenged (individually, or in teams of 3 to 5 players) to find a word for each category which begins with each letter. In the example above, for instance, students must find the names of COLORS that begin with the letters B, O, O, and K. They must also find the names of ANIMALS, ADJECTIVES, and CITIES that begin with the letters B, O, O, and K.

Activity 6

Level: Intermediate

Skills involved: Writing

The class is divided into teams of 5 to 7 players each. On a signal from the teacher, the first player of each team goes to the board and writes a word (any word) on the board. He then hands the chalk to the second member of his team who writes another word in front of, or behind, the first word. Every other player, in turn, adds a word and the last member of each team must complete the sentence including punctuation. There is to be no conferring among team members. The number of words in each team's sentence will equal the number of players on that team.

For example:

Team A: (7 players)

It is very hot today, isn't it?

1 2 3 4 5 6 7

Team B: (6 players)

We went to the movies yesterday.

1 2 3 4 5 6

Team C: (5 players)

I watch television every night.

1 2 3 4 5

After all sentences are read (and corrected as required), the last player on each team goes to the board first in the next round. This way, everybody gets an equal opportunity to play each role.

Activity 7

Level: Intermediate

Skills involved: Reading, writing, speaking

Give the class some fixed expressions. Go through them with the class, column by column, to make sure that they are understood. Arrange the students in pairs or groups. Ask them to select five of the expressions and incorporate them into a dialogue. Then invite the students to act out their dialogues to the rest of the class.

Food & Drink

to go shopping	service is included
to lose / put on weight	to go on a diet
to eat between meals	to have a snack / drink
to have breakfast in bed	to book a table for two
to have dinner by candlelight	to pay the bill
to have tea with milk / sugar	to ask for the bill
to have lunch / supper	to split the bill

(Berman, 1998:36)

Activity 8

Level: Intermediate

Skills involved: Writing

Divide students into pairs or small groups and give each group a time period, e.g. Group 1: 2005-2010, Group 2: 2011-2015. Ask them to think

about all the good things that will happen in that time period. What will happen to you?, Where are you going to be?, What will you be doing?, How will be here like? They can then develop this into a wall chart or poster for the classroom, writing sentences to explain what happens, e.g. 2005,2010: *The first human walks on Mars. Solar-powered cars become easily and cheaply available. A cure is discovered for cancer.* They can illustrate this with their own drawings or with pictures cut from magazines.

Activity 9

Level: Intermediate

Skills involved: Writing, speaking

Have a discussion about the traffic problem in your town, and the possible solutions. Discuss how different people view the situation. Try to draw up 5 or 6 different interested parties, perhaps politicians, developers, residents, shopkeepers, cyclists, etc. Allocate roles to your students so they can prepare at home. In the next lesson, put the roles together, all the developers together, all the shopkeepers together, etc. This is to help them share their ideas. Do the role-plays. You need to decide if you want all the groups talking at the same time, or if you want them one by one so everyone can hear.

Activity 10

Level: Beginner

Skills involved: Writing, speaking

Write down five facts about yourself, four that are true and one that is false. Work in pairs and exchange your lists.

For example, I speak five languages.

Student A

Ask student B questions to find out which is the false fact on the list. You cannot ask a direct question. For example, if student B has written "I used to live in Sweden", you cannot ask "Have you ever lived in Sweden?" Ask checking questions: For example, "Can you tell me the name of three cities in Sweden?"

Student B

Answer Student A's questions about the five facts on your list.

Change round when you've finished.

4.7. Intrapersonal Intelligence Activities Related to Multiple Intelligences

These activities are to develop the intrapersonal intelligence level of the students. These students like every type of activity requiring individual work. They like independent study because this gives them self-confidence.

Activity 1

Level: Beginner or intermediate

Skills involved: Writing

Students think about their own learning and record what they have studied both in and out of the classroom. They need to do this activity alone and it may be best done at home. When they have completed them, they could either discuss their answers with a partner, with the teacher, or hand them in to receive written feedback.

Outside the classroom:

I have read an English book.

I have spoken with my friends in English.

I have written a composition and developed my vocabulary.

I have watched an English program.

Inside the classroom:

What have you studied in your English class recently?

Reading:

Speaking:

Writing:

Listening:

Vocabulary:

Grammar:

Activity 2

Level: Upper beginner

Skills involved: Writing, reading, speaking

You are going to apply for a job. So, you have to fill out this form. But first, match the questions on the right with the expressions on the left. Then, write an application letter to a company.

first name	Where do you live?
surname	What do you do?
date of birth	Where are you living at the moment?
country of origin	What degrees, diplomas, certificates, etc. do you have?
present address	What's your first name?
permanent address	How much do you earn a year?
marital status	What do you do in your free time?
occupation	What's your surname?
qualifications	Are you married or single?
annual income	Where were you born?
hobbies/interests	When were you born?

Activity 3

Level: Upper beginner

Skills involved: Reading, listening, speaking, writing

Close your eyes for a few minutes. Imagine it is one hundred years ago. And you are very rich.

What is your life like?

Where do you live? What do you do?

Do you have any servants?

What do you know about your servants? Where do they live?

Are you married?

Do you have any children?

Discuss your ideas in the class.

Activity 4

Level: Upper beginner or intermediate

Skills involved: Writing, speaking

You are organizing an imaginary trip. You can have the students work as a team or group. They can individually be responsible for a portion of the trip. This gives the students a chance to show off their own town and be the expert on an unfamiliar territory. It also introduces you as the teacher, to places and facts in and about the town you are living in which you may never have otherwise looked at or realized.

Activity 5

Level: Upper beginner or intermediate

Skills involved: Writing, speaking, reading

Invite the students to write postcards individually. Collect all the postcards you receive from the students, stick a blank piece of white paper over the writing and you will soon build up a varied collection of views. Invite each member of the class to select a view that appeals to them, then ask them to imagine they are on holiday at the place shown and to write a postcard to someone else in the class describing their experiences. You can then play the part of postman and deliver the cards to the addressees.

Activity 6

Level: Upper beginner or intermediate

Skills involved: Writing, reading, listening, speaking

Tell students to think of their favorite hobby or interest and to imagine that it has become an obsession. They cannot live their lives without it and they think about it all the time. On a piece of paper, they write down a combination of things that they do as part of their obsession and the results, but they must not mention what the obsession actually is. They give their papers to you. Read out the lists (or ask a student to do it). The students must guess what the obsessions are. The first to guess each one correctly wins a point.

