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THE ROLE AND IMPORTANCE OF THE DIFFERENCE IN INTELLIGENCE PROFILES AMONG TEACHERS IN ENGLISH TEACHING

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M.A. THESIS

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ABSTRACT

This study aims to find out the role and the significance of individual differences, in other words, the differences of intelligence profiles among teachers in English Teaching, which is based on The Theory of Multiple Intelligences proposed by Dr. Howard Gardner.

The study has six chapters. The first chapter presents the problem, aim and scope, the method and the assumptions of the study.

In chapter 2, the review of literature is presented including the definition of intelligence, the explanation of The Theory of Multiple Intelligences and the classification of intelligences.

In chapter 3, the relation between The Theory of Multiple Intelligences and English Teaching and the effect of the differences of intelligence profiles among teachers on education are introduced.

In chapter 4, the analysis of data collected from both the teachers and the students through the inventories is stated. Besides, this chapter states how the data is collected, analysed and interpreted in detail.

Chapter 5 suggests sample integrated multiple intelligence activities that teachers can make use of in EFL classrooms by taking their dominant and weaker intelligence types into consideration and the classroom observations in the process of applying suggested activities are presented.

Chapter 6, which is the conclusion part of this study, summaries the study and suggests the ways which aim to diminish the problems caused by the effects of the different intelligence profiles among teachers on English Teaching and to enrich the teaching styles of teachers to address all students.

ÖZET

Bu çalışmanın amacı Dr. Howard Gardner'ın Çoklu Zeka Teorisini esas alarak bireysel farklılıkların, diğer bir deyişle öğretmenler arasındaki zeka türü farklılıklarının İngilizce Öğretimindeki rolü ve önemini ortaya çıkarmaktır.

Bu çalışmada 6 bölüm vardır. 1. Bölüm çalışmanın problemini, amacını, kapsamını, metodunu ve varsayımlarını belirtmektedir.

2. bölümde, zekanın tanımı, Çoklu Zeka Teorisinin açıklanması ve zeka türlerinin sınıflandırılmasını içeren kaynak taraması sunulmaktadır.

3. bölümde, Çoklu Zeka Teorisi ile İngilizce Öğretimi arasındaki ilişki ve öğretmenler arasındaki zeka türü farklılıklarının eğitim üzerindeki etkisi belirtilmiştir.

4. bölümde, öğretmen ve öğrencilere uygulanan anketlerin nasıl toplandığı, analizi ve sonuçların yorumları yer almaktadır.

5. bölümde, öğretmenlerin baskın ve zayıf zeka türlerini göz önünde bulundurarak, sınıflarında kullanabilecekleri örnek Çoklu Zeka aktiviteleri önerilmekte ve önerilen aktivitelerin uygulanması sırasında yapılan sınıf gözlemleri sunulmaktadır.

6. bölümde, tüm çalışmanın genel olarak özetlendiği sonuç bölümü yer almakta ve öğretmenler arasında zeka türü farklılıklarının İngilizce Öğretimi üzerinde neden olduğu sorunları en aza indirmek ve bütün öğrencilere ulaşmak için öğretmenlerin öğretim yöntemlerini zenginleştirmeyi amaçlayan yollar önerilmektedir.

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TABLE OF CONTENTS

	Page
ABSTRACT	ii
ÖZET	iii
ACKNOWLEDGEMENTS	iv
CHAPTER 1	
INTRODUCTION	1
1.1. Problem	1
1.2. Aim and Scope of the Study	2
1.3. Method	2
1.4. Assumptions	3
CHAPTER 2	
REVIEW OF LITERATURE	4
2.0. Introduction	4
2.1. What is Intelligence?	4
2.2. The Theory of Multiple Intelligences	11
2.3. Principles of Multiple Intelligence Theory	13
2.4. Why MI Theory for Adults?	18
2.5. Description of Eight Types of Intelligences	19
2.5.1. Verbal/Linguistic Intelligence	22
2.5.2. Logical/Mathematical Intelligence	25
2.5.3. Visual/Spatial Intelligence	27
2.5.4. Bodily/Kinesthetic Intelligence	29
2.5.5. Musical Intelligence	32
2.5.6. Interpersonal Intelligence	34
2.5.7. Intrapersonal Intelligence	37
2.5.8. Naturalistic Intelligence	39
2.6. MI and Existential Intelligence	42
CHAPTER 3	
MULTIPLE IINTELLIGENCES AND ENGLISH TEACHING	48
3.0. Introduction	48
3.1. Individual Differences	48

Page

3.2. Understanding How MI Theory Applies to Your Teaching 49
3.3. Determining Strengths and Weaknesses 51
3.4. Developing Your Teaching 53

CHAPTER 4
THE ANALYSIS OF THE DATA COLLECTED 60
4.0. Introduction 60
4.1. Data Collection 60
4.2. Data Analysis 61
4.2.1. Teachers 61
4.2.1.1. Bacground Information 61
4.2.2. Students 64
4.3. The Interpretation of the Data Collected from Teachers 64
4.3.1. Frequency Tables 64
4.3.2. Cross Tables 74
4.4. The Interpretation of the Data Collected from Students 82
4.4.1. Descriptive Statistics 83

CHAPTER 5
SUGGESTED INTEGRATED ACTIVITIES RELATED TO MULTIPLE INTELLIGENCES AND CLASSROOM OBSERVATIONS 89
5.0. Introduction 89
5.1. Integrated Multiple Intelligences Activities 89
5.2. Classroom Observations 140

CHAPTER 6
CONCLUSION 153

BIBLIOGRAPHY 158
APPENDICES 163

CHAPTER 1

INTRODUCTION

In this part, the problem, aim and scope of the study and the method are expressed. Finally, some assumptions are presented.

1.1. Problem

The Theory of Multiple Intelligences (MI) proposed by H. Gardner can be considered as a revolution in education. Unlike many other educational novelties which have limitations, MI is being implemented from the pre-school through the university level. In the Theory of Multiple Intelligences Gardner claims that individuals do not have one fixed profile of intelligence but at least eight types of intelligences that can be developed over a life time. He also states that since each individual is different, we all have unique combinations of intelligences. This new look at intelligence differs from the traditional view which defines intelligence as a single capacity that could be measured and reduced to a single score called an "intelligence quotient" or I.Q.

As individuals may differ in particular intelligence profiles with which they are born, they possess different talents and skills. The Theory of Multiple Intelligences has many implications for education. In the light of this theory, there is an undeniable fact that each student is an individual and must be treated as such. Clearly, what works for one student may not work for another because of individuals' different intelligence types. This is an incontrovertible principle, but it should not be forgotten that each teacher is also an individual and individual variation has a significant influence in language teaching, too.

During the regular peer-observations that take place four times in a year among the colleagues, it has been observed that each teacher brings such individual differences in intelligence profiles into the classroom. It would appear that teachers show general tendencies towards one intelligence or another and these differing intelligence profiles evoke different teaching styles. So it is highly probable that the difference in intelligence types between students and the teacher could be the reason behind the failure in EFL classrooms.

1.2. Aim and Scope

The goal of this study is to find out how the differences; the strengths and weaknesses in the eight intelligences influence teachers' teaching styles by administering an MI inventory. By the help of this inventory teachers will be able to see their dominant intelligence types as well as the types they need to enhance.

The study also aims at identifying the MI profile of each student and by giving an MI inventory examine how different they are from one another. Another purpose of this study is to supply different types of activities related to Multiple Intelligences, which will not only allow teachers opportunities to explore and expand their strengths but also develop their weaker intelligences and appreciate the intellectual strengths of their students, while providing them with varied learning experiences that will let them use their combination of intelligences to be successful in EFL classroom.

This study has been carried out at Başkent University and focused on 60 preparatory teachers who are all university graduates of different departments and 128 (10 classes) preparatory school students. The subjects have been selected randomly.

1.3. Method

First of all, library research has been conducted to analyse H. Gardner's Theory and ideas about Multiple Intelligences in education. The fundamental reason for the study has been stated in the first chapter. The second chapter started with a literature review to provide background information. The third chapter introduced what relation MI has with English Teaching. Also, some of the views of several professionals were presented.

Then, an MI inventory was given both to the teachers and the students in order to identify their profile of intelligences. After analysing the results of the inventories, the strongest and the weaker intelligence types were stated and interpreted by using the essential statistical methods. The findings were presented in charts and graphs. Later, some MI activities that teachers can make use of in EFL classrooms by taking their profiles into consideration and the reflections of classroom observations were included in Chapter 5.

1.4. Assumptions

In this study it is assumed that

1. Teachers at Başkent University Preparatory School are considered to represent teachers in terms of knowledge and experience.

2. The researcher teaches at the same department with the participants in the study.

3. The class size, the equipment used and the level of the students are assumed to be equal.

4. By the help of the inventory, both the teachers' and the students' profile of intelligences can be revealed so that the awareness of each teacher and student will be raised.

5. The reason of the great number of failures and lack of motivation in EFL classrooms is the distinction between the individual intelligence profiles between teachers and their students.

6. Supplying multiplicity in lessons and activities -applying The Theory of Multiple Intelligences to English language teaching- by addressing various intelligence types will increase motivation and success rate.

CHAPTER 2

REVIEW OF LITERATURE

2.0. Introduction

This chapter gives the theoretical part of the study and the changing vision of intelligence.

Section 2.1 deals with what intelligence is, 2.2 explains the theory of Multiple Intelligence and 2.3 answers the question why MI theory for adults. The following section, 2.4 concentrates on the description of intelligence types. Finally, section 2.5 explains the MI Theory and Existential Intelligence.

2.1. What Is Intelligence?

Advances in the concept of intelligence have totally changed the traditional definition of intelligence. Pyle (1981) states that the achievement of Alfred Binet and his co-workers in measuring individual differences can be considered as the first real innovation in educational matters. Since the previous tests were found too simple, a need to create a more complicated process appeared. Intelligence defined as an innate ability by the term "Intelligence Quotient" (IQ), was seen as a single general capacity for mathematical and verbal skills that predicted school success.

Armstrong (1994; 1) states that

> "In 1904, The minister of Public Instruction in Paris asked the French Psychologist; Alfred Binet and a group of colleagues to develop a means of determining which primary grade students are at risk of failure so these students could receive remedial attention. Out of their efforts came the first intelligence tests. Imported to United States several years later, intelligence testing became widespread, as did the notion that there was something called "intelligence" that could be objectively measured and reduced to a single number or "IQ" score."

The tests developed to measure a person's IQ, were first employed during World War I to discover soldiers who could be trained as officers and for special technical tasks. So the idea of a single intelligence gained domination in those days.

It was cleary seen that in education matters, IQ test results determined the child's place in all other children who have taken the same test without considering the individual differences. In 1983, there were signs of a reawakening of interest in theoretical and research aspects of intelligence. The failure or the shortcomings of traditional view caused a Harvard psychologist named Howard Gardner to question the traditional view of intelligence and propose the Theory of Multiple Intelligences (MI).

Gardner defines (1983: x) intelligence as the ability to solve problems, or to create products, that are valued within one or more cultural settings. Building upon this definition, in one of his articles Gardner (www.newhorizons.org.) states that until this century, the word "intelligence" has been used to describe the mental powers of individuals. For instance; people living in the west were called intelligent if they were quick, persuasive or wise. However, in other cultures, the individual was called intelligent if he was obedient or well-behaved.

On the other hand, Pyle (1981) also disagrees with the definition of IQ by Alfred Binet that underlines in-born, inherited, native ability and states that only the capacity for developing some ability can be inherited rather than the ability and Pyle (1981; 1) shares the same idea with Gardner and states that

> "One of the first things to realise is that the word "intelligence" is a 'situation specific' word. That is, the word is used in various situations and thus takes on various meanings depending upon the particular situation."

Gardner as a professor of education, research psychologist and professor of medicine and of neurology, and his research group have studied special populations; one with normal and gifted children and second with normal adults who have suffered brain damage.

T. Good and J. Brophy mention (1995) that Gardner and his colleagues have trained individuals in certain skills to see whether the training transfers to other skills or not. For instance; Does training in musical ability influence mathematical or verbal performance?

After these researches, it is clearly seen that (www.newhorizons.org.)

> "Until presenting this list of intelligences, Gardner and his colleagues examined the literature in several fields: the development of cognitive capacities in normal individuals; the breakdown of cognitive capacities under various kinds of organic pathology, the existence of abilities in "special populations", such as prodigies, autistic individuals, idiots savants, and learning disabled children; forms of intellect that exist in different species, forms of intellect valued in different cultures, and the outcome of studies of transfer and generalisation. Candidate capacites that turned up repeatedly in these disparate literatures made up a provisional list of human intelligences."

Gardner first came to the idea of multiple intelligences while working with brain-damaged patients in a Boston hospital. He observed that injuries in different regions of the brain caused patients to lose the ability to perform different functions.

So it can be said that Gardner's argument for multiple intelligences derives from three sources: First is the research on people with brain damage, which suggests that neural functioning is specific to a single area such as speech. The second is the variety of skills found in society such as interpersonal skills or spatial ability. The third is the existence of prodigies, savants who are exceptionally talented in specific areas.

Gardner's effort to synthesise these lines of work led him to develop and introduce The Theory of Multiple Intelligences in his book Frames of Mind in 1983, although he makes no claim that this is a final or complete list.

By means of these findings, Gardner (cited in Christison, 1998: 4) developed the following basic set of criteria against which potential intelligences could be judged of an intelligence:

a) Potential isolation by brain damage (Brain damage studies):

> "To the extent that a particular faculty can be destroyed, or spared in isolation, as a result of brain damage, its relative autonomy from other human faculties seems likely" (Gardner, 1983: 63).

"When people suffer brain damage as a result of an injury, one intelligence is often damaged. For example; if a person has damage to Broca's area (the left frontal

lobe), linguistic intelligence may be greatly damaged. The individual may have great trouble reading, writing, and speaking, yet still be able to do math, dance, and sing. Gardner is actually proposing the existence of eight autonomous brain systems. His premise is that because a person can lose ability in one area while others are spared, there cannot simply be a single intelligence."

b) The existence of idiots savants, prodigies, and other exceptional individuals (Exceptional individuals):

> "The selective absence of an intellectual skill - as many characterise autistic children or youngsters with learning abilities - provides a confirmation by negation of a certain intelligence" (Gardner, 1983: 63).