Activity 7

Level: Upper beginner or intermediate

Skills involved: Writing, listening

Dictate (or write on the board) the names of these animals:

snake-lizard-frog-spider-monkey-rat-duck-koala bear-eagle.

Tell students to write down which animal they would most like to keep as a pet and which animal they would least like to keep as a pet. Then the students read out their ideas. While one of the students is reading his, the others try to guess what that animal is.

Activity 8

Level: Upper beginner or intermediate

Skills involved: Writing, speaking

Instead of asking students to describe their ideal place to live, take in a selection of a lifestyle magazine and ask them to choose a picture from one of them. Give them a time limit of two minutes. This picture should show either the exterior or interior of a house, or an outside location, e.g. a street, the countryside. Students then describe it to the rest of the class. They should say what it is like, where it is and why they would like to live there.

Activity 9

Level: Intermediate

Skills involved: Writing

Writing a story:

You have entered a short story competition for a local radio station. Your story must begin with the following words: "I'll never forget the time..."

The story begins with this phrase which means that your story must be about something memorable that happened to you in the past, perhaps when you were a child. Writing about a real experience is quite often simpler than inventing a story and has good results.

Activity 10

Level: Intermediate

Skills involved: Reading, writing

This personality quiz helps you discover what type of a person you are. Write Yes, No, and Sometimes. Then ask your partner to do the quiz about you. Look at your ideas and your partner's ideas about you. Are they the same?

Are you usually smiling or happy?

Do you enjoy the company of other people?

Do you find it difficult to meet new people?

Is it important to you to succeed in your career?

Does your mood change often and suddenly for no reason?

Do you notice other people's feelings?

Do you think the future will be good?

Can your friends depend on you?

Is your room often in a mess?

Do you get annoyed if you have to wait for anyone or anything?

Do you put off until tomorrow what you could do today?

Do you work hard?

Do you keep your feelings and ideas to yourself?

Do you often give presents?

Do you talk a lot?

Are you usually calm and not worried by things?

(Soars, 1996:91)

4.8. Naturalistic Intelligence Activities Related to Multiple Intelligences

Activities suggested in this section cater for the naturalistic intelligence. They help the students to identify, classify, and categorize things easily.

Activity 1

Level: Pre-intermediate

Skills involved: Reading, writing

Give the students 20 words and ask them to classify the words into four groups of five and to give each group a name.

alligator	grasshopper	owl	snake
ant	horse	pigeon	sparrow
bee	lizard	rabbit	tiger
camel	mosquito	sea gull	whale
eagle	moth	snail	worm

Answers: mammals / reptiles / birds / insects

Activity 2

Level: Pre-intermediate

Skills involved: Reading, writing

Give the students 20 words and ask them to put the words under the headings on the board.

Animals	Minerals	Flowers	Disasters
---------	----------	---------	-----------

carnation

earthquake

iron ore

salt

clam

fire

oil

skunk

coal

flood

orchid

stork

daisy

gold

ostrich

toad

drought

hurricane

rose

tulip

Activity 3

Level: Pre-intermediate

Skills involved: Reading, writing

Project work.

The students look for original trees and plants in their environment. After finding an interesting one, they pick up a leaf from it. Then, they paste it on a separate sheet of paper and by that they draw its picture. They look up all the information about it, write sentences using all the correct capitalization and punctuation and hand it in to the teacher as a term project.

CHAPTER 5

A SAMPLE UNIT PLAN AND SOME SUGGESTED ACTIVITIES

5.0. Introduction

In order to implement the theory of multiple intelligences in English Language Teaching, a unit is chosen from a widely used textbook, Headway Pre-Intermediate. Then, the activities in the unit are identified according to the multiple intelligence categories. Furthermore, some additional activities referring to all multiple intelligence types are suggested where necessary to address all different intelligence types.

5.1. A Sample Unit and Suggested Activities to Address Multiple Intelligence Types

This unit is taken from Headway Pre-Intermediate, (pp. 84-92), by John and Liz Soars. It is unit 12 in the book and is kept in its original form in this study. However, the activities are identified according to the multiple intelligences that they address. These are written in bold and italic form. There are additional activities designed to address the intelligence types which have been thought to be neglected. These additions are also made in bold and italic form.

UNIT 12

Verb patterns (2) – Apostrophes – Time

Adventure!

LEAD-IN

- 01 What do you think of wild animals?

Can you name some?

Where do you think we can find wild animals?

What are their features?

(Naturalistic Intelligence / Verbal-Linguistic Intelligence)

- 02 Look at the picture and the drawing.

Can you tell what the reading passage is going to be about?

Why?

Where do you think it takes place? Why?

(Visual-Spatial Intelligence / Verbal-Linguistic Intelligence)

03 Look at the sentences below and put them into correct order.

The books are closed.

- *The hospital let me have a few days' holiday.*
- *I think it's important to see as much of a country as you can, but it is difficult to travel around Nepal.*
- *Last year I went to Nepal for three months to work in a hospital.*
- *So, I decided to go into the jungle and I asked a Nepalese guide, Kamal Rai, to go with me.*

(Logical-Mathematical Intelligence)

PRESENTATION

- 1 There is a feature in a magazine called 'It happened to me', where readers are invited to write about something extraordinary that has happened to them. Read about Tony Russell.

It happened to me

Tony Russell describes how the sight of a tiger in Nepal – '500 kilos plus and four metres long' – will stay with him forever.

THE DAY I CAME FACE TO FACE WITH A TIGER

Last year I went to Nepal for three months to work in a hospital. I think it's important to see as much of a country as you can, but it is difficult to travel around Nepal. The hospital let me have a few days' holiday, so I decided to go into the jungle and I asked a Nepalese guide, Kamal Rai, to go with me.

We started preparing for the trip at six in the morning, and left camp with two elephants carrying our equipment. It was hot, but Kamal made me wear shoes and trousers to protect me from snakes. In the jungle there



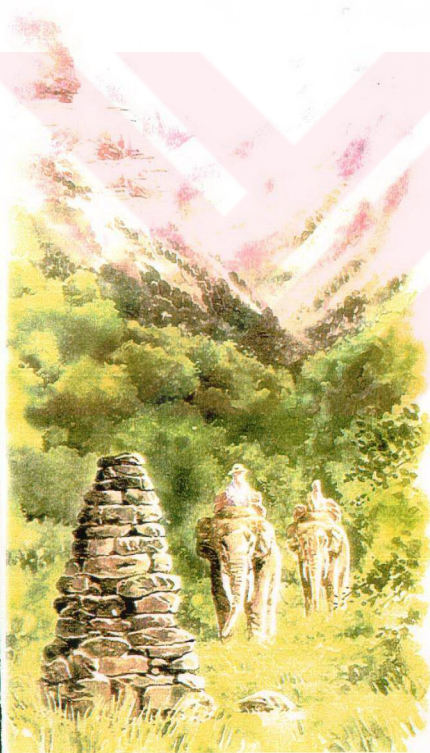
was a lot of wildlife, but we were trying to find big cats, especially tigers. We climbed onto the elephants' backs to get a better view, but it is unusual to find tigers in the afternoon because they sleep in the heat of the day.

Then, in the distance, we saw a tiger, and Kamal told me to be very quiet. We crept nearer and found a dead deer, still bleeding. This was the tiger's lunch! Suddenly I started to feel very frightened.

We heard the tiger a second before we saw it. It jumped out like a flash of lightning, five hundred kilos plus and four metres long. I looked into its eyes and face, and saw right down the animal's throat. It grabbed Kamal's leg between its teeth, but I managed to pull Kamal away. One of our elephants ran at the tiger and made it go back into the grass, so we quickly escaped to let the tiger eat its lunch. That night it was impossible to sleep!

2 Answer the questions.

- Why did Tony go to Nepal?
- What does he think it's important to do abroad?
- Is transport good in Nepal?
- Did the hospital let him have a long holiday?
- Who did he ask to go with him into the jungle?
- What did the guide make him wear? Why?
- Why did they climb onto the elephants?
- How did Kamal escape?

(Verbal-Linguistic Intelligence)

● Grammar questions

- In the text, there are two examples of the verb pattern **ask/tell somebody to do** (something).
He asked her to dance.
Find them.
- There are four examples of the pattern **make/let somebody do** (something).
You make me laugh!
Find them. What is the difference between **make** and **let**?
- Find the examples of the following verbs.
decided started (x2) trying managed
Are they followed by an infinitive or an **-ing** form?
- There are four examples of the pattern adjective + infinitive.
It's easy to learn English.
Find them.
- There are four examples of the infinitive used to express purpose.
I come to class to learn English.
Find them.

*(Verbal-Linguistic Intelligence)**(Logical-Mathematical Intelligence)*

PRACTICE

1 Grammar

- 1 Put a form of **make** or **let** and a suitable verb into each gap.

Example

The teacher let me go home early because I felt ill.

- My children usually go to bed early, but I _____ them _____ TV till 10.00 at the weekend.
- I don't like the sight of blood. It _____ me _____ ill if I see it.
- My parents weren't strict with me at all. They _____ me _____ what I wanted.
- But they thought that education was very important, so they _____ me _____ hard for my exams.
- It was a very sad film. The ending _____ me _____.
- My parents _____ me _____ the piano for two hours every day. I hate it.
- My brother _____ me _____ his car sometimes, but I have to pay for the petrol.

(Verbal-Linguistic Intelligence)

Think of your favourite teacher, and a teacher you don't/didn't like!

He lets us play games.

She made us do homework every night!

(Intrapersonal Intelligence)

Prepare a jazz chant or a song to report what your favourite teacher lets or makes you do.

(Musical-Intelligence)

2 Rewrite the following sentences using **tell** or **ask**.

Example

'Can you help me?' she said to him.

She asked him to help her.

a. 'Can you lend me some money?' I asked her.

b. 'Do your homework again,' the teacher said to me.

c. 'Please write to me soon,' I said to her.

d. 'Do more exercise,' the doctor said to Peter.

e. 'Drive more carefully!' she said to me.

(Verbal-Linguistic Intelligence)

What are some of the things your parents tell/told/ask/asked you to do?

They asked me to do the shopping sometimes.

They tell me to tidy my room.

(Intrapersonal Intelligence)

3 Choose the correct form of the verb.

a. Let me buy

buying	
to buy	

 you a drink.

b. I've decided

stop	
to stop	

 smoking.

c. I managed

to find	
find	

 the book I was looking for.

d. The smell of roses makes me

to think	
think	
thinking	

 of you.

e. I tried

understanding	
to understand	

 the lecture, but it was too difficult.

f. The doctor told me

to do	
do	

 more exercise.

g. Look outside! It's starting

to snow.	
snowing.	
to snow.	

(Verbal-Linguistic Intelligence)

2 Speaking

Work in pairs. Ask and answer questions about why you go to certain places.

Why do you go to a hairdresser's?

To have a haircut.

- post office
- book shop
- library
- travel agent's
- petrol station
- newsagent's
- butcher's
- off-licence

(Interpersonal Intelligence)

3 Apostrophes

- 1 Apostrophes are used to show where letters are left out.

can't she's I'd

They are also used to show possession.

Helen's book the girls' room (more than one girl)

a day's holiday four days' holiday

Find examples of both uses in the text on page 84.

- 2 Is the apostrophe used correctly in the following phrases? Correct any mistakes.

- | | |
|---------------------|-----------------------------|
| - Kamals' leg | - my parent's house |
| - Its raining. | - I went to a boy's school |
| - two day's holiday | - I looked down its throat. |

- 3 Put apostrophes in the following sentences.

- a. My childrens favourite game is chasing Wally the cat. Its not a game I like, and the cat certainly doesnt like it. It hides under Kates bed, or runs up its favourite tree, where the children cant get it.



- b. 'Have you seen todays newspaper?'

'No, I havent. Why?'

'Were going on holiday to America in a few days time, and I wondered what the weathers been like.'

(Verbal-Linguistic Intelligence)

4 Speaking

Work in pairs.

Using the following words and pictures to help you, retell the story about Tony Russell.

(Verbal-Linguistic Intelligence)

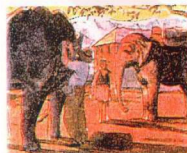
(Visual-Spatial Intelligence)



Tony Russell / go / Nepal / work / hospital



hospital / let / have a few days' holiday / decide / go / jungle / ask / guide / come



start / prepare / 6.00 / Kamal / make / wear / shoes and trousers / protect him from snakes



climb / elephants' backs / get / view



see / tiger / Kamal / tell him / quiet / start / feel / frightened



tiger / jump out / look down / throat



grab / Kamal's leg / manage / pull Kamal away



elephant / run at tiger / escape / impossible / sleep

Work in pairs. One of you will be Tony Russell, and the other Kamal Rai. Then, act it out in the class.