"In some people; we can see intelligences operating at high levels. Some individuals can calculate multidigit numbers in their heads or can play a musical composition after hearing it only once. Savants are people who demonstrate amazing abilities in one intelligence while other intelligences are very low."

c) An identifiable core operation or set of operations (Developmental history):

> "It becomes crucial to be able to identify these core operations, to locate their neural substrate, and to prove that these cores are indeed separate" (Gardner, 1983: 64).

"Each intelligence has its own developmental history - its time of arising in childhood, its time of peaking during one's lifetime, and its time of gradual decline. Musical intelligence, for example, peaks early, but linguistic intelligence can peak very late."

d) A distinctive developmental history, along with a definable set of expert "end-state" performances (Evolutionary history):

> "An intelligence should have an identifiable development history, through which normal as well as gifted individuals pass in the course of ontogeny. To be sure, the intelligence will not develop in isolation, except in an unusual person; so it becomes necessary to focus on those roles of situations where the intelligence occupies a central place" (Gardner, 1983: 64).

"Each intelligence has roots in the evolutionary history of man. For example; archaeological evidence supports the presence of early musical instruments. The cave drawings of Lascaux are good examples of spatial intelligence."

e) An evolutionary history and evolutionary plausibility (Psychometric findings):

> "All species display areas of intelligence and human beings are no exceptions ... A specific intelligence becomes more plausible to the extent that one can locate its evolutionary antecedents, including capacities -like a bird song or primate social organisation- that are shared with other organisms; one must also be on the lookout for specific computational abilities which appear to operate in isolation in other species but have become yoked with one another in human beings. For example; discrete aspects of musical intelligence may well appear in several species but are only joined in human beigns" (Gardner, 1983: 65).

"We can look at many existing standardised tests for support of the theory of multiple intelligences. The Weschsler Intelligence Scale for Children includes subtests that focus on several of the different intelligences."

f) Support from experimental psychological tasks (Psychological tasks):

> "... particular abilities are manifestations of the same intelligences. To the extent that various specific computational mechanisms - or procedural systems - work together smootly, experimental psychology can also help demonstrate the ways in which modular or domain - specific abilities may interact in the execution of complex tasks" (Gardner, 1983: 65).

"We can look at psychological studies and witness intelligences working separately. For example; subjects may master a specific skill, such as solving arithmetic problems, but they may still not be able to read well. Also, individuals may have a superior memory for words but not for faces. The tasks seem to be independent from each other."

g) Support from psychometric findings (Core operations):

> "Intelligence tests do not always test what they are claimed to test ... and the stress on paper and pencil methods often precludes the proper test of certain abilities, especially those

> involving active manipulation of the environment or interaction with other individuals. Hence, interpretation of psychometric findings is not always a straightforward matter" (Gardner, 1983: 66).

"Each intelligence has a set of core operations. For example; with musical intelligence a person needs to be able to discriminate rhythmic structures and be sensitive to pitch."

h) Susceptibility to encoding in a symbol system (Symbol system):

> "Much of human representation and communication of knowledge takes place via symbol systems - culturally contrived systems of meaning which capture important forms of information ... one of the features that makes a raw computational capacity useful by human beings, is its susceptibility to marshaling by a cultural symbol system." (Gardner, 1983: 66).

"Intelligences are susceptible to being symbolised. For example; there are spoken and written languages, graphic languages, computer languages, musical notation systems, and ideographic languages."

Gardner (Gardner et. al. 1996) believes that the strongest proof for MI comes from research of once-normal people who have become brain damaged or trauma. For instance, Gardner (Gardner et.al. 1996: 204) claims that

> "Some stroke patients may have unimpaired speech yet are unable to find their way around the hospital or their home; others may exhibit the opposite pattern of strengths and deficits. These two abilities can be isolated from each other. These findings help him to support the notion of separate intelligences governing language and spatial thinking. Another strong support also comes from the intellectual profiles of special populations such as prodigies and idiots savants. For example; savants are individual of low IQ, who nevertheless show some remarkable skills. They may be able to draw with great accuracy, play the piano by ear, or quickly figure out whether March 15,2018, will fall on a Wednesday. Among these special populations, certain capacities are operating in isolation from others."

In addition to that M.A. Christison (1998) states that the concept of intelligence has a deep effect on not only one's social position but also in education

and professional life. She adds that although intelligence has a significant role in our lives, it is not easy to define exactly what intelligence is for most of us.

In terms of defining intelligence, Gardner (1983: 69) has a similar opinion:

> "Intelligence is a such a word; we use it so often that we have come to believe in its existence, as a genuine tangible, measurable entity, rather than as a convenient way of labelling some phenomena that may exist."

In his article (1997) named "Multiplicity of Intelligences" Gardner gives Bobby Fisher as an example and adds that Bobby Fisher might inherently have had the potential to be a great chess player, but if he had lived in a culture without chess, that potential would never have been manifested, let alone actualised. Gardner has always claimed that biological tendencies and opportunities for learning in a specific cultural context work close together.

Almost eighty years later, it was noticed that the concept of IQ which mainly measures how intelligent a person is only by mathematical and verbal skills, failed to measure and reflect all the abilities. Unfortunately, schools teaching only by language and logical thinking skills gave harm rather than do good. Needless to say that those who have different weaknesses and strengths, in other words different intelligences were misunderstood and neglected by the educational systems.

As Pyle (1981) expresses that intelligence which is evaluated in isolated ways or which endeavours to cut an individual off from the society he is living is doomed to failure.

An awareness of these factors has proved that intelligence is not a single capacity but multi-dimensional concept. The standard IQ test which focuses on maths and language is a prejudiced way of looking at an individual. Each individual is unique. Just like we all have different physical appearances, we each have different personalities. As Brown (1994) mentions that since each individual is unique and has different characters it is natural that every individual approaches a problem, learns something or organises his feelings from a unique outlook.

2.2. The Theory of Multiple Intelligences

Multiple Intelligences (MI) Theory has been developed by Professor H. Gardner, a cognitive psychologist working at the University of Harvard, U.S.A.

According to Gardner, (1983: 10) the theory of MI human intelligence has three main 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 recognising or creating problems, thereby establishing the necessity for the new knowledge."

As H. Silver and et. al. (2000) state that Gardner's method is different from traditional IQ testing or other ways of measuring intelligence. They explain Gardner's method as the way in which cultures appreciate individuals and the way individuals produce various products or serve their cultures in different abilities.

In terms of the clash of the opinions, R. Tanner has the same idea with Silver and et. al. Tanner states (2001: 40) that

> "Gardner challenges the idea that individuals have a fixed, general, measurable capacity for learning, called intelligence, which varies in quantity from person to person."

When H. Gardner published "Frames of Mind" in 1983, it changed the way people thought about thinking intelligence and learning. Until that work, simple tests and a single number based IQ, which symbolises a person's "intelligence quotient" was an evidence of an individual's verbal/linguistic and mathematical/logical abilities.

Campbell (1997) also claims that unlike other reforms in education, MI theory is not prescriptive, in other words, it does not focus on the capacities that are significant for success in school, moreover, its broad viewpoint of human capacities does not rule how and what to teach. In sharp contrast, something that could be measured with a single, general - purpose intelligence test, linguistic and mathematical symbolisation and summarised by a single number take no role in Gardner's formulation.

Gardner (cited in H. Silver et. al. 2000: 7) says that

> "In developing this theory I did not start with an examination of existing tests. ... I was not interested in predicting success of failure in school. ... Instead my initial intuition that there were different kinds of minds led me to sample the range of cognitive and - states as thoroughly as I could, and then to seek a model that might help us to progress in explaining how these different competences develop."

In addition, H. Silver et. al (2000) state that Gardner by adding "s" to "intelligence" has broken the IQ theory which previously supported two basic principles that human cognition was unitary and that individuals can adequately be described as having a single, quantifiable intelligence.

The chart below shows how our definition of Intelligence has changed through out the years:

OLD VIEW	NEW VIEW
• Intelligence was fixed	• Intelligence can be developed
• Intelligence was measured by a number	• Intelligence cannot numerically quantifiable and is exhibited during a performance or problem - solving process
• Intelligence was unitary	• Intelligence can be exhibited in many ways - multiple intelligences
• Intelligence was measured by isolation	• Intelligence is measured in context/real-life situations
• Intelligence was used to sort students and predict their success	• Intelligence is used to understand human capacities and the many and varied ways students can achieve

(Harvey, Silver, Strong, 2000: 7)

As it is seen in the chart our definition of intelligence and attitude towards an individual have changed a lot. First, intelligence is no longer stable, single and quantifiable but a process that can be developed. Second, intelligence was unitary measured in isolation but now it is a multi-dimensional concept which can only be measured in real life contexts. The last but not the least important item is that

intelligence was used only to predict success but today it is used to understand human abilities and different ways students can achieve.

Gardner in one of his articles (1997: 21) claims that the Theory of Multiple Intelligences has two strong claims:

> " - The first is that all humans possess all these intelligences: indeed they can collectively be considered a definition of Homo sapiens, cognitively speaking.
>
> - The second claim is that just as we all look different and have unique personalities and temperaments, we also have different profiles of intelligences. No two individuals, not even identical twins or clones, have exactly the same amalgam of profiles, with the same strengths and weaknesses. Even in the case of identical genetic heritage, individuals undergo different experiences and seek to distinguish their profiles from one another."

As stated above; since intelligences are fed through biological and also environmental stimulation, you might have the biological heredity to be strong in a specific intelligence but might not have had the environmental stimulation.

T. Hoerr (1996) also claims that everyone possesses some degree of each type of intelligences, but no two individuals have exactly the same figure. He also adds (1996: 12) that "As performances in every discipline become increasingly sophisticated and complex, proficiency in more than one intelligence is essential for success."

2.3. Principles of Multiple Intelligence Theory

The following principles are a condensation of J. Keith Rogers and based upon his study of Howard Gardner's theory: (www.harding.edu/cbr/midemo/prin.html)

1. Intelligence is not singular: intelligences are multiple.
2. Every person is a unique blend of dynamic intelligences.
3. Intelligences vary in development, both within and among individuals.
4. All intelligences are dynamic.
5. Multiple intelligences can be identified and described.
6. Every person deserve opportunities to recognise and develop the multiplicity of intelligences.

7. The use of one of the intelligences can be used to enhance another intelligence.
8. Personal background density and dispersion are critical to knowledge, beliefs, and skills in all intelligences.
9. All intelligences provide alternate resources and potential capacities to become more human, regardless of age or circumstance.
10. A pure intelligence is rarely seen.
11. Developmental theory applies to the theory of multiple intelligences.

Any list of intelligences is subject to change as we learn more about multiple intelligences.

Accordingly, the Theory of Multiple Intelligences can be considered as a revolution in the way we understand human potential in terms of taking individual differences into consideration and bringing diversity in thinking and learning styles.

Altan (2001: 55) says that

> "Another important point to keep in mind is that MI inventories are not for labelling our students and for placing them in a category of one of the intelligences. Instead they are for helping us in the planning process so that we know where we can develop some of the intelligences."

Gardner in one of interviews (1999) gives an example which emphasises the importance of pluralistic view of MI theory:

> "Here is an example I use in school. If you only read about wars from the point of view of the victors or the point of view of the losers, you really don't have a sense of what the world is like. But if you read about a particular war in different text books, or look at movies about it made in different cultures, you get a much more varied picture of the scene, the strategy, the players and their concerns in that particular conflict" (An interview with H. Gardner, 1999, Kurtzel Joel).
>
> "Try to present at least 3 options. One is no choice at all. Two creates a dilemma. With three you begin to have real choice and flexibility."

It is an undeniable fact that Gardner's theory is a dream come true for teachers and learners. However, as Pyle (1981) states that if people who instruct do not trust in

what they are doing, its value cannot be more useful than a sleep of beauty and people instructed will be unsuccessful or will learn in spite of the system. It is highly probable that the more teachers see learning and teaching in a narrow way, the more they will get involved only linguistic and mathematical tasks.

As K. Nelson (1995) mentions, MI theory can help teachers to create an individualised learning atmosphere. Besides, the signs of personalisation not only enable students to discover their own strengths but also do their best to improve their weaker areas and feel better about themselves. It is therefore reasonable to assume that if there is no place for a learner to prove himself in the lesson, he will look for it in somewhere else.

Strenberg (1997) analyses the issue both from the learners' and the teachers' point of view and states that teaching in all different abilities makes the teacher's job easier because it is easier to meet all the students' needs rather than individualising instruction for each and every student in a crowded class. He adds that by emphasising each type of ability and presenting the activities that suit them, students can be given an opportunity to experience a sense of success and fulfilment otherwise, they may never accomplish their full potential.

Eggen and Kauchak (2001: 123) explain how different views of intelligence (MI) change teachers' point of view in the following sentences:

> "... When we enter our classrooms for the first time, a sea of faces appears before us. In some ways, our students seem very much alike; they are nearly the same age, they have similar interests, and they study common subjects. A closer look, however, reveals many differences. Almost certainly, we have both boys and girls in our classes, and their ethnic and cultural backgrounds differ. Learning is nearly effortless for some; others struggle with even basic ideas. ... Suddenly; our sea of faces turns into 30 individuals!"

On the contrary, there are also several criticisms against MI theory. Some of them are given in the following items: (Gardner, 1995: 202).

"- Now seven intelligences have been identified, one can -and perhaps should- create seven tests."

Gardner's comment: "My concept of intelligences is an outgrowth of accumulating knowledge about the human brain and about human cultures, not the

result of a priori definitions or of factor analyses of test scores. As such, it becomes crucial that intelligence be assessed in ways that are "intelligent-fair" that is, in ways that examine the intelligence directly rather than through the lens of linguistic or logical intelligence (as ordinary paper and pencil tests do.) ... If one wants to examine musical intelligence, one should expose an individual to a new melody in a reasonably familiar idiom and see how readily the person can learn to sing it, recognise it, transform it, and the like."

"- An intelligence is the same as a domain or a discipline."