(Interpersonal Intelligence)

(Bodily-Kinesthetic Intelligence)

● Language review

Verb patterns

We saw in Unit 5 that verbs can be followed by an infinitive. Here are some more.

I've decided to stop smoking.
I managed to ring her.
She told me to ring her.
She asked me to ring her.
He made me cry.
She lets me do what I want.

Translate

She told me to ring her.

She asked me to ring her.

He made me cry.

She lets me do what I want.

There is a list of verb patterns on page 143.

Infinitives

Infinitives are used after certain adjectives.

It's easy to learn languages.
It's difficult to learn languages.

Translate

It's difficult to read your writing.

Infinitives are also used to express purpose.

I went to Nepal to work as a doctor.

Translate

I come to class to learn English.

SKILLS DEVELOPMENT

● Reading and speaking

National heroes

Pre-reading task

You are going to read about two legendary English heroes, King Arthur and Robin Hood. (A legend is an old, popular story which is perhaps true and perhaps not.)

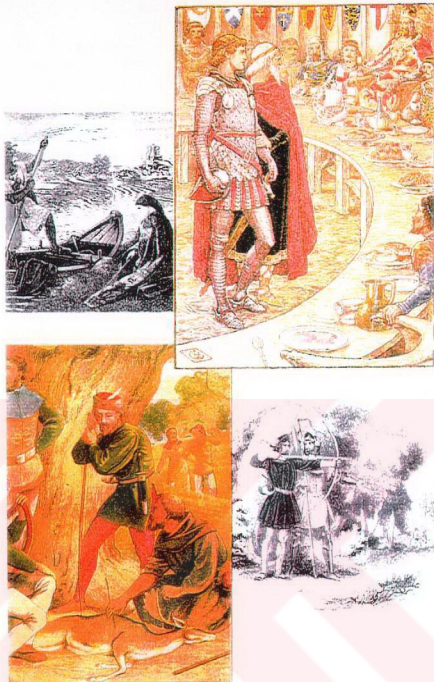
- Look at the pictures and answer the questions.
When do you think they lived?
Where did they live? (In a house/a hut?)
Who did they fight against?
What weapons did they fight with?
- What is happening in the pictures?
Do you know any stories about King Arthur or Robin Hood?

(Verbal-Linguistic Intelligence)

(Visual-Spatial Intelligence)

3. If you were to be a historical figure, who would you be? And what would your outstanding features be?

(Intrapersonal Intelligence)



Vocabulary

Match a line in A with a line in B to define the words in italics.

A	B
When you <i>bring up</i> children,	in a hole in the ground when they are dead.
A <i>battle</i> is	you take them prisoner.
If you <i>defeat</i> your enemy,	you are badly hurt.
If you <i>capture</i> someone,	was a soldier who rode a horse.
If you are <i>wounded</i> in a battle,	you look after them and educate them until they are grown up.
In medieval times, a <i>knight</i>	the place where you bury someone.
You <i>bury</i> someone	a fight between soldiers, armies, etc.
A <i>tomb</i> is	you win a victory over them in a battle.

(Verbal-Linguistic Intelligence)

Jigsaw reading

Divide into two groups.

Group A Read about King Arthur.

Group B Read about Robin Hood.

Answer the questions as you read.

Comprehension check

- When did stories about him begin to appear?
- Who is the legend based on?
- When did he live?
- Where did he live?
- He was the leader of a group of people. Who were they? What did they use to do?
- Was he a good man?
- Why is he famous? What are some of the things he did?
- Who were his enemies?
- How did he die?

When you have answered your questions, find a partner from the other group.

Compare your answers and swap information. Read both texts, and find examples of the grammar taught in this unit (verb patterns and infinitives to express purpose).

(Interpersonal Intelligence)

(Verbal-Linguistic Intelligence)

Read both texts and think of the characters and the objects that they have used (for example; sword, bow, arrow...) and draw pictures to illustrate those.

(Visual-Spatial Intelligence)

Speaking

- 1 What do King Arthur and Robin Hood have in common?
- 2 Your teacher has information about two real English heroines, Florence Nightingale and Amy Johnson. Ask your teacher questions to find out about them.
- 3 Who are the legendary or real heroes and heroines from your country?
- 4 Are there certain 'ingredients' that legends have in common?

(Verbal-Linguistic Intelligence)



The legends of King Arthur began to appear in the twelfth century, and it is possible that they are based on a Celtic leader in the fifth or sixth century who defended his country against Saxon invasion. King Arthur was the son of Pendragon, and was born in Tintagel in Cornwall. He was brought up by Merlin, an old Celtic magician, and became king of Britain when he was fifteen. He proved his right to be king when he managed to pull a sword from a rock. He had to fight many lords, and when, with Merlin's help, he defeated them, he received the magic sword *Excalibur* from the Lady of the Lake. He married Guinevere and lived in a castle at Camelot. His knights sat at a round table so that they were all equal – nobody was sitting at the head of the table. Many of the stories in the legends are about the adventures of the knights, among them Lancelot, Perceval, Gawain, and Galahad. They spent their time hunting wild pigs, having feasts, and singing ballads. They often had to kill dragons and giants. At all times they behaved very correctly, with respect, honour, and compassion.

Arthur went to Rome to fight the emperor, Lucius, and he left his kingdom in the hands of his nephew, Modred. As he was entering Rome, Arthur learned that Modred had taken control of the kingdom and had captured Guinevere. He came back to England and defeated his nephew, but in the battle was seriously wounded. Arthur told Sir Belvedere, the last surviving knight, to throw *Excalibur* into the water of a lake. He did this, and the sword was caught by a hand which came out of the water and then took the sword below the surface.

Arthur was then taken to the Isle of Avalon to get better. We understand that he did not die, but lives on and will return when his country needs him. The legend says that the following verse is written on his tomb:

HIC IACET ARTHURUS,
REX QUONDAM
REXQUE FUTURUS

(THERE LIES ARTHUR, THE ONCE AND FUTURE KING.)



Robin Hood is a legendary hero who lived in Sherwood Forest, in Nottingham, with his band of followers. Stories about him and his adventures began to appear in the fourteenth century, but the facts behind the legend are uncertain. One writer thinks Robin was born in 1160, at a time when there were many robbers living in the woods, stealing from the rich but only killing in self-defence.