Gardner's comment: An intelligence is a biological and psychological potential: that potential is capable of being realised to a greater or lesser extent as a consequence of the experiential, cultural and motivational factors that affect a person. In contrast, a domain is an organised set of activities within a culture, one typically characterised by a specific symbol system and its attendant operations. Any cultural activity in which individuals participate on more than a casual basis, and in which degrees of expertise can be identified and nurtured, should be considered a domain. Thus, chess, gardening, and rap music are all domains in Western culture. Any domain can be realised through the use of several intelligences."

"- An intelligence is the same as a learning style, a cognitive style or a working style."

Gardner's comment: "The concept of style designates a general approach that an individual can apply equally to every conceivable content. In contrast, an intelligence is a capacity, with its component processes, that is geared to a specific content in the world such as musical sounds or spatial patterns ..."

"- MI theory is not empirical."

Gardner's comment: "MI theory is based wholly on empirical evidence. Anyone who puts this criticism cannot have read Frames of Mind. Literally hundreds of empirical studies were reviewed in that book and the actual intelligences were identified and delineated on the basis of empirical findings. In the last decade, I have collected and reflected on empirical evidence that is relevant to the claims of MI theory, 1983 version. Thus work on the development in children of a "theory of mind" as well as the study of pathologies in which an individual loses a sense of social judgement, has provided fresh evidence for the importance and independence of interpersonal intelligence."

"- MI theory is incompatible with general intelligence (g) with hereditarian accounts, or with environmental accounts of the nature and causes of intelligence.

Gardner's comment: "MI theory questions not the existence but the province and explanatory power of g. While I have been critical of much of the research in the g tradition, I do not consider the study of g to be scientifically improper, and I am willing to accept the utility of g for certain theoretical purposes. My interest obviously, centers on those intelligences and intellectual processes that are not covered by g."

"- MI theory so broadens the notion of intelligence that it includes all psychological constructs and thus vitiates the usefulness as well as the connotation of the term."

Gardner's comment: "MI theory is about the intellect, the human mind in its cognitive aspects. ... However, MI theory makes no claims whatsoever to deal with issues beyond the intellect. MI theory is not, and does not pretend to be, about personality, will, morality, attention, motivation and other psychological constructs. Note as well that MI theory is not connected to any set of morals or values. ..."

Indeed, the major strength of MI is that it is context-specific, school-specific and teacher-specific. In addition to that MI qualifies one of the broadest based theories which include all kinds of learning needs.

Since MI theory values culture and cultural specialities, it is fair to say that MI theory is hand in hand with multiculturalism. Since there is diversity in culture style and thinking style, it can be said that both value diversity. As it is known, most of us come out of a tradition and because people do not easily give up the notions they hold dear, the acceptance of new ideas always involves a struggle.

Sternberg (1997: 24) mentions about the link between society and MI theory and he states:

> "In a pluralistic society, we cannot afford to have a monolithic conception of intelligence and schooling; it's simply a waste of talent. The more we teach and assess students based on a broader set of abilities, the more racially, ethnically, and socio economically diverse our achievers will be. We can easily change our closed system and we should. We must take a more balanced approach to education to reach all of our students."

An MI approach implies that different intelligences are discovered and valued, but how that consciousness is integrated into the everyday instruction can be different in every setting.

2.4. Why MI Theory for Adults?

The Theory of Multiple Intelligences has been focused mostly on child development although it applies to all ages. MI theory is new for many educators but it is even newer for adult learners. T. Hoerr claims (1996) that since today's adults have not had experiences such as working collaboratively and reflecting on their own learning, they have difficulty in accepting these new methods simply because they are different from their own school experiences.

L. Shelton in her project (www.newhorizons.org.) argues that it is known that most of the adult learners think that it is too late to learn something new or they have missed the boat. They characterise themselves talented rather than smart when they are talking about their skills.

The theory of Multiple Intelligences conveyed a new dimension to understanding how adults learn and succeed. MI theory not only allowed educators but also society to appreciate adult learners for their intelligences, instead of concentrating on their weaknesses. She states that

> "How would you feel if you had to walk out into the world everyday with a spotlight on your failings, your weaknesses - and 30 or 40 years of daily messages that say, "you don't measure up."

T. Hoerr states (1996) that MI theory makes sense because the qualities that are necessary to achieve success in school are different from the qualities that are necessary to achieve success in life. Success in the "real world" requires strength in a variety of intelligences.

Unlike children, when adults understand how they learn best, they can sit still for a long time, do whatever possible to reach their target and to increase self-confidence. What is more, they will make an effort to understand MI since they have to use various intelligences to gain and to share information in real life. As a teacher, it should be remembered that learners are not alike. Each of them is unique and they are all good at learning. Our mission is to search and find what and how. That's why

MI, which argues that a person can be smart in many ways, is important in adult learning, too.

In a story titled "Geology of Teaching", by J. Ostrow (2000: 27), the importance of MI theory is explained by giving the similarities between Geology and Teaching.

"The Geology of Teaching"

Geology is all about getting to the core of things - finding out about the extraordinary characteristics of this planet. Questions lead to more questions. Our environment has been shaped by layers and layers of earth. Geology is getting to know these layers, finding beauty in ordinary things that we take for granted, like rocks. ...

The beauty of teaching is looking at my students as unique souls -not just another group of students. The geology of teaching is learning about students, finding the "inner beauty of the thunder egg"- they all have one. The geology of teaching is patience. I need to work on my patience as I wait for my rock tumbler to go through its four cycles of grinding and polishing.

I have learned to be patient, but not always gentle ... I know that there are remarkable layers of beauty and colour within an ordinary "normal-looking" rock. ... I can wait patiently, imagining what it might look like, but when it comes time to dig deeper with my curiosity, I must know exactly how to handle it. If I smash it, I will get little pieces. If I cut it with a rock saw, I must know which way to cut or I won't get the layers I want to see. Sometimes it's a guess-sometimes I know exactly What I'm doing and why ... With some, I know exactly where I need to dig in order to learn as much as I can about them. With others, it takes more polishing, more grinding from me."

2.5. Description of Eight Types of Intelligences

The factors led Gardner to a conceptualisation of human intellect which was more spacious. In the theory of Multiple Intelligences (MI) Gardner proposed the existence of a number of relatively independent human intelligences and he claimed

(1993) that except for abnormal people, intelligences are always in harmony and an adult has several of them.

As C. Rose and M. Nicholl claim (1997) that using our all areas of intelligences will give us an opportunity to think in new ways. As a result, we will become more creative and self-confident.

First, Gardner has identified seven types of intelligences. In practice, the seven intelligences are not detached but integrated in unique combinations as one intelligence that constructs the mind, body and spirit. They are engaged daily to interpret the world around us. In addition to that Gardner suggests (1983) that there are a number of distinct forms of intelligences that each person has in varying degrees. In his interview with Joel Kurtzman (1999) Gardner states that

> "At present I can pinpoint nine different intelligences. But the number isn't crucial. The point is that we all have different ways of thinking and that no two people will therefore think in exactly the same way."

Armstrong (1994: 12) has combined these ideas into the following key points:

"1. Each person possess all seven intelligences. MI theory is not a type of theory for determining the one of the intelligence that fits. It is a theory of cognitive functioning, and it proposes that each person has capacities in all seven intelligences. Of course; the seven intelligences function together in ways unique to each person. Some people appear to possess extremely high levels of functioning in all or most of the seven intelligences. Most of us fall somewhere in between these two poles- being highly developed in some intelligences, modestly developed in others and relatively underdeveloped in the rest.

2. Most people can develop each intelligence to an adequate level of competency. Although an individual may bewail his deficiencies in a given area and consider his problems innate and intractable, Gardner suggests that virtually everyone has a 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. Gardner points out that each intelligence as described above is actually a "fiction": that is no intelligence exists by itself in life. Intelligences always interacting with each other. For example;

while cooking a meal; one must read the recipe (linguistic), possibly divide the recipe into half (logical/mathematical), develop a menu that satisfies all members of the family (interpersonal), and placate one's own appetite as well (intrapersonel).

4. There are many ways to be intelligent within each category: There is no standard set of attributes that one must have to be considered intelligent in a specific area. Consequently, a person may not be able to read, yet be highly linguistic because he can tell a terrific story or has a large oral vocabulary. Similarly, a person may be quite awkward on the playing field, yet possess superior bodily-kinesthetic intelligence when she weaves a carpet or creates an inlaid chess table. MI theory emphasises the rich diversity of ways in which people show their gifts within intelligences as well as between intelligences."

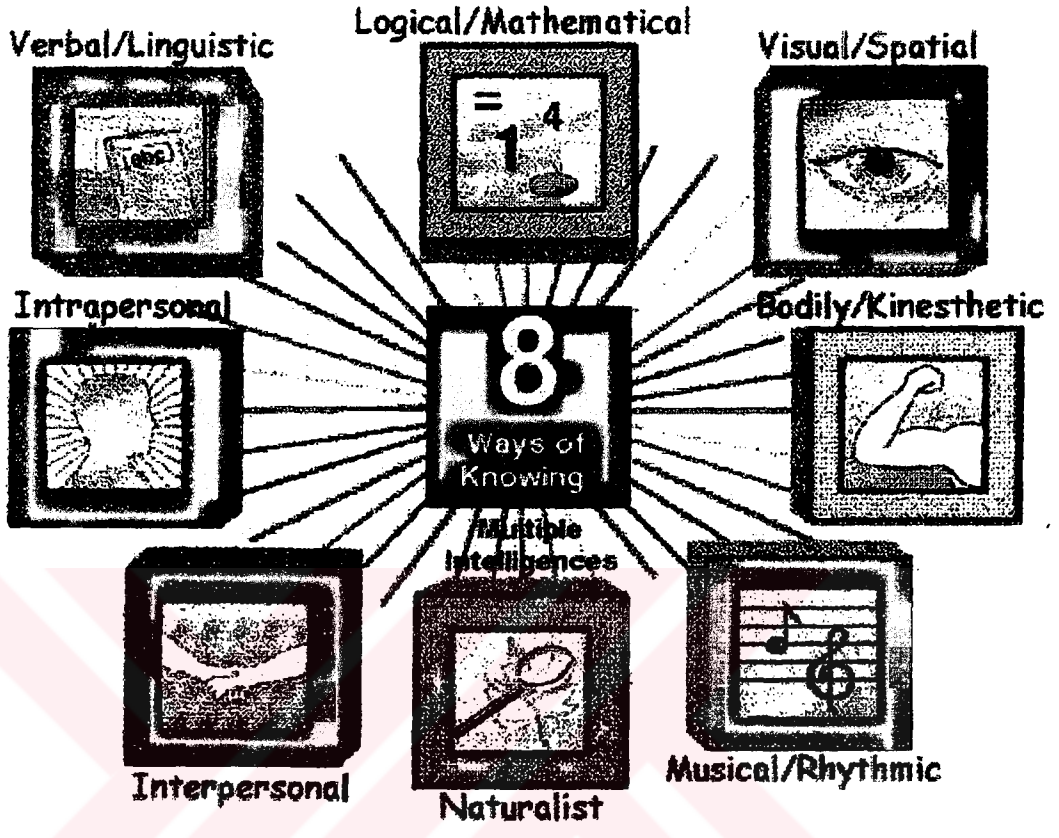
These eight intelligences are:

1. Verbal/Linguistic Intelligence
2. Logical/Mathematical Intelligence
3. Visual/Spatial Intelligence
4. Bodily/Kinesthetic Intelligence
5. Musical Intelligence
6. Interpersonal Intelligence
7. Intrapersonal Intelligence
8. Naturalistic Intelligence

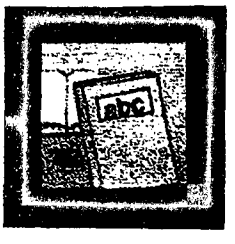
KURULU MERKEZİ

T.C. YÜKSEKÖĞRETİM KURULU
DOKÜMANTASYON MERKEZİ

Multiple Intelligences



2.5.1. Verbal/Linguistic Intelligence



"The spoken word made it possible for our ancestors to move from a concrete to abstract thinking as they progressed from pointing to objects to naming them and to talking about the objects in their presence. Reading has made it possible for human beings to know about the objects, places and processes that we have not personally experienced and writing made it possible to communicate with people that the speaker has never met. It is thoroughly the ability to think in words that human beings can remember, analyse, problem solve, plan ahead and create. Since the normal fetus develops hearing while still in womb the foundation of verbal-linguistic intelligence is laid before birth." (Campbell, 1996: 2).

Gardner claims (1983) that Verbal/Linguistic intelligence is the capacity to use your native language or other languages, to express yourself, what you think, and to understand other people. It deals with abilities in acquisition, formation and processing of language. This type of intelligence also includes thinking symbolically,

reasoning abstractly and creating conceptual verbal patterns. In addition to this, reading, writing, and language skills such as metaphors, similes, puns and analogies can be listed under this title. These individuals love words, both spoken and written, moreover, they learn by verbalisation, by seeing and hearing words and enjoy playing word games.

According to Gardner (1983) verbal intelligence is firstly the ability to use language to convince other individuals. Secondly, the capacity to use this tool to help one remember information, rules of a game, directions for finding one's way, understand procedures for operating a new machine. Thirdly, the ability to explain, giving oral instructions through the word in its written form.

> "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" (Gardner, 1993: 21).

Verbal/Linguistic Intelligence, as Silver et. al (2000) state, expresses itself in the ability to manipulate and use words effectively whether orally or in writing such as debate, story telling, poetry, prose writing ... etc.

Armstrong (1994: 66) states that

> "Linguistic intelligence is perhaps the easiest intelligence to develop strategies for, because so much attention has been given to its cultivation in the schools. I do not include the traditional linguistic strategies involving textbooks, worksheets, and lectures among the five strategies, however, simply because they have been over used. They serve as excellent channels for effectively imparting certain kinds of information. But they are only one small part of a vast repertoire of teaching strategies."

The five strategies described below are those which may bring out the linguistic intelligence in every learner:

1. Story telling: Story telling should be viewed as an important teaching tool in the classroom. By listing the essential elements, ideas, and then adding your imagination, colourful characters and a plot in the story, you cannot

only help your students to visualise but also impress simply with your willingness to be creative.

2. Brainstorming: The brainstorming can be about anything such as suggestions, thoughts, dreams ... etc. The general rules for brainstorming are: share everything related to the topic and then organise them in different formats such as an outline, a mind map, or a Venn diagram. This strategy allows all students to participate and reflect their ideas.
3. Tape Recording: Tape recorder is another valuable learning tool in classrooms. This is because it offers students to talk aloud about a problem and hear their own pronunciation, intonation, inner feelings ... etc. and also it can be used to provide information or as a reporter of information.
4. Journal Writing: It involves students in writing about anything they feel and think during the class day or about a specific situation. They can be shared between teachers and students or be kept private.
5. Publishing: Since writing is a powerful tool for communicating ideas and influencing other people, students' writing should be published in a magazine or sent to a real friend. When students see that others care their writings and write an answer, they will be highly motivated to continue.

It is likely that a teacher who has highly developed Verbal/Linguistic Intelligence often shows the following characteristics: (Campbell, 1996: 4).

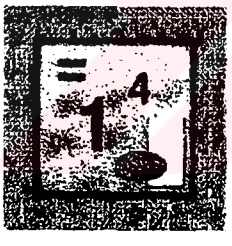
1. Reads and listens effectively, comprehends, summarises, interprets or explains and remembers what has been read.
2. Speaks effectively to a variety of audiences for a variety of purposes, and knows how to speak simply, persuasively, or passionately at appropriate times.
3. Uses listening, speaking, writing, reading to remember, communicate, discuss, explain, persuade, create knowledge, construct meaning and reflect upon language itself.
4. Strives to enhance his or her own language usage.
5. Demonstrates interest in poetry, story telling, debate, speaking, writing or editing.

Verbal/Linguistic Intelligence displays itself in its fullest form in poets, teachers, lawyers, politicians, writers, journalists, salespersons, playwrights ... etc.

Teachers who have developed verbal/linguistic intelligence think in words and communicate to students in a verbal way. In classroom settings, they tend to deal with words and language, both written and spoken forms, moreover, teach best through reading aloud, speaking, encoding grammar structures. They enjoy checking essays, telling stories, playing with words, class discussions, teaching new words. In addition to that they expect their students to analyse the language, think in words, write well, and enjoy listening to spoken word, appreciate rhymes and also join class discussions.

2.5.2. Logical/Mathematical Intelligence

Gardner (1993) suggests that this type of intelligence has been examined by traditional psychologists especially Jean Piaget and other psychologists. Campbell states that (1996: 35).



"Piaget mapped the progression of logical intelligence beginning with a child's interactions with objects in the environment; to the discovery of number, to the transition from concrete objects to abstract symbols, to the manipulation of abstractions and to the consideration of hypothetical statements with their relationships and implications."

Logical/Mathematical Intelligence is most often associated with the capacity to use numbers effectively and reason well. This intelligence involves various components. Such as mathematical calculations, problem solving, deductive, inductive and scientific reasoning, generalisation and classification ... etc.

Armstrong (1994: 69) states that

> "Logical/Mathematical thinking is typically restricted to math and science courses. There are components of this intelligence, however that are applicable throughout the curriculum. The emergence of the critical thinking movement certainly suggests one broad way in which logical/mathematical intelligence has affected the social sciences and humanities."

The following five major strategies for developing mathematical/logical intelligence can be employed to all schools:

1. Calculations and qualifications: Teachers should be encouraged to discover opportunities to talk about numbers to involve logical/mathematical people. It is surprising that lots of stories and novels make reference to numbers. For instance; if there is a mention of fifty pounds a teacher may ask the students how that figure translates into U.S. dollars. As a result, by tuning into the numbers during the nonmathematical subjects, we can show our students that math belongs to real life not only maths.
2. Classifications and categorisations: The main aim of this strategy is that organising ideas always makes them easier to remember, discuss and think about it. For example: diagrams, mind maps, using lists ... etc.
3. Socratic Questioning: In Socratic questioning, the teacher questions students' point of view. The aim is to question the rightness or wrongness of their beliefs and also to sharpen students' criticial thinking.
4. Heuristics: It provides students to find their way in a problem. For instance, separating the various parts of the problem, offering a solution, finding a related problem to yours ... etc.
5. Science Thinking: It aims to look at events from a scientific point of view. For instance, students can study on scientific ideas which have an influence on history such as how the atomic bomb influenced the outcome of World War 2.

It is likely that a teacher with well-developed Logical/Mathematical Intelligence:

1. Is familiar with the concepts of quantity, time, cause and effect.
2. Demonstrates skill at logical problem solving.
3. Uses mathematical skills such as estimating, calculating, algorithms, interpreting, statistics, and visually representing or research methods.
4. Thinks mathematically by gathering evidence, making hypothesis, formulating models and building strong arguments.
5. Is analytical in approach to problems. (Campbell, 1996: 35).

Logical/Mathematical Intelligence is highly developed in mathematicians, tax accountants, scientists, engineers, inventors, and researchers ... etc.

Teachers who have developed Logical/Mathematical Intelligence think by reasoning. In their classrooms, they teach best through explaining in patterns, structures, classifying and sequencing all items. They like using puzzles, problem solving and rule-based activities, asking cosmic questions during the lesson. They always have a logical rationale or argument for questions.

They expect their students to ask questions about how things work, be systematic and analytical, compute arithmetic problems in head quickly, think scientifically, develop strategies, besides, categorising and have a good sense of cause-effect in a given context.

2.5.3. Visual/Spatial Intelligence

Campbell (1996: 96) states that



"Visual imagery is a means of knowing the world that is older than linguistic symbolism. Fossil records indicate that long before the human mechanisms for speech had evolved, the organs of visions were highly developed, serving as important tools of knowledge for early human beings. It was visual/spatial intelligence that inspired the earliest record of human drawings."

He also adds that (1996) most educational programs stress the significance of abstract symbols in reading, writing, and arithmetic, overlooking other aspects of visual/spatial intelligence.

Gardner (1983) defines visual/spatial intelligence as the ability to be sensitive to form, space, colour, line, and shape. It includes perceiving from different angles, image manipulation, active imagination, graphic representation, and forming mental images. He also points out that this type of intelligence is also formed in blind children and claims (1993: 22) that

> "The visual arts also employ this intelligence in the use of space. Damage to the right posterior regions causes impairment of the ability to find one's way around a site, to recognise faces or scenes, or to notice fine details."

He adds (1993) that blind people provide an illustration of the difference between the spatial intelligence and visual perception. A blind person can distinguish

shapes by an indirect technique; running a hand along the object translates into length of time of movement, which in turn is translated into the size of the object.

Armstrong (1994) totally agrees with Campbell and states (1994) that in pre-historic times, the cave drawings are the most eye-catching evidence that spatial learning have been used throughout history. Unlike Campbell, Armstrong points out (1994) that in today's schools the importance of visual-spatial intelligence is neglected by translating the information into simply writing on the board. On the contrary, visual/spatial intelligence involves using photos, slides, movies, drawings and graphic symbols ... etc.

Armstrong (1994: 72) explains five teaching strategies designed to activate students' visual/spatial intelligence:

1. Visualisation: This strategy involves having students close their eyes and see images or pictures of what they have read or studied. Then they can be asked to draw or talk about it. This strategy is also called as "inner blackboard" since students create and place their own material on their mental blackboard.
2. Colour Cues: It is known that highly visual/spatial students are sensitive to colour. This strategy offers teachers to avoid black and white texts, worksheets and black board markers. There are, however, lots of creative ways of putting variety, colour into the classroom setting as a learning tool. For instance; using different colours of board markers, transparencies to emphasise patterns, rules and classifications during instruction; coloured pens on which to write assignments; coloured papers, pencils to colour code material they are studying ... etc.
3. Picture Metaphors: A picture metaphor expresses an idea in a visual image. This strategy is based on establishing connections between what a student already knows and what is being presented. For instance; if the major organs in the body were animals, which ones would they be?
4. Idea Sketching: The idea sketching strategy involves building a relationship between the drawings and the subject matter. So, the students can be asked to draw rapid drawings that reveal central ideas.
5. Graphic Symbols: It is an undeniable fact that pictures and graphics are extremely important to the understanding of visual/spatial student. Teachers

who can support their teaching with drawings and graphic symbols cannot only reach a wider range of learners but also be a model for students who feel shy about sharing their own drawing with the class.

People who work as a photographer, artist, architect, sculptor, sailor, surgeon, carpenter, mechanic, football coach, and painters ... etc. all have highly developed visual/spatial intelligence.

It is likely that a teacher with well-developed visual/spatial intelligence:

1. Recognises faces, objects, shapes, colours, details, and scenes.
2. Perceives and produces mental imagery, thinks in pictures and visualises details.
3. Uses visual images as an aid in recalling and reminding information.
4. Teaches with graphs, charts, maps, and diagrams.
5. Is proficient at representational or abstract design.

(Campbell, 1996: 97).

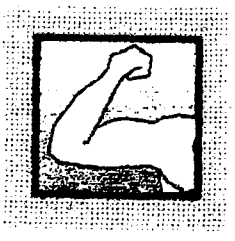
Teachers who have this type of intelligence are interested in visual details; objects, shapes, colours, and they design their lessons by using graphs, tables or images. They think in images and pictures. In their classrooms, the seating plan helps them to remember the students' names.

They teach best through doing presentations with pictures, maps, video and representing something graphically. These teachers generally like to attract the students' attention by highlighting the important items with colours and also by using visual accompaniment for lectures. They want their students to think in images and pictures, draw the scene while listening, enjoy art activities, prepare class posters, colourful projects, and use visual memory techniques such as establishing connections ... etc.

2.5.4. Bodily/Kinesthetic Intelligence

Campbell states (1996) that Bodily/Kinesthetic Intelligence involves the ability to combine body and mind to perfect physical performance. By the help of automatic and voluntary movements, kinesthetic intelligence improves and leads to using our bodies in highly differentiated and skilled ways.

Gardner (1983: 235) states 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 from a sense of self which he will perpetually modify, and which will in turn come to influence his thoughts and behaviour as he comes to respond to others in his environment in terms of their special traits and behaviour."

Bodily/Kinesthetic Intelligence is the ability to solve problems or to fashion products using one's whole body or parts of the body. This intelligence includes physical skills such as coordination, mind-body balance, flexibility, mimetic abilities, speed, strength, and improved body functions.

Armstrong (1994: 74) claims that "Students may leave their textbooks and folders behind when they leave school, but they take their bodies with them wherever they go." So it can be claimed that teachers should help their learners by participating them into learning process to increase their retention and understanding.

The strategies below are some of the ways that can be used to integrate bodily/kinesthetic intelligence in classroom settings.

1. Body Answers: This strategy involves responding the teacher's instruction by using bodies such as holding up fingers, blinking one eye instead of raising hands ... etc.
2. The Classroom Theatre: By dramatising, role-playing or producing puppet shows students may show what they have learnt in a communicative and enjoyable way.
3. Kinesthetic Concepts: This strategy requires students to translate information from linguistic or logical symbol system to bodily-kinesthetic expression such as physical gestures, pantomimes ... etc.

4. Body Maps: The human body can be used as a toll or a map for specific knowledge domain. For instance, using fingers in counting or calculating

(Armstrong, 1994: 74).

According to Gardner (1983) those who have the ability to use their bodies to solve problems they encountered have well-developed kinesthetic intelligence. Bodily/Kinesthetic intelligence is highly developed in athletes, dancers, surgeons, craftspeople, trainers, football-basketball players, actors, and also mechanics, jewellers who work with hands.

It is likely that a teacher who has bodily/kinesthetic intelligence:

1. Teaches best by direct involvement and participation.
2. Remembers most what was done, rather than what was said or observed.
3. Participates or takes an active role in role plays, games and enjoys physical exercise.
4. Is sensitive and responsive to physical environments and physical systems.
5. Invents new approaches to physical skills or creates new forms in physical activities

(Campbell, 1996: 68).

Teachers who have this type of intelligence attach importance to communication through body language and other physical gestures. In their classroom, they teach best through processing knowledge through bodily sensations and moving. They like physical movement and role play activities. They generally use physical games and also demonstrate a new grammar structure or present new vocabulary by using gestures or mimics. Besides; since it is difficult to see this kind of teachers to sit still for a long time, they usually monitor students or join them. This type of teachers expect their students to use their bodies, perform well in physical activities, act out in role-plays, and be always active in the classroom.

2.5.5. Musical Intelligence



Campbell states (1996) that there is no doubt that music is one of the oldest art forms, using the human voice and body as natural instruments and means of self expression. It is an art that was born with us. All human beings can be considered inherently musical since they hear their mother's heart beat for nine months before they are born. This is a capability that can be developed in ourselves and in others if necessary conditions are provided.

It is clearly seen that throughout the history since stone age societies, music has played an important role in our lives. Gardner states (1993) that proof from various cultures supports the notion that music is universal faculty.

In addition to that Gardner (1993) claims that musical ability should be considered as an intellectual skill like mathematics because there are lots of evidence to support the explanations that it deserves consideration.

Since music is considered as an aural language, it has a unique symbol system. So musical intelligence has its own rules and thinking structures. On the other hand, as many children and adults enjoy melody and like participating in musical activities, in the classroom setting music can be used to create a positive atmosphere just like we do at home when we want to relax.

Campbell states (1996) that since there is a strong connection between music and the emotions, music in the classroom can be used as an aid to create a positive emotional atmosphere promoting learning. Music can also be used to increase the suspense, sadness, tragedy or joy of stories or texts from literature or history, moreover, songs have a role to add enthusiasm and a welcoming environment in the classroom.

Armstrong defines (1994: 3) musical intelligence as "the capacity to perceive, discriminate, transform and express musical forms." This intelligence includes sensivity to rhythm, pitch or melody. He also emphasises (1994) the importance of music in our daily lives in the 20th century and criticises the educators who ignore music in learning. He states (1994: 77) that "Advertisers have discovered that musical jingles help people remember their client's product. Educators, however, have been slower to recognise the importance of music in learning".