Everyone knows that Robin Hood robbed the rich to give to the poor. He chose to be an outlaw, that is, someone who lives 'outside the law', but he had his own ideas of right and wrong. He fought against injustice, and tried to give ordinary people a share of the riches owned by people in authority and the Church. He had many qualities – he was a great sportsman, a brave fighter, and was very good with his bow and arrow.

He dressed in green, lived in the forest with his wife, Maid Marion, and his men, among them Friar Tuck, Allen a Dale, Will Scarlet, and Little John. For food, they killed the King's deer, and many days were spent eating, drinking, and playing games. He robbed the rich by capturing them as they travelled through the forest and inviting them to eat with him. During the supper, someone looked in their bags to see how much money they had. When it was finished, Robin asked them to pay for the meal, and of course, he knew how much to ask for!

His main enemy was the Sheriff of Nottingham, who was always trying to capture Robin but never managed to do it. Some stories say that he killed Robin by poisoning him. In his dying moments, he shot a final arrow from his famous bow, and asked Little John to bury him where the arrow landed.

Vocabulary

Adverbs

- 1 We do not usually put adverbs between a verb and its object.

Examples

You speak English well. (Not *You speak well English.*)

I like reading very much. (Not *I like very much reading.*)

I did my homework quickly. (Not *I did quickly my homework.*)

(Verbal-Linguistic Intelligence)

Perform the actions as the adverbs describe them.

(Bodily-Kinesthetic Intelligence)

Some adverbs can move position:

Yesterday it rained all day.

It rained all day yesterday. (There is little difference.)

Some sound best in just one position:

Suddenly a tiger appeared. (It is more dramatic to have suddenly at the beginning.)

- 2 Put one of the adverbs into each gap. Sometimes more than one adverb is possible.

quickly	slowly	carefully	heavily
patiently	clearly	seriously	suddenly
	badly	fluently	properly
	well	hard	(irregular)

- I can't see _____ without my glasses.
- They escaped from the tiger as _____ as possible.
- Three people were _____ injured in a car crash.
- I used to speak French _____, but I've forgotten it.
- I read the letter _____.
- She worked _____ all weekend.
- When I left work, it was raining _____.
- I waited _____ in the traffic jam, because I knew there was nothing I could do about it.
- I was driving home when _____ I ran out of petrol.
- I drove _____, because the conditions were bad.
- She explained the problem _____.
- I did _____ in my driving test and passed first time.
- I couldn't fill in the form _____, because I didn't have all the information.

(Verbal-Linguistic Intelligence)

Think of a suitable verb which would apply to most of the adverbs in the box and demonstrate it in different ways according to the adverbs that you have used.

(Bodily-Kinesthetic Intelligence)

Sing the song "Brother John"

- a) quickly
- b) slowly
- c) seriously
- d) badly
- e) well

(Musical Intelligence)

-ed and -ing adjectives

- 1 We can use past participles to say how we feel about something.

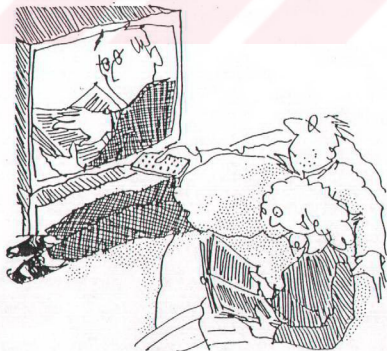
I'm very interested in modern art.

I was so excited that I couldn't sleep.

We use the -ing form to talk about the thing or person that makes us feel interested or excited, etc.

That picture is very interesting.

Skiing is an exciting sport.



(Verbal-Linguistic Intelligence)

- 2 Put one of the adjectives into each gap. Sometimes more than one is possible.

interested/interesting	bored/boring
embarrassed/embarrassing	tired/tiring
surprised/surprising	

- a. Your news was very _____. I'm pleased you're enjoying yourself.
- b. I liked the book until the end. It had a _____ ending which I didn't like.
- c. A: How was your journey?
B: Very _____. I think I'll go to bed.
- d. The play was so _____ that I fell asleep.
- e. He started to tell a joke about the director when the director came into the room. It was very _____.
- f. You look _____. Have you had a busy day?
- g. It's Sunday and I don't know what to do. I'm _____.
- h. Are you _____ in museums? I'm going to the National this afternoon – do you want to come?

(Verbal-Linguistic Intelligence)

Demonstrate the adjectives in the box.

(Bodily-Kinesthetic Intelligence)

- 3 What films have you seen recently? What books have you read? What did you think of them?

I read a spy novel.
It was very exciting.

I saw a horror film.
I thought it was frightening.

(Intrapersonal Intelligence)

Ask questions to each other:

For example;

Who are the characters?

Where does it take place?

Do you recommend it?

(Interpersonal Intelligence)

Listening

Pre-listening task

- 1 What stories do you know about UFOs (Unidentified Flying Objects)?
- 2 Some people say they have seen flying saucers. What do they say they look like? Draw one!

and draw an alien.

(Visual-Spatial Intelligence)

- 3 You are going to listen to a man who says he has seen a UFO, spoken to the aliens in it and been inside their space craft. What would you like to ask him?

Where were you?
Did they speak to you?

(Intrapersonal Intelligence)

4. Recently a secret code has arrived at your station. Working in pairs try to break the code.

ΔΦ θΘΣΣ ΩΘΞΘΨ αβλμ θβμσσ Ξββζ.

♣βζ ' Ψ ♦Φ ♥♠μ♥Θσ.

ΔΦ ' μΦ ♠μΘΦζσσ α €μΦ♥ΨλμΦΞ.

Key:

f	♠
r	μ
i	Θ
e	Φ
n	ζ
d	σ
l	Σ
y	α

(Logical-Mathematical Intelligence)

(Interpersonal Intelligence)

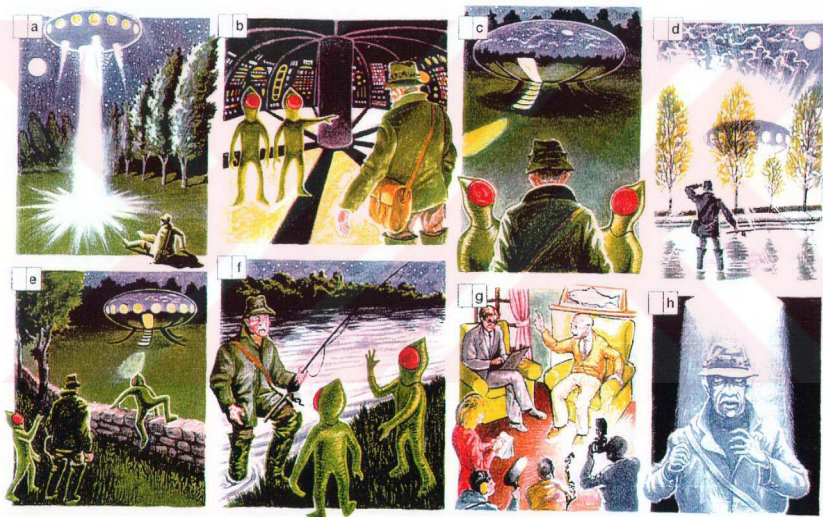
Listening for information

T.34 Listen to the interview and look at the pictures. Put them in the right order. There is one mistake in each picture. Find the eight mistakes.

(Verbal-Linguistic Intelligence)

(Logical-Mathematical Intelligence)

(Visual-Spatial Intelligence)



Comprehension check

- Which of your questions did Mr Burton answer?
- What do the following refer to in the story?

Example

about a year ago – He saw the UFO about a year ago.

- | | |
|--------------------------|----------------|
| – one o'clock | – a machine |
| – three hundred feet | – black |
| – full moon | – red |
| – five feet away | – five minutes |
| – ten or fifteen seconds | – two o'clock |
| – green | |

- Retell Mr Burton's story, beginning like this:
One night, Mr Burton decided to go fishing because...

(Verbal-Linguistic Intelligence)

(Verbal-Linguistic Intelligence)

What do you think?

- 1 The interview was based on a book of scientific research into UFOs by Timothy Good. He quotes many officials, including a former member of the Chief of Defence Staff, pilots, and astronauts, who say they have seen UFOs. Timothy Good thinks that so many reliable people have seen UFOs that they *must* exist. Also, stories from all over the world are remarkably similar. Common ideas are:
- the space ships are round, fly very fast, and make no noise
 - they have bright lights and a shiny, metallic surface
 - they are often seen at night near military bases
 - the aliens are smaller than us, wear tight, one-piece uniforms, have larger heads but similar faces
 - the aliens are not violent.
- How much is this similar to Mr Burton's story?

- 2 Timothy Good thinks that the officials are not telling the truth. Do you agree?
Why might officials not tell the truth?
- 3 His book concludes 'I believe that Man's progress on Earth has been watched by beings whose technological and mental developments make ours look primitive'.
What do you think?

(Interpersonal Intelligence)**Speaking**

Work in groups of four. Write a short story about the time when someone meets an alien. Look at the ingredients below to give you some ideas.

Place	Time
in the garden at home	in the middle of the night
in a country lane	in the year 2050
in a plane at 30,000 feet	last night
in an Inca town	in the fifteenth century
People	Events
characters with five heads	space ships travelling at the speed of light
talking machines	visits to other galaxies
green beings from invisible planets	getting lost in black holes
time travellers	planet Earth is an experiment

(Interpersonal Intelligence)

● Everyday English

Time

- 1 There are several ways of telling the time.

past/to

It's twenty past six.

It's a quarter past eight.

It's half past ten.

It's ten to three.

It's a quarter to four.

With **five, ten, twenty, and twenty-five**, we do not say 'minutes'. With all other numbers, we do.

It's four minutes past two.

It's twenty-eight minutes past six.

It's twelve minutes to four.

hour + minutes

It's 6.20. (six twenty)

It's 10.30. (ten thirty)

It's 3.50. (three fifty)

It's 2.04. (two oh four – 'O' is pronounced /ɔ:/)

It's 6.28. (six twenty-eight)

It's 3.48. (three forty-eight)

- 2 We do not usually use the twenty-four hour clock when we speak. If we want to be specific, we add **in the morning/in the afternoon/at night**, or **a.m./p.m.**

I got home at four o'clock in the morning/4.00 a.m.

The twenty-four hour clock is used in timetables and announcements.

The BA flight to New York leaves at fifteen forty.

(Verbal-Linguistic Intelligence)

(Logical-Mathematical Intelligence)

3. *Make an original clock and bring it to the classroom. When you have your clocks with you, you will set them to the times given in 1. Then, you will show the times to your partner and ask what time it is.*

(Bodily-Kinesthetic Intelligence)

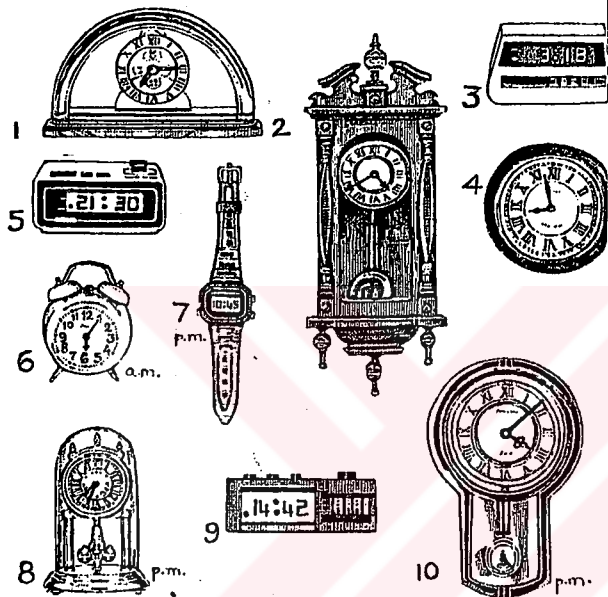
(Interpersonal Intelligence)

(Visual-Spatial Intelligence)

- 3 | T.35 | You will hear twelve short recordings. In each one there is a time. Write down the time you hear.

(Verbal-Linguistic Intelligence)

- 4 Say these times in different ways.



(Visual-Spatial Intelligence)

- 5 Work in pairs. Ask each other questions.
Example
What time do you go to bed?

(Interpersonal Intelligence)

6. Read the following questions and write the answers in your journal.

- Which part of the day do you like most? Why?
- Which part of the day do you hate most? Why?
- What can you do to transfer that time into fun?

(Intrapersonal Intelligence)

7. Close your eyes and think of the sounds that you may hear at night.

Try to identify who or what makes those sounds. Now open your eyes. Make a list of the things that you have thought. Then, compare those with the ones you hear during the day time.

How are they different?