The following strategies are given by Armstrong (1994: 77) to help teachers to integrate music into their lessons:

1. Rhythms, Songs, Raps and Chants: This strategy suggests to identify the main point you want to stress in a rhythmic format. Another alternative is that students can be invited to create songs, raps or chants that summarise the subjects or the text they have studied.
2. Discographies: This strategy requires to collect related tapes, compact discs, video cassettes with the subject beforehand. The class can discuss the significance of the songs in relation to the topic of the unit.
3. Supermemory Music: In this strategy it is claimed that students can easily get the information if they listen to the teacher's instructions against musical background.
4. Mood Music: The music which includes sound effects, nature sounds, classical or contemporary pieces help teachers to create an appropriate mood and positive atmosphere for a lesson.

It is likely that a teacher with well-developed musical intelligence:

1. Enjoys and seeks out opportunities to hear music or environmental sounds in the learning atmosphere. Is eager to be around and learn from music and musicians.
2. Responds to music kinesthetically by conducting, performing, creating or dancing; emotionally through responding to the moods and tempos of music.
3. Develops the ability to sing or play an instrument alone or with others.
4. Enjoys playing with sounds, and when given a phrase of music, can complete a musical statement in a way that makes sense.
5. Discusses different musical styles and cultural variations. Demonstrates interest in the role music has and continues to play in human lives

(Campbell, 1996: 135).

Possible career interests that use musical intelligence include singers, composers, conductors, musicians, dancers, disc jockeys ... etc.

Teachers interested in playing background music to increase classroom motivation are very sensitive to sounds in the environment. Various sounds, tones, and rhythms cause a change in their facial expressions or body movement. In their classrooms, they like using background music and melodies related to the unit/topic. Moreover, they generally tend to create a class discussion atmosphere about the content of the songs in relation to the topic or feelings of the songs as a pre- or post activity.

Teachers who have musical intelligence teach best through melody and rhythm. In addition, they establish a musical learning atmosphere not only by using background music but also by teaching reading through music, setting up a music laboratory with cassettes, presenting lyrics or including sound related items in their lessons.

These teachers, typically expect students to compose their own songs, write the lyrics or in other words, think in tones. Teachers who have dominant musical intelligence focus students' attention to language accents, others' speech, patterns while they are listening to tape scripts.

2.5.6. Interpersonal Intelligence

Gardner states (1993: 23) that



"Interpersonal intelligence builds on a core capacity to notice distinctions among others; in particular, contrasts in their moods, temperaments, motivations and intentions. In more advanced forms, this intelligence permits a skilled adult to read the intentions and desires of others, even these have been hidden."

Campbell shares the similar argument with Gardner and he argues (1996: 160) that "Interpersonal intelligence enables us to understand and communicate with other people". He also states that this intelligence involves the ability to understand how others' moods, feelings, intentions and motivations work and also what motivates them ... etc.

During his research, Gardner has noticed that damage in the frontal lobes has a crucial role in interpersonal intelligence. He claims (1993: 23) that "Damage in this

area can cause profound personality changes while leaving other forms of problem solving unharmed - a person is often "not the same person" after such an injury."

Another effectively related point deserves to be mentioned here is the role of interpersonal intelligence in education. Campbell (1996) claims that in today's changing society, lots of students are cut off close relationships and unfortunately, schools might prefer to overlook students' social and emotional needs. Just as Campbell, so Mebosniak (1998) mentions about the need for relationships and social experience in schools and he also states that despite all these huge structural changes in our schools we notice a unique phenomenon. Most days, most students in the year 2000's still get up and go to school to see their friends, to study an interesting subject to them, to play organised sports or to go to social events in other words; in order to find out Who am I? They have to be with generational group and have experiences with others.

Because of these reasons the following strategies are given by Armstrong (1994: 79) to help teachers to meet their students' need for belonging and connection to others.

1. Peer-Sharing: The aim of this strategy is to encourage students to share their knowledge with different members of the class. Peer sharing can also develop peer tutoring in which better student helps to another student.
2. People Sculptures: This strategy enables students to represent things that were represented only in their students' book or lectures; in theoretical contexts. Students have a chance to place the information in its social setting. For instance; if students are learning the skeleton system, they can build a people sculpture in which each student represents a bone or group of bones.
3. Cooperative Groups: This strategy involves studying in small groups of three to eight members. The group can work collectively in which each member contributes ideas and shares the responsibility ... etc. This strategy is appropriate for MI teaching because students can share their responsibilities according to their dominant intelligences. For instance; while a socially developed student is organising the group, a linguistically strong member can do the writing and so forth.

4. Simulations: It involves a group of students coming together to create an "as-if" environment. The teacher can provide a scenario and costumes of that time and ask the students to act out the scenario. This strategy not only includes bodily-kinesthetic, linguistic and visual intelligences but also interpersonal intelligence because the human interactions provide them to make the theoretical information practical and also permanent.

It is likely that a teacher with well-developed interpersonal intelligence:

1. Connects with parents and interacts with others.
2. Forms and maintains social relationships.
3. Perceives the feelings, thoughts, behaviours and lifestyles of others.
4. Influences the opinions or actions of others.
5. Understands and communicates effectively in both verbal and non-verbal ways

(Campbell, 1996: 160).

This intelligence appears in a highly developed form in political leaders, teachers, therapists, religious leaders, skilled parents, salespeople ... etc.

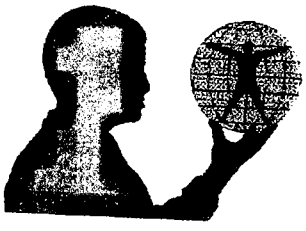
Interpersonally skilled teachers enjoy interacting with others and generally have a capacity to influence their students. This type of teachers show a great deal of empathy for their students and tend to understand their feelings and ideas. In addition to this, teachers who have strong interpersonal intelligence reflect a sense of belonging.

In their classrooms, they teach best through person to person interaction and cooperation. They are generally natural leaders, so they tend to organise groups and create collaborative learning atmosphere. These teachers expect their students to join group games, group discussions, share information, work co-operatively, form teams and empathise with others and also understand diverse points of view.

2.5.7. Intrapersonal Intelligence

There is an undeniable fact that the more we can understand our own thoughts and feelings, the better we can relate our inner world to the outer world of experience.

According to Gardner (1993: 25)



"Intrapersonal ability is based on the knowledge of the internal aspects of a person; access to one's own feeling life, one's range of emotions, the capacity to effect discriminations among these emotions and to label them and to draw upon them as a means of understanding and guiding one's own behaviour."

He adds (1993) that since this intelligence is considered as the most confidental one, it needs support from language, music or some other more expressive forms of intelligences.

Intrapersonal intelligence gives us a chance to explore ways to understand internal aspect of the self, in other words it is the ability to understand our weaknesses, strengths, moods and desires ... etc. A person who has a dominant intrapersonal intelligence has the capacity to understand and work with oneself to operate effectively in his life.

Campbell (1996) claims that in the depth of our inner world, we have certain strengths and weaknesses. By the help of these strengths we not only rely on to understand ourselves and others but we also plan our life and solve our problems. If we did not have these inner resources, it would be difficult to live a productive life.

Campbell et. al. (1996: 195) also claim that "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 behaviour." They also point out (1996) that such a critical self awareness and observation is as important for teachers as students to know more about our inner world.

Armstrong (1994: 82) shares the same idea with Campbell and suggests the following strategies:

1. One-Minute Reflection Periods: After a presentation of a new structure or a new topic, one minute reflection periods offer students time to think about

it to build a connection between the new information and their own lives. Silence or background thinking music is offered as the best environment for reflections.

2. Personal Connections: The aim of this strategy is to make connections between what is being taught and the students' lives. Students should use the given information in one way or another in real life. For instance; for a lesson on world geography, they can find the countries they have studied on the map.
3. Choice Time: It includes offering opportunities for students to make decisions about their learning experiences. They can either choose to work on the problems on a specific page in their students' book or they can choose an open ended project.
4. Feeling-Toned Moments: As it is known, all human beings have an emotional brain consisting subcortical structures; so this strategy suggests educators to teach with feeling in their classrooms. For instance, there should be moments where students laugh, feel angry or get excited ... etc.
5. Goal-Setting Sessions: One of the most significant peculiarities of intrapersonal learners is their capacity to set realistic goals for themselves. Educators should allow time everyday for students to set short-term or long-term goals and may ask them to present the progress at the end of the term or year.

It is likely that a teacher with highly developed intrapersonal intelligence:

1. Finds approaches to express his/her feelings and thoughts.
2. Is motivated to identify weekly or yearly goals.
3. Manages ongoing learning and personal growth.
4. Attempts to understand inner experiences.
5. Is confident of his/her abilities

(Campbell, 1996: 196).

This intelligence is evident in psychologists and philosophers. Teachers who respect and care for themselves, in other words, who have well-developed intrapersonal intelligence find it easier to offer care, respect and acceptance for their

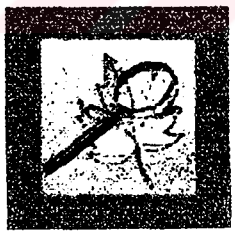
students. As a result, these teachers can encourage a sense of self-respect, self-worth or self acceptance.

These teachers are self-confident, inwardly motivated so they do not need external rewards. Typically, they are viewed as distant people. In a classroom, they like setting goals and planning. They expect their students to work individually, do self paced projects, moreover, they tend to invite students to set their own goals in the lesson and in life. Generally, they also expect the students to fill in interest surveys, express their strengths and weaknesses or personal feelings through arts. In addition to this, in more advanced levels, students are usually encouraged to keep journals during the term by their teachers.

2.5.8. Naturalistic Intelligence

The eighth and most recent intelligence type supported by Gardner is the Naturalistic Intelligence. Gardner (1997) defines this intelligence as the ability to recognise and grass and all variety of flora and fauna.

In one of his interviews with Joel Kurtzman, H. Gardner states (www.thoughtleaders/99109/page 4.Htm 1) that



"When I originally described my seven intelligences, which was a long time ago, I didn't include the naturalist intelligence, but I became convinced about five years ago that there was an eight form of intelligence that has to do with the capacity to be sensitive to the natural world, the world that God created, as opposed to the man-made world. It has to do with sensitivity to plants and animals, living things, what to eat, what to say away from, what to chase, what to be chased by. It also goes to sensitivity to the seasons, the clouds, the temperature, the seas and the mountains. It's really being very involved in the world of nature and how it works."

R. Barkman (Zephyr. Press) claims that when students seek patterns in the world around them, they see order instead of chaos which builds confidence in their understanding of how the world works and gives them greater control over it. Charles Darwin drew upon it when he synthesised his evolutionary theory from observations of life pieced together from his voyage.

As Silver et. al. (2000) state that this intelligence is found in those who are highly adapted to the natural world of plants and animals as well as to natural geography and natural objects like rocks, clouds, plants, stars ... etc.

The naturalistic intelligence refers to the ability to recognise and classify plants, minerals and animals ... etc. These people classify, collect or read about things from their environment. In addition to that they are especially interested in the subjects such as biology, zoology, geology, meteorology or astronomy.

Generally people who have hobbies such as hiking, camping, digging or jogging ... etc. are those who have well-developed naturalistic intelligence.

A teacher who has well-developed naturalistic intelligence has the following characteristics:

1. He/She has a good knowledge of how the body works- where the main organs are.
2. Has an understanding of, and interest in the main global environment issues.
3. Be very interested in the developments in astronomy, the origins of the universe and the evolution of life.
4. Tends to learn names, categorisations and species in the natural world.
5. Likes to be outside or likes outside sports or activities.

Naturalistic Intelligence is highly developed in zoologists, astronauts, biologists, scientists and scouts. Teachers who have a high naturalist intelligence love to be outdoors and tend to notice patterns and features in the ecological settings. They show an appreciation for and a deep understanding of the environment. They generally expect their students to collect items from nature, study them and group them, participate in different activities of outdoor life, moreover, they assign various projects such as observing the shape of the moon in a month or growing beans, doing experiments at home ... etc.

INTELLIGENCES AS DISPOSITIONS

Disposition/Intelligence	Sensitivity to:	Inclination for:	Ability to:
Verbal-Linguistic Intelligence	the sounds, meanings, structures, and styles of language	speaking, writing, listening, reading	speak effectively (teacher, religious leader, politician) or write effectively (poet, journalist, novelist, copywriter, editor)
Logical-Mathematical Intelligence	patterns, numbers and numerical data, causes and effects, objective and quantitative reasoning	finding patterns, making calculations, forming and testing hypotheses, using the scientific method, deductive and inductive reasoning	work effectively with numbers (accountant, statistician, economist) and reason effectively (engineer, scientist, computer programmer)
Spatial Intelligence	colours, shapes, visual puzzles, symmetry, lines, images	representing ideas visually, creating mental images, noticing visual details, drawing and sketching	create visually (artist, photographer, engineer, decorator) and visualize accurately (tour guide, scout, ranger)
Bodily-Kinesthetic Intelligence	touch, movement, physical self, athleticism	activities requiring strength, speed, flexibility, hand-eye coordination, and balance	use the hands to fix or create (mechanic, surgeon, carpenter, sculptor, mason) and use the body expressively (dancer, athlete, actor)
Musical Intelligence	tone, beat, tempo, melody, pitch, sound	listening, singing, playing an instrument	create music (songwriter, composer, musician, conductor) and analyse music (music critic)
Interpersonal Intelligence	body language, moods, voice feelings	noticing and responding to other people's feelings and personalities	work with people (administrators, managers, consultants, teachers) and help people identify and overcome problems (therapists, psychologists)
Intrapersonal Intelligence	one's own strengths, weaknesses, goals and desires	setting goals, assessing personal abilities and liabilities, monitoring one's own thinking	meditate, reflect, exhibit self-discipline, maintain composure, and get the most out of oneself
Naturalist Intelligence	natural objects, plants, animals, naturally occurring patterns, ecological issues	identifying and classifying living things and natural objects	analyze ecological and natural situations and data (ecologists and rangers), learn from living things (zoologist, botanist, veterinarian) and work in natural settings (hunter, scout)

(Silver, F. Harvey et.al. 2000: 11)

2.6. MI and Existential Intelligence

As we approach the world of 21st century, our environment is quite different from that which existed in the 19th century. That's why, H. Gardner has recently written about the possibility of a ninth intelligence "The Existential Intelligence" and analyse the applications of it.