Discuss it with your partner.

(Naturalistic Intelligence)

(Interpersonal Intelligence)

CHAPTER 6

CONCLUSION

Since multiple intelligences theory has become popular in the field of education in recent years, applying the theory in EFL classes is the major aim of this study. According to the theory of multiple intelligences put forward by Gardner, every individual possesses eight different intelligences in varying degrees. He identified these intelligences as verbal-linguistic intelligence, logical-mathematical intelligence, bodily-kinesthetic intelligence, visual-spatial intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence and naturalistic intelligence. The theory states that all eight intelligences are needed to productively function in real life. Teachers, therefore, should think of all intelligences as equally important. This is in great contrast to traditional education systems which typically place a strong emphasis on the development and use of verbal-linguistic and logical-mathematical intelligences. However, the theory of multiple intelligences acknowledges that while all students may not be verbally or mathematically gifted, students may have an expertise in other areas, such as music, spatial relations, or interpersonal knowledge. Thus, the theory of multiple intelligences implies that teachers should recognize and teach to a broader range of talents and skills. In other words, the theory provides a theoretical foundation for recognizing the different abilities and talents of students.

The teachers of EFL should recognize and appreciate the diversity in the students in their classes. They also should identify the activities that they frequently use in their classes and categorize them and they should find out the ones which help to develop all the intelligence types. Therefore, teachers should structure the presentation of a material in a style which engages most or all of the intelligences.

Multiple intelligences theory helps the teachers of EFL create an individualized learning environment. Knowing how each student learns will allow the teacher to properly assess the student's progress. This individualized evaluation practice will allow a teacher to make more informed decisions on what to teach and how to present information. Approaching and assessing learning in this manner allows a wider range of students to successfully participate in classroom learning.

Considering the importance of the multiple intelligences theory and the implication of the theory in EFL classes, a case study has been carried out in the ELT Department of Gazi University in order to identify the multiple intelligence categories of the students. Therefore, an inventory has been used to find out which intelligences the students possess. The inventory including ten statements for each intelligence category consists of eight parts. The students who are chosen at random are asked to tick the statements of each intelligence category by either yes or no. After discovering their preferences among the intelligence types, various activities are suggested related to their intelligence categories. The activities are classified according to the multiple intelligence types. The suggested activities for each category are believed to develop mainly the type of intelligence in that category and they can also help to improve the other types of intelligences.

A unit is chosen from Headway Pre-Intermediate to present how to make use of the suggested activities in EFL classes. The activities in the unit are identified according to the multiple intelligence categories and some additional activities are suggested to address all intelligences. The activities presented for all the multiple intelligence categories and the sample unit plan can be adopted according to the levels, needs, and interests of the students and to the aim of the lesson.

Applying the multiple intelligences theory in EFL classrooms enriches the lives of both the students and the teachers. By using the theory of multiple intelligences in the classroom the teaching / learning methodology provides a wide variety of options for the students and the teachers. It also offers opportunities for the students to take more responsibility for their learning and for the teachers to become a facilitator of learning in the classroom rather than the sole provider of knowledge.



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APPENDIX



Dear Students,

The findings of the inventory will be used in a scientific study. Your reliable answers would be appreciated.

Thanks for your participation and invaluable contributions.

Korkut İşisağ

Research Assistant

VERBAL-LINGUISTIC INTELLIGENCE

1. Books are very important to me.	☐ YES	☐ NO
2. I show an aptitude for word games like Scrabble, Anagrams, or Password.	☐ YES	☐ NO
3. English, social studies, and history were easier for me in school than math and science.	☐ YES	☐ NO
4. When I drive down a freeway, I pay more attention to the words written on billboards than to the scenery.	☐ YES	☐ NO
5. My conversation includes frequent references to things that I've read or heard.	☐ YES	☐ NO
6. I write well and enjoy putting thoughts on paper (or in the computer).	☐ YES	☐ NO
7. I enjoy telling stories or jokes.	☐ YES	☐ NO
8. I can remember names, places, dates or trivia.	☐ YES	☐ NO
9. I have a good vocabulary.	☐ YES	☐ NO

10. My library of books is among my most precious possessions.

YES NO

LOGICAL-MATHEMATICAL INTELLIGENCE

1. I can easily compute numbers in my head.

YES NO

2. Math and/or science were among my favorite subjects in school.

YES NO

3. I'm interested in new developments in science.

YES NO

4. I believe that almost everything has a rational explanation.

YES NO

5. I ask questions about how things work.

YES NO

6. I enjoy chess, checkers, or other strategy games.

YES NO

7. I clearly see cause-effect relationships.

YES NO

8. I am fascinated by scientific and philosophical questions like "When did time begin?"

YES NO

9. People sometimes tell me that I have a very computer-like mind.

YES NO

10. I organize things in my kitchen, bathroom, and at my desk according to categories and in patterns.

YES NO

BODILY-KINESTHETIC INTELLIGENCE

1. I find it difficult to sit still for long periods of time.

YES NO

2. I often like to spend my free time outdoors.

YES NO

3. I frequently use hand gestures or other forms of body language when conversing with someone.

YES NO

- | | | |
|--|-----|----|
| 4. I am good at mimicking others' gestures. | YES | NO |
| 5. I like taking things apart and putting them back together. | YES | NO |
| 6. I enjoy being on the go; running, jumping, moving, wrestling. | YES | NO |
| 7. I like working with my hands, e.g., sewing, repairing, making things. | YES | NO |
| 8. I use many gestures when expressing myself. | YES | NO |
| 9. I regularly engage in at least one sport or physical activity. | YES | NO |
| 10. My best ideas often come to me when I'm out for a long walk or jog. | YES | NO |

VISUAL-SPATIAL INTELLIGENCE

- | | | |
|---|-----|----|
| 1. I often see clear visual images when I close my eyes. | YES | NO |
| 2. I can generally find my way around unfamiliar territory. | YES | NO |
| 3. Geometry was easier for me than algebra in school. | YES | NO |
| 4. I like maps, charts and diagrams better than words. | YES | NO |
| 5. I am good at drawing things. | YES | NO |
| 6. I like movies, pictures and other visual presentations. | YES | NO |
| 7. I enjoy creating designs on paper or by computer. | YES | NO |
| 8. I can remember in detail the layout and landmarks of places I've visited on vacations. | YES | NO |
| 9. I am usually sensitive to color. | YES | NO |
| 10. I sometimes have vivid dreams at night. | YES | NO |