Gardner defines (cited in Armstrong, 2000: 127) existential intelligence as "a concern with ultimate life issues." Gardner clearly expresses (Armstrong, 2000) that he is not proposing a spiritual religious or moral intelligence or any specific belief system but instead he is suggesting that this intelligence examines the broader efforts of humanity to address existential concerns and the broader efforts of humanity to comprehend the ultimate questions of life:

"Who are we?, What's it all about?, Where is humanity heading?, Is there meaning in life? ... and so forth.

People who are asking such questions especially religious roles such as priests, shamans, imams, lams ... etc. as well as non religious roles such as philosophers, artists, scientists and others can be listed as the group who have existential intelligence.

Gardner has considered the existential intelligence as the candidate intelligence since it seems to fit well with his criteria for an intelligence. In spite of the characteristics mentioned before; Armstrong (2000) on the other hand, expresses his concern about the advantages in attempting to apply existential intelligence to every possible educational objective. In particular, he warns that some educators may feel reluctance to focus on the existential intelligence for fear of experiencing controversy from the community and disregarding students' belief systems or deeper life issues.

In addition, he argues that someday, even if it will be approved by Gardner as an official intelligence, the application of existential intelligence to the curriculum will always require a special status within MI Theory than it is for any other intelligences.

Thus, Armstrong (2000: 128) concludes that

> "I feel that attempts to assess existential intelligence in students -or to develop existential methods for assessing regular school topics- are not going to be at all productive or useful in an educational context because they will tend to

> force educators into creating criteria that are far too limiting and artificial to be of any pedagogical use (and, conversely; are likely only to incite controversy and confusion)."

Armstrong also adds (2000) that the most appropriate way to unify existential intelligence into educational context is to search the existential dimensions of an academic discipline such as science, math, history ... etc. and discuss how they can be incorporated into the regular curriculum. Teachers can also help students think about the existential dimensions of whatever they are studying and consider the ways in which scientists, politicians, artists, writers and others have involved existential matters into their field. For instance; Armstrong has suggested the use of existential intelligence in the classroom as follows:

Science: Many great scientists including Newton, Einstein have been motivated by religious, spiritual or cosmic concerns. For example, Einstein did not believe that "God would play dice with the universe". In addition, questions that science poses, such as:

Where did we come from? What are we made of? are existential in nature so they are related to existential issues.

Math: The first Western Mathematician whom we know about, the Greek thinker Pythagoras, was a mathematician and a mystic who believed that number patterns revealed the ultimate harmony of the cosmos.

History: Many wars in human history have come about at least partially as a result of religious differences, so students need to understand the causes of those conflicts.

Literature: One cannot fully understand or appreciate many of the great books-including most of Shakespeare's plays, Bunyan's Pilgrim's Progress, Melville's Moby Dick, and many more without seeing how Biblical or religious sources interpret them.

Geography: Teachers can help students to understand how the landscape has been formed and reformed. For example, to make sense of changing map of the former Yugoslavia can require an understanding of the distinctions between Roman Catholicism, Orthodox Christianity and Islam.

Arts: Since people express themselves by music, painting, sculpture, dance ... and so forth, art reveals an ongoing concern with the meaning of life, death, suffering and other existential issues

(Armstrong, 2000: 130).

It is obvious that somehow or other, we all have different strengths and weaknesses just like we all have different physical features and different personalities.

As V. Emig (1997) mentions that we learn best when these strengths and intelligence profiles are brought into consideration during the learning-teaching process.

Another vitally important aspect of the theory is that since Gardner's new point of view differs from the traditional view by identifying a wider family of human intelligences, the theory of multiple intelligences aims to question what is normally valued by traditional education systems.

As it is known traditionally, only two of the eight intelligences are valued and tested by education systems. As C. Rose and M. Nicholl state (1997) that if these approaches do not meet your needs then you are not well served by traditional teaching system. On the other hand, when materials and teaching style address most or all of the intelligence profiles, there is as Gardner calls "multiple chance" to understand the needed information.

Gardner claims (cited in C. Rose and M. Nicholl, 1997: 109) that

> "The single chance practice of education has resulted in a depressingly large number of people who have concluded that they have little talent for learning."

Although these intelligences are anatomically separated from each other, in MI Theory it is claimed that the eight intelligences do not operate independently, instead, all types of intelligences function together in society and complete each other productively.

Altan (1999: 26) gives dancers as an example and says that

> "Dancers can only be great people in their arts if they have strong musical intelligence to understand the rhythm, spatial intelligence to carry out the choreography, bodily/kinesthetic intelligence to move successfully and interpersonal intelligence

> to understand how they can influence and motivate the audience through their movements."

He adds that culture also has an important role in the development of the intelligences since all societies attach importance to different types of intelligences. As a result; different intelligences are appreciated and developed by people of different cultures.

It is essential to keep in mind that these eight types of intelligences do not necessarily symbolise the full capacity of human beings. These intelligences are not firmly attached categories, instead, they can be used in different contexts and also each intelligence can be developed if appropriate conditions are provided.

There is an obvious fact that it is impossible to teach each lesson in seven or eight ways. That is not the point in MI Theory. The aim is variety and heterogeneity. It should not be forgotten that each student is individual and must be treated as such.

In the light of this aim, the following story exemplifies the characteristics of Multiple Intelligences. In fact, the metaphors used in the story serve as an excellent reflection of Gardner's Theory.

RAINBOW IS A SYMBOL OF HARMONY

One day, all colours of the world gathered together and started to discuss about which colour is the most important and the most special.

Green said: "Of course, I'm the most important one. I am the colour of life and hope. I have been chosen for grass, trees, and leaves. ... Look at the earth, everywhere is covered with my colour.

Blue jumped and said: You are only the colour of earth. Look at me! I am the colour of the sea and also the sky. The blue of the sky gives people a feeling of tranquility and peace. Without it, you mean nothing. ...

Yellow interfered in the discussion: Are you kidding? I am the colour that gives warmth to this world. ... I am the colour of the sun. Without me, You would all freeze ...

Orange asked: What about me? I am the colour of health and strength. My colour includes all the necessary vitamins for human life. Think of orange and carrot. ... I may not be the colour which is common but I am the colour which gives the beautiful colour to the sky when the sun rises and sets.

Red couldn't sit still so long and said: That's for sure, I am superior to you. I am the colour of blood. Can you think of life without blood? I am the colour of danger and bravery! And the colour of war and fire! the colour of love and passion! Without me, this world would be empty ...

Purple stood up and said: I am vastly superior to the others. I am the colour of nobility and strength. All kings and leaders have chosen me. People don't question me, they listen and obey ... because I am the colour of authority and wisdom.

Then all the colours started to fight. Each were saying "I am superior." Suddenly, the flash of lightning lit up the sky and it started raining. All colours held each other in fear. Then the voice of the rain was heard:

What is the reason for your fighting? Why are you struggling to be superior? Don't you know that each of you has been created for a different mission? You are different from each other and each of you is special ... Now come to me hand in hand."

The colours were ashamed of themselves. They flew up to the sky, hand in hand, forming a bow shape.

The rain said:

"From now on; you are going to combine together from sky to earth and people will feel peaceful and strong. When they see you, you will be hope for people for the future. You are going to encircle the sky like a belt and you will be called "rainbow". Ok?"

That's why whenever it rains, the rainbow appears in the sky. Just like the colours in the rainbow, we are different from each other and each of us is special ... These differences and specialities make us a harmonious whole with our environment.

...

("Bütün Dünya" January 2001 / 01 p. 61-62).

Building upon this story, we can argue that just like the colours of the world, no intelligence exists by itself in life but the intelligences usually interact with each other in harmony. In addition; like the colours, people with different intelligence profiles function together and complete each other in a community.

CHAPTER 3

MULTIPLE INTELLIGENCES AND ENGLISH TEACHING

3.0. Introduction

In this chapter, the following section, 3.1, concentrates on the individual differences. Then, 3.2 explains how MI Theory applies to your teaching and section 3.3 deals with determining strengths and weaknesses. The last section 3.4 emphasises developing your teaching.

3.1. Individual Differences

T. Good and J. Brophy state (1995) that individuals analyse what happens to them and interpret events with regard to their experiences, abilities, self-concepts and interests so individuals may perceive, interpret and evaluate the same event in different ways, by the same token, individuals differ from each other on understanding of intelligence. How individuals understand intelligence has an important influence on how they think about themselves and others as learners. For instance, if one sees intelligence as something that is fixed at birth, he will have a great difficulty in understanding the new information or idea, in comparison, one who believes that intelligence is like a muscle that develops, has many dimensions and ways that is flexible, this means he has multiple chance to understand and learn the needed information.

Another point is that where individuals differ is the strength of these intelligences which is called "profile" of intelligences. Therefore, it is reasonable to assume that since every individual approaches a problem, learns something or organises feelings from a unique perspective, one's understanding of intelligence and point of view influence one's learning and teaching.

Since people are not the same in intelligence profiles, they own different talents and skills. It is certainly true that each student is an individual and must be treated as such. However, we should also keep in mind that not only are students

unique but also each teacher has his/her own individual intelligence type which inevitably affects language teaching.

When individual teachers with their particular intelligence characteristics enter their classrooms, their teaching styles certainly reflect their profile of intelligences. Therefore as Gardner points out (1991) these differences challenge an educational system that assumes everyone can learn and teach the same materials in the same way.

3.2. Understanding How MI Theory Applies To Your Teaching

One thing Nate Crowder (cited in P. Eggen and D. Kauchak, 2001: 135) remembered from his teacher preparation experience was that variety is important in promoting learning and motivation.

> "In social studies, he tended to mostly use large-group discussions because many of the students seemed to respond well. Others, however, appeared disinterested, and their attention often wandered. In an effort to involve all his students, he decided to try some small group work focusing on problem solving. This fitted nicely in a unit on cities and the problems they face.
>
> He organised the groups and assigned each a problem. As he watched the group members interact, he was struck by the fact that some of the quietest, most withdrawn students in whole-class discussions were leaders in the small groups. "Great!" he thought. But at the same time, he saw that some of his typically more active students were sitting back, uninvolved."

P. Eggen and D. Kauchak (2001) state that unquestionably, students come to us with different preferences. In addition, V. B. Emig points out (1997) that in spite of the best curriculums, as teachers, we do not affect all learners equally.

The key points are;
- What do we do about these differences?
- Are our lessons balanced? and perhaps more realistically,
- Does our intelligence profile dominate our teaching style?

M.A. Christison states (1996) that MI Theory presents ESL/EFL teachers a way to analyse their best teaching techniques and strategies by taking human differences into consideration. In addition, R. Tanner indicates (2001) that each

teacher and learner have their own individual intelligence characterisation which embodies different types of intelligences.

This distinction between the individual intelligence profiles between teachers and students may not appear to be important in theory but as R. Tanner (2001) mentions the significance of the distinction becomes clear when we consider the fact that our learners all learn in their own way and teachers also have their stronger and weaker intelligences which inevitably influence the way they teach.

Altan (2001: 54) states that

> "Gardner's revolutionary theory of Multiple Intelligences offers EFL teachers a new perspective to examine their teaching in the light of individual differences amongst their students. This is especially important when we consider the great number of failures and dropouts in EFL classrooms."

It is therefore reasonable to assume that the success in EFL classrooms lies in the distinction between the intelligence types between teachers and students. Teachers should not only be aware of their students' intelligence types but also their own MI profiles.

Altan (2001) adds that it is important that teachers should be aware of their individual MI profile to emphasise and develop their weaker areas and also to benefit from their stronger areas. Similar to this idea, J. Wingate points out (1997) that teachers should spend time on considering the areas of their own weaker intelligences instead of looking at the strongest ones since they teach strongly in those ways.

Wingate approaches this problem from teachers' point of view and he states (1997: 29) that

> " - What are the ways you learn best as a teacher?
> - Does this imply that you neglect other aspects of intelligence that will be the strengths of many of your learners?
> - Does your own intelligence profile dominate your teaching style?"

J. Wingate also claims (1997: 29) that

> "For learners who are strong where you are weak, you are not a good teacher. This is not your fault. You are not to blame. But you can plan your lessons so that students can activate their intelligences and learn in their own most efficient way."

On the other hand, Gardner warns (1995) that not all ideas or subjects can be approached with each intelligence and he states (1995: 26) that "There is no point in assuming that every topic can be effectively approached in multiple ways and it is a waste of effort and time to attempt to do this."

All things considered, as Christison (1998) points out in order to implement the theory in their lessons, it is important for teachers to understand not only the theory but also their own intelligence profiles.

3.3. Determining Strengths and Weaknesses

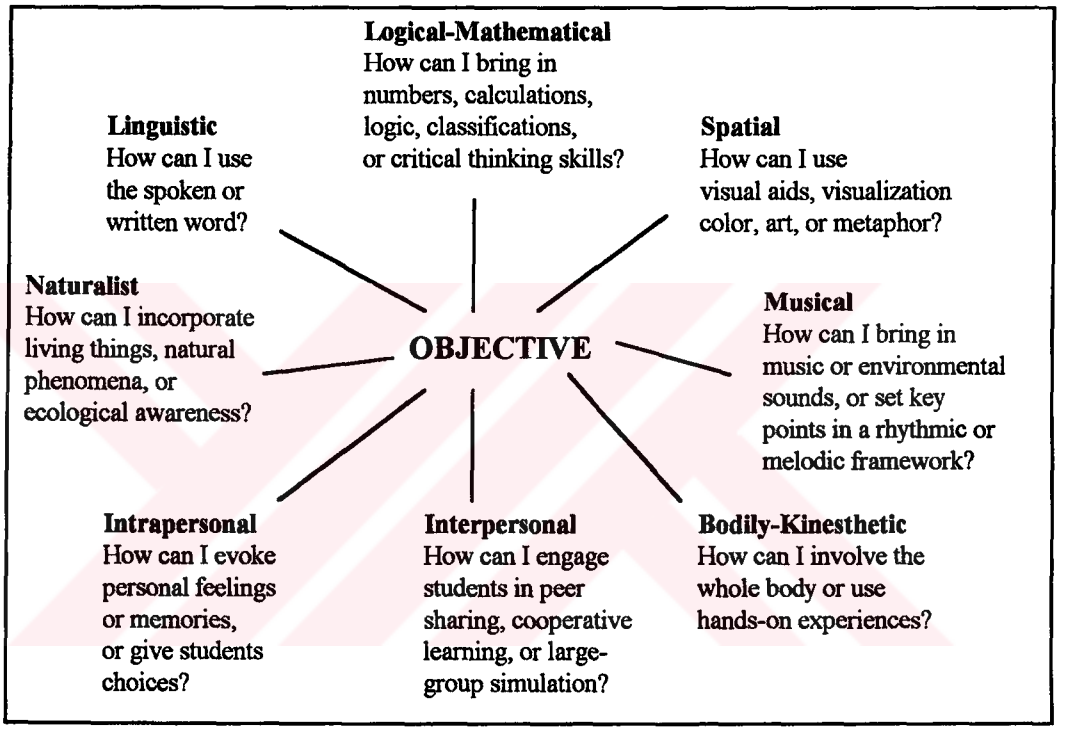
According to Wingate (1997) it may be hard to teach in a way that you are weak, but you can create opportunities for those learners. In his articles Wingate not only focuses on one of the most important problems in EFL classrooms, but he also comes up with a solution to this problem and claims (1997) that if a teacher encourages his/her learners who are strong where the teacher is weak to use their intelligences, the teacher will enable students who are different to use their strengths to translate the way he/she teaches into the way they learn.

He exemplifies (1997: 29) his solution by the following sentences:

> "For example, I have a weak musical intelligence. I almost never use songs, music or rhythm in my lessons. Those of my learners who have strong musical intelligence find me a bad teacher. So I say to them; 'During this lesson, if you like, work out what song this lesson is like.' The non-musical learners won't bother to do that task. Only the otherwise -neglected- by me musically intelligent learners will do it. Because they are strong musically, they can do that without losing concentration on the lesson. In fact, because at last I am letting them use their strength, they concentrate better on the lesson ..."

As the previous example clarifies, Tanner (2001) also agrees with the impossibility to address all the individual MI profiles in the class by a teacher. However, he suggests a similar way in which all types of intelligences can be dealt with by planning our lesson plans carefully and by doing different activities supporting different intelligences equally over a period of time.

MI PLANNING QUESTIONS



(Armstrong, 2000: 45)

As it has been shown in the diagram, the key question that teachers must ask in order to integrate MI Theory into their lessons is: "How can I integrate a variety of intelligences so that all my students have an opportunity to learn through their strengths?" When teachers plan their lessons, it does not necessarily mean that all intelligences should be included in each lesson but they should refer to as many of the intelligences as possible.

3.4. Developing Your Teaching

In his article Altan (2001) compares the MI Theory and traditional education systems and states that since eight intelligences are required to function productively in society, identifying and teaching to a broader range of skills are exceedingly important in terms of the Theory of MI.

In contrast with MI Theory, traditional education systems emphasize only the use of verbal and mathematical intelligences. Armstrong (2000: 39) compares the MI Teacher and a traditional teacher as follows:

> "A teacher in an MI classroom contrasts sharply with a teacher in a traditional linguistic classroom. In a traditional classroom, a teacher lectures while standing at the front of the classroom, writes on the board, asks students questions about the assigned reading or handouts. In the MI classroom; the teacher continually shifts her method of presentation from linguistic to spatial to musical and so on ..., often combines intelligences in creative ways."

He also adds (2000) that the MI teacher not only draws pictures on the board, shows a video tape but also plays music during the lesson or provides appropriate environment for study. In addition to that, the MI teacher lets students interact with each other and sometimes gives time for students to engage in self reflection and so forth.

Armstrong (2000: 41) summarizes the eight ways of teaching with the following diagram:

SUMMARY OF THE EIGHT WAYS OF THE TEACHING

Intelligence	Teaching Activities (examples)	Teaching Materials (examples)	Instructional Strategies
Linguistic	lectures, discussions, word games, storytelling, choral reading, journal writing	books, tape recorders, type-writers, stamp sets, books on tape	read about it, write about it, talk about it, listen to it
Logical-Mathematical	brain teasers, problem solving, science experiments, mental calculation, number games, critical thinking	calculators, math manipulatives, science equipment, math games	quantify it, think critically about it, put it in a logical framework, experiment with it
Spatial	visual presentation, art activities, imagination games, mind-mapping, metaphor, visualization	graphs, maps, video, LEGO sets, art materials, optical illusions, cameras, picture library	see it, draw it, visualize it, color it, mind-map it
Bodily-Kinesthetic	hands-on learning, drama, dance, sports that teach, tactile activities, relaxation exercises	building tools, clay, sports equipment, manipulatives, tactile learning resources	build it, act it out, touch it, get a "gut feeling" of it, dance it
Musical	rhythmic learnings, rapping, using songs that teach	tape recorder, tape collection, musical instruments	sing it, rap it, listen to it
Interpersonal	cooperative learning, peer tutoring, community involvement, social gatherings, simulations	board games, party supplies, props for role plays	teach it, collaborate on it, interact with respect to it
Intrapersonal	individualized instruction, independent study, options in course of study, self-esteem building	self-checking materials, journals, materials for projects	connect it to your personal life, make choice with regard to it, reflect on it
Naturalist	nature study, ecological awareness, care of animals	plants, animals, naturalists' tools (e.g. binoculars), gardening tools	connect it to living things and natural phenomena

(Armstrong, 2000: 41)

As it is seen in the diagram, by accepting Gardner's Theory of MI, EFL teachers will be able to address to all types of intelligences equally by means of various activities and strategies. As Armstrong (2000: 39) mentions:

> "MI Theory will help teachers expand their current teaching repertoire to include a broader range of methods, materials and techniques for reaching an ever wider and more diverse range of learners."

What is needed according to Wingate (1997) is to communicate openly and emphatically with the students and vice versa. Successful language learning atmosphere necessitates the spirit of a team. Especially, if students who are strong in particular intelligences where you are weak are perceived as a danger, the result will be dogmatic, prejudiced and inflexible attitude that is too narrow to be helpful to the learners.

Wingate tells (1997: 29) his experiences about this attitude and emphasises one of the most important point in his sentences:

> "I used to find the learners who are strong where I am weak a threat. They can ask the very question which exposes the weakness of my teaching. But, I'm strong in intelligences where they are weak so I can avoid answering their difficult questions or I can make a comment which expose their weaknesses. Then we become 'enemies'."

Alternatively; instead of becoming enemies and turning the classroom setting into a battle field, he suggests (1997: 29) an other attitude:

> "They are strong where I am weak. I am strong where they are weak. That's OK. We need one another. Potentially disruptive enemies in the classroom become allies."

Another effectively related point which deserves to be mentioned here is the role of national education system. It is well known that traditional education systems have stressed the importance of only linguistic and mathematical intelligences for years. There is ample evidence that national education system fails to achieve its most important missions.

As Altan claims (2001) it is reasonable to assume that because at the time, when today's educators were learners, they focused only on Linguistic and Logical - Mathematical intelligences, today's most educators seem to be superior in only these two types of intelligences. He adds (2001) that the problem lies in the fact that unlike the profile of most educators, because of technology, today's students are superior in the other intelligences which most contemporary education systems unfortunately still neglect.

It is exceedingly important to remember that although the concept of intelligence and the attitude towards the individual differences have changed in the last

quarter of this century, unfortunately, our education system is still not ready to focus the needs of all the intelligences and is still neglecting to address the development of most of the areas.

Gardner (1991) explains that we all hope these differences will challenge the educational system which supposes each individual can learn and each teacher teaches the same material in the same way.

The benefits of MI for teachers and administrators can be listed as follows:

- A positive climate that supports, motivates, and promotes success for all students and staff.
- Improved and expanded repertoire of instructional strategies.
- Varied teaching/instructional approaches that are celebrated and supported.
- Increased teacher/parent collaboration.
- Planned and consistent staff development.
- Renewed sense of professionalism (www.scbe.on.ca./mit/mi.htm)

In this regard, as teachers, we can regard all intelligence types as equally important by both taking our own intelligence profiles into consideration and thinking about our own experiences as a learner and as a teacher. Therefore, we can make an effort to plan more activities in the specific and weak intelligence types in which we feel uncomfortable.

MI Theory helps us look at the world and our own classrooms differently.

As T. Hoerr (1996: 52) mentions:

"By definition, MI is student-centered. Students benefit from our use of MI, but that is only the beginning. Teachers who use MI gain as well. They may work harder, but they will derive a stronger sense of satisfaction from their work."

This chapter can be concluded with two stories that include ideas presented in the previous pages and that may teach us a lesson.

An Eagle's Tale

Once upon a time, an eagle built itself a comfortable nest at the top of a mountain. After sometime, it laid four eggs. During the incubation, the earth was destroyed by an earthquake.

Thus, one of the eggs in the nest fell and rolled down the hill and arrived at a farm in the valley.

It was a chicken farm. The hens in the farm wanted to own the egg which was much bigger and different than theirs. An old hen decided to care for the egg as if it were her own.

Then, one day, the exact time came and the baby eagle in the egg broke the eggshell and came into the world. When the eagle realised that it was living on a chicken farm among hundreds of hens, it supposed itself to be a hen and like the other hens, it grew day by day. ... Not only did it see itself as a chicken, but also all the hens in the farm treated it like a hen.

From time to time it thought to itself:

"I don't look like the other hens ... Who am I?" but it couldn't totally express this feeling.

Nevertheless, it was a hen, too and it should accept the fact and act accordingly. One day, while it was playing with the other hens in the barn yard, it saw some eagles soaring freely, high above the hills. It couldn't help shouting, and cried enthusiastically:

"Oh my God! How wonderfully they are flying. I want to fly like them, too." All the hens just laughed at the eagle. "You are a hen" they said. And, "You mustn't forget than hens don't fly like eagles."

After that the young eagle looked at the sky every single day, looking forward to seeing eagles flying. Whenever it saw an eagle, it completely forgot about the other hens in the field and watched those eagles with great admiration and yearning. Whenever it saw eagles, it expressed its feelings by pleading:

"Oh God, please, I wish I could fly like them and soar freely in the blue sky ..."

However, whenever it repeated these wishes, all the hens as usual repeated the same sentences again and again: "Forget it! You're a hen and you'll stay a hen forever..."!

The young eagle had been so influenced by the hens who were repeating the same things all the time that in the end, it gave up its dreams of flying freely in the blue sky like an eagle and accepted its life of living like a hen.

And at the end of its life, it died like a hen ...

A Horse Ranch

A sixteen-year American called Monty once had to write a composition about what he wanted to do when he grew up. He took a lot of trouble over it and spent hours writing about his dream of one day being the owner of a horse ranch. He wrote seven pages describing the 200-acre ranch in great detail, and drew a diagram showing the location of all the buildings, the stables and the track. He even drew a detailed floor plan of the 4,000 square-foot house that he would build. The next day he handed it in to his teacher.

Two days later his teacher handed it back. With a big, red F on the front. And the words: 'See me after class.'

After class, the boy with the dream asked his teacher why he had got an F, and the teacher said: 'Because this is an impossible dream for a boy like you. You need lots and lots of money to own a horse ranch. What sort of money have you got? Nothing. You come from a very poor family. There's no way you could ever do it. It's just not possible. I'll tell you what. You go back and write another composition with a more realistic goal, and I'll give you a different mark.'

The boy went home and asked his father for advice. His father said: 'I'm sorry I can't help you, but I think this has to be your decision, and I have a sense that it's going to be a really important one for you.' The boy thought about it for a week. Finally he handed back the same paper to his teacher, saying 'You can keep the F. I'll keep my dream.'

Monty then turned to the group of people with him and said: 'I tell you this story because you are all sitting in my 4,000 square-foot house in the middle of my

200-acre horse ranch. And that composition is framed over the fireplace.' We went on: 'The best part of the story is that two summers ago, that same teacher brought 30 kids to camp out on my ranch for a week. When he was leaving, he said: "Look Monty, I can tell you this now. When I was your teacher I was a bit of a dreamstealer. I'm sorry to say that I stole of lot of kids' dreams in those days. But I'm glad you had the courage to hang on to yours."

All in all, MI Teachers of this century will know how to teach, how to create, and how to notice and manage their own and their students so as to facilitate maximal performance in the learning environment. In short, the teacher of the ever-changing future will be a model.

CHAPTER 4

THE ANALYSIS OF THE DATA COLLECTED

4.0. Introduction

This chapter deals with the analysis of the data collected from both teachers and 128 students (10 classes) and the interpretation of the data results. Section 4.1 includes how the data is collected from both teachers and students. Section 4.2 is about the analysis of the data collected from both the teachers and the students. The next parts 4.3 and 4.4 are about the interpretation of the data.

4.1. Data Collection

The subjects of this study are 60 English Language School, Preparatory Programme teachers who are teaching at Başkent University and 128 (10 classes) students who are studying English at Başkent University, Preparatory Programme which is designed in such a way that input is given in four skills: reading, listening, writing and speaking.

Different inventories have been prepared and applied to the teachers and the students. The first inventory consisting two sections (Appendix 1) has been applied to 60 teachers in order to find out their dominant and weaker intelligence types. The first section is about background information. In this part, their name, age, total teaching experience, the department they graduated from and (if any) post graduate qualifications (MA/Ph.D) are found out.

The second section that consists of 120 statements related to 8 types of intelligences in a jumbled order aims to reveal the intelligence profile of the teachers. Teachers are expected to tick the personal statements that they think describe themselves by either YES or NO. In addition to this, the inventory responses are used to find out whether the age of the teacher or the teacher's professional experience have any influence on MI profile. After determining each teacher's dominant and weaker intelligence types, 10 teachers out of 60 are chosen randomly. (Appendix 2).

Another MI inventory (Appendix 3) has been prepared and carried out on 128 students (10 classes) of the chosen teachers in order to identify the general dominant intelligence tendency of each class. This inventory consists of eight parts. Each part having five items are ticked by either YES or NO.