MUSICAL INTELLIGENCE

- | | | |
|--|------------------------------|-----------------------------|
| 1. My life would be poorer if there were no music in it. | ☐ YES | ☐ NO |
| 2. If I hear a musical selection once or twice, I am usually able to sing it back fairly accurately. | ☐ YES | ☐ NO |
| 3. I can distinguish among different sounds/tones. | ☐ YES | ☐ NO |
| 4. I remember melodies easily. | ☐ YES | ☐ NO |
| 5. I can play a musical instrument. | ☐ YES | ☐ NO |
| 6. I am sensitive to noises, e.g., rain, traffic. | ☐ YES | ☐ NO |
| 7. People say that I have a pleasant singing voice. | ☐ YES | ☐ NO |
| 8. My collection of records, cassettes and compact discs is among my most treasured possessions. | ☐ YES | ☐ NO |
| 9. I know the tunes to many different songs or musical pieces. | ☐ YES | ☐ NO |
| 10. I often make tapping sounds or sing melodies while working, studying, or learning something new. | ☐ YES | ☐ NO |

INTERPERSONAL INTELLIGENCE

- | | | |
|---|------------------------------|-----------------------------|
| 1. I'm the sort of person that people come to for advice and counsel at work or in my neighborhood. | ☐ YES | ☐ NO |
| 2. I prefer group sports like badminton, volleyball, or softball to solo sports such as swimming and jogging. | ☐ YES | ☐ NO |
| 3. When I have a problem, I'm more likely to seek out for help than attempt to work it out on my own. | ☐ YES | ☐ NO |
| 4. I like to get involved in social activities connected with my work or community. | ☐ YES | ☐ NO |

- | | | |
|---|------------------------------|-----------------------------|
| 5. I would rather spend my evenings at a lively social gathering than stay at home alone. | ☐ YES | ☐ NO |
| 6. I like teaching things to others. | ☐ YES | ☐ NO |
| 7. I have many good friends and close acquaintances.. | ☐ YES | ☐ NO |
| 8. I am good at seeing another person's point of view. | ☐ YES | ☐ NO |
| 9. I enjoy exchanging ideas with others. | ☐ YES | ☐ NO |
| 10. I feel comfortable in the middle of a crowd. | ☐ YES | ☐ NO |

INTRAPERSONAL INTELLIGENCE

- | | | |
|--|------------------------------|-----------------------------|
| 1. I have a special hobby or interest that I keep pretty much to myself. | ☐ YES | ☐ NO |
| 2. I have a realistic view of my strengths and weaknesses. | ☐ YES | ☐ NO |
| 3. I consider myself to be strong willed or independent minded. | ☐ YES | ☐ NO |
| 4. I am comfortable with myself and enjoy my own company. | ☐ YES | ☐ NO |
| 5. I stand up for what I believe, regardless of what others think. | ☐ YES | ☐ NO |
| 6. I am continually learning from my successes and failures. | ☐ YES | ☐ NO |
| 7. I almost never feel bored or "down." | ☐ YES | ☐ NO |
| 8. I think about what I want from life and what I want to accomplish. | ☐ YES | ☐ NO |
| 9. I keep a personal diary or journal to record the events of my inner life. | ☐ YES | ☐ NO |
| 10. I would rather spend my evenings at home than at a lively party. | ☐ YES | ☐ NO |

NATURALISTIC INTELLIGENCE

- | | | |
|---|------------------------------|-----------------------------|
| 1. I like plants and animals better than people. | ☐ YES | ☐ NO |
| 2. I am good at recognizing and classifying plants and animals. | ☐ YES | ☐ NO |
| 3. I recognize, appreciate, and understand the natural world around me. | ☐ YES | ☐ NO |
| 4. I am fascinated by animals and their behaviors. | ☐ YES | ☐ NO |
| 5. I am keenly aware of my surroundings and the changes in my environment. | ☐ YES | ☐ NO |
| 6. I like to collect things from nature; rocks, fossils, butterflies, feathers, shells, and the like. | ☐ YES | ☐ NO |
| 7. I like camping, fishing or other activities relating to the natural environment. | ☐ YES | ☐ NO |
| 8. I enjoy subjects, shows and stories that deal with animals or natural phenomena. | ☐ YES | ☐ NO |
| 9. I show great interest in subjects like biology, zoology, botany, geology, and astronomy. | ☐ YES | ☐ NO |
| 10. I am interested and care a lot about plants and animals. | ☐ YES | ☐ NO |

ABSTRACT

This study aims to introduce the theory of multiple intelligences which was put forward by Dr. Howard Gardner and its implications on education, basically on foreign language teaching classes.

The study has five chapters. The first chapter presents the introduction part, background to the study, the problem, aim and scope of the study, the method and the assumptions of the study.

In chapter II, the review of literature is presented including the theory of multiple intelligences, the classification of the intelligences and its impact on education.

In chapter III, the analysis of the data collected from the students through an inventory is stated. Also, this chapter gives information how the data is collected, analyzed and interpreted in detail.

Chapter IV suggests various types of activities which are based on the findings of the inventory.

Chapter V includes a unit taken from Headway Pre-Intermediate with suggested multiple intelligences activities.

Chapter VI, which is the conclusion part of the study, summarizes the study.

ÖZET

Bu çalışmanın amacı Dr. Howard Gardner tarafından ortaya çıkarılan Çoklu Zeka Kuramı'nı tanıtmak ve eğitime, özellikle yabancı dil sınıflarına katkılarını göstermektir.

Bu çalışmada beş bölüm vardır. I. bölüm çalışmanın problemini, amacını, kapsamını, metodunu ve varsayımlarını belirtmektedir.

II. bölümde Çoklu Zeka Kuramı'nı, bu kurama göre farklı zeka türlerinin sınıflandırılması ve eğitime etkisini detaylı bir şekilde inceleyen kaynak taraması sunulmaktadır.

III. bölümde bir envanter yardımıyla nasıl veri toplandığı ve bu verilerin nasıl analiz edilip yorumlandığı açıklanmaktadır.

IV. bölümde öğrencilere uygulanan envanterin sonucunda elde edilen verilere dayanarak farklı türlerde aktiviteler önerilmektedir.

V. bölümde bu aktivitelere bağlı olarak örnek bir ders planı hazırlanmıştır.

Tezin sonuç bölümünü oluşturan VI. bölümde ise tüm çalışma genel olarak özetlenmiştir.