At the application stage, the data was collected from 10 classes by the researcher using observation techniques. The number of students in each class ranged from 10 to 17.

4.2. Data Analysis

4.2.1. Teachers

First of all, the data gathered from the teachers have been listed and analysed by using statistical methods (Appendix 2). The teachers were categorised according to their intelligence types as poor (0-4), average (5-10), good (11-13) and excellent (14-15) under the names of eight intelligence types in frequency tables. Secondly, the results were shown in charts for each type of intelligence. Then, the general situation graphs were interpreted.

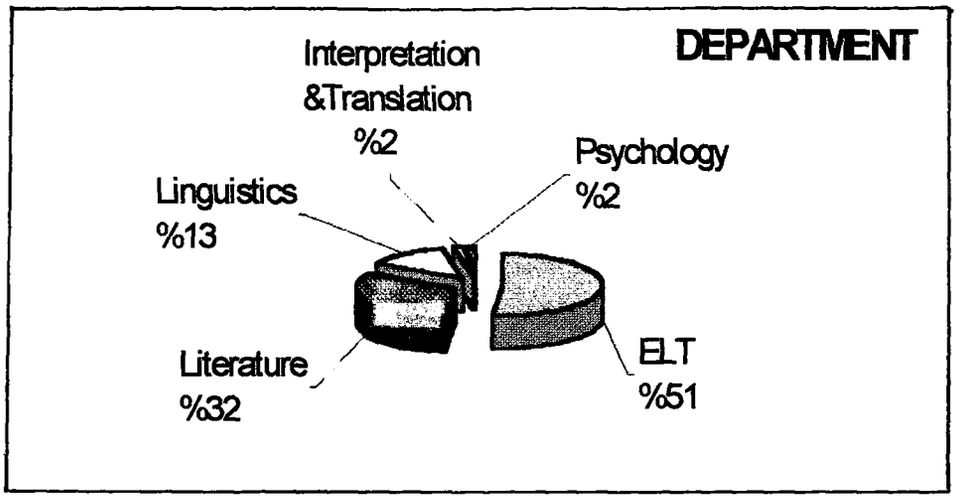
In addition to this, it was hypothesised that teachers were categorised according to their intelligence types independent from their age and the amount of experience in their profession. To check this, first the teachers were put into two age categories; thirty and above, and below thirty. According to their experience they were grouped into five categories; 0-2, 3-5, 6-8, 9-11, 12 +.

After that, Chi- Square statistics were calculated for each intelligence type versus age and experience categories in cross tables (Alpha level was chosen as 0,05 (0.5).

4.2.1.1. Background Information

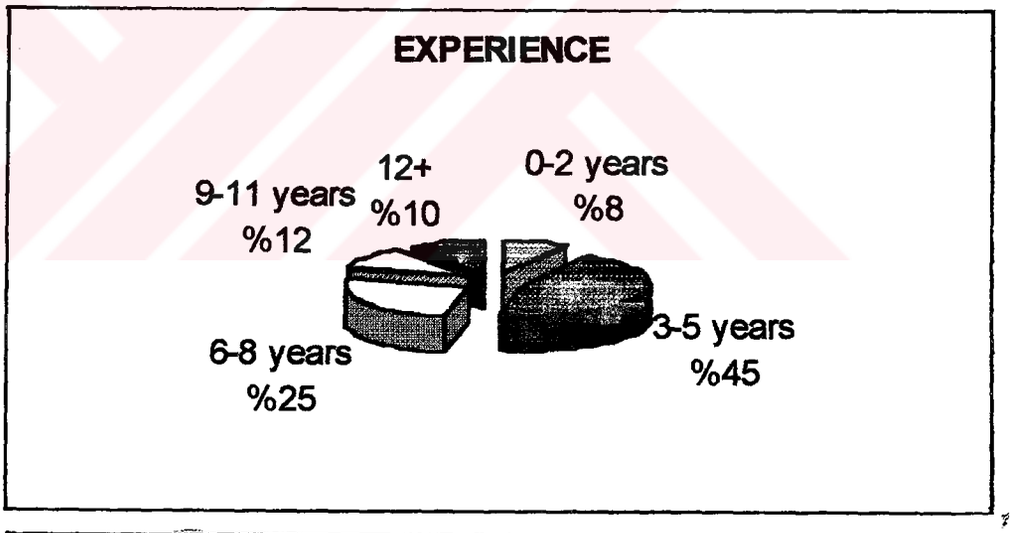
In this study, 60 teachers who are teaching at English Language School, Preparatory Programme are taken as test subjects.

By looking at the charts, it can easily be seen that teachers in this study come from a wide range of backgrounds, age and experience groups.

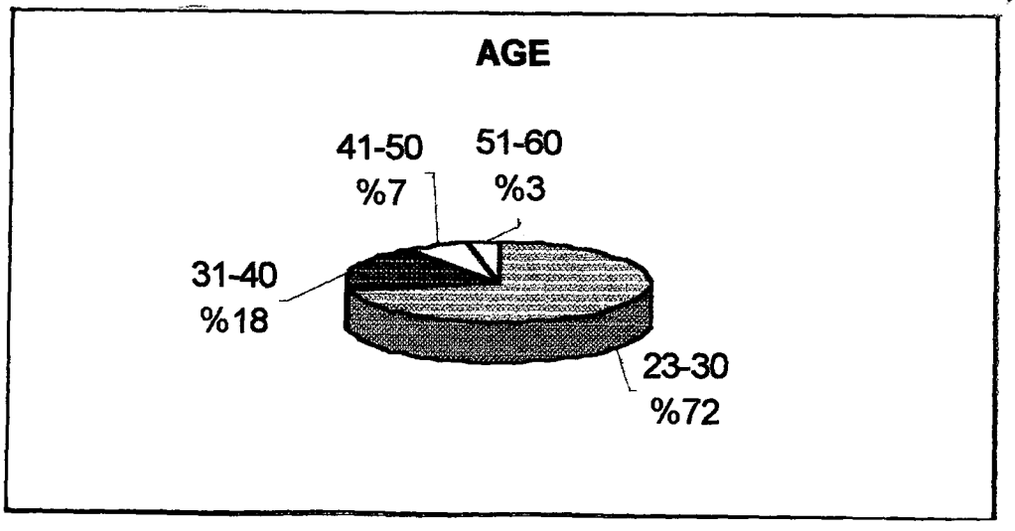


(Fig 1.1)

The answers given to the background questions revealed that subjects participating in the study come from five different fields. There are 60 teachers who are all university graduates of different departments. There are 31 (51 %) ELT, 19 (32 %) Literature, 8 (13 %) Linguistics and there is 1 (2 %) Interpretation and Translation, 1 (2 %) Psychology graduates among teachers (Fig 1.1.).

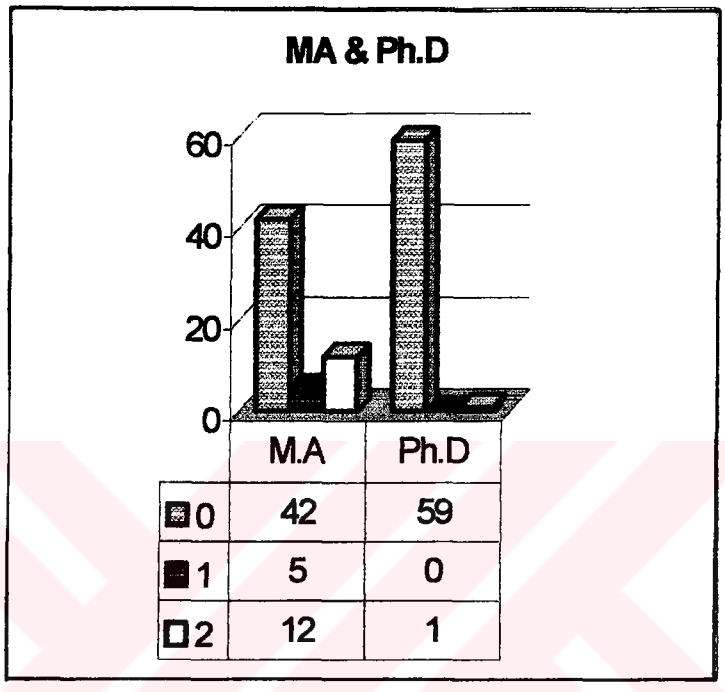


(Fig 1.2)

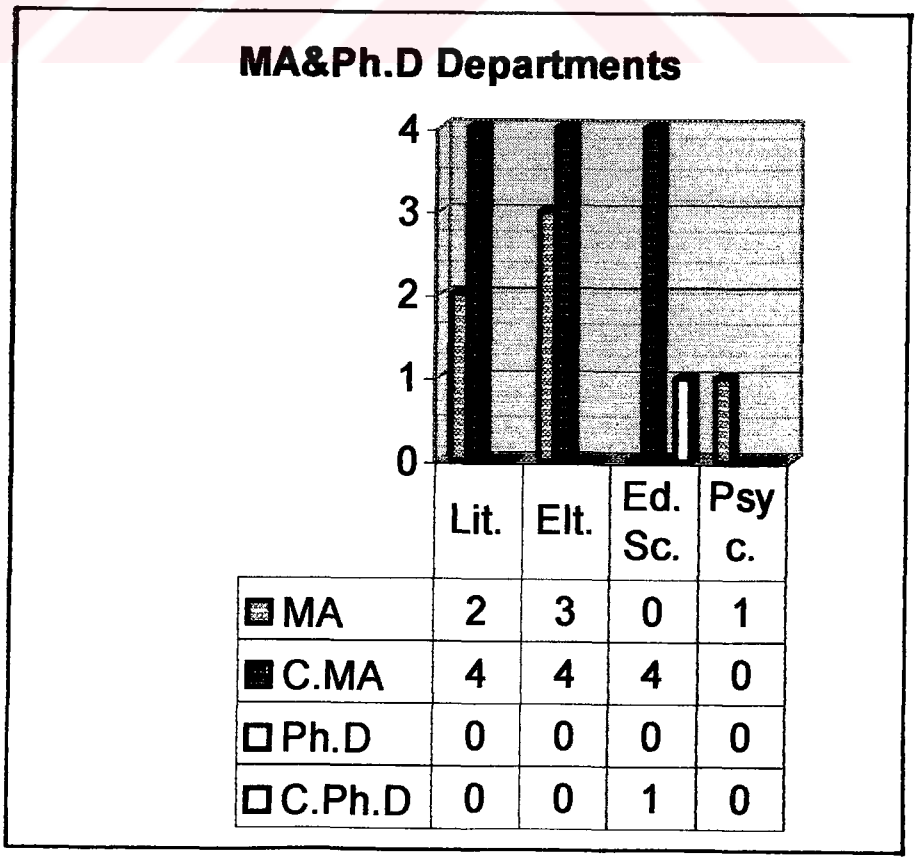


(Fig 1.3)

The findings in 1.2 and 1.3 showed that the teachers' teaching experience ranged from 1 to 12+ years and age from 23 to 51+ in Preparatory Programme.



(Fig. 1.4)



(Fig 1.5)

In addition to this, since the school encourages and supports those teachers who are interested in taking up courses which are relevant to their chosen profession in the field of ELT, out of 60 teachers 12 are currently doing MA, 1 PhD and 5 of them completed post graduate qualifications (Fig 1.4).

When we looked at the departments, it was observed that in the department of Literature 2 of the teachers completed, 4 are currently doing their MA; in the department of ELT 3 of them completed and 4 teachers are currently doing; in Educational Sciences 4 of them are currently doing MA and 1 of them is still doing PhD.; in Psychology there is 1 who has completed MA (Fig 1.5).

4.2.2. Students

All responses of the students for the questionnaire were examined one by one counting YES and NO's separately for each student. In order to analyse which intelligence was superior in each particular class, "means" were calculated for each of these 8 parts by using statistical methods. Besides, a table was made to show each type of intelligence which seems to be dominant in order for each class. Later, these tables were not only used to compare the Teacher's superior intelligence type with the students' superior one but also to evaluate the classroom observations.

4.3. The Interpretation of the Data Collected from Teachers

As the statistics show the inventory was applied to 60 teachers.

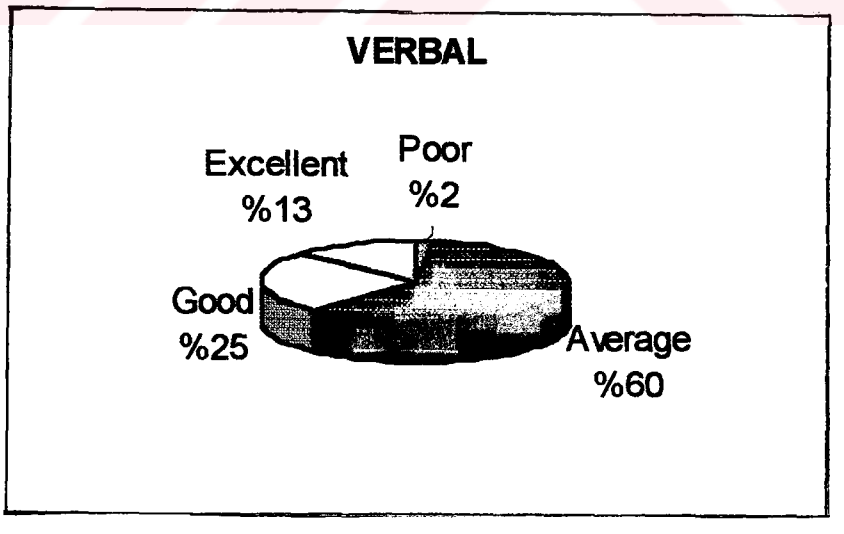
The following tables illustrate the frequency distribution of scores received from the inventory applied to teachers out of 60 (100 %). If all teachers who have not scored poor are considered to possess intelligence type in question, we can interpret cumulative percent as the indicator of dominance of a particular intelligence type among teachers

4.3.1. Frequency Tables

4.1. Verbal/Linguistic Intelligence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	8	13,3	13,3	73,3
	Good	15	25,0	25,0	98,3
	Average	36	60,0	60,0	60,0
	Poor	1	1,7	1,7	100,0
	Total	**60**	**100,0**	**100,0**	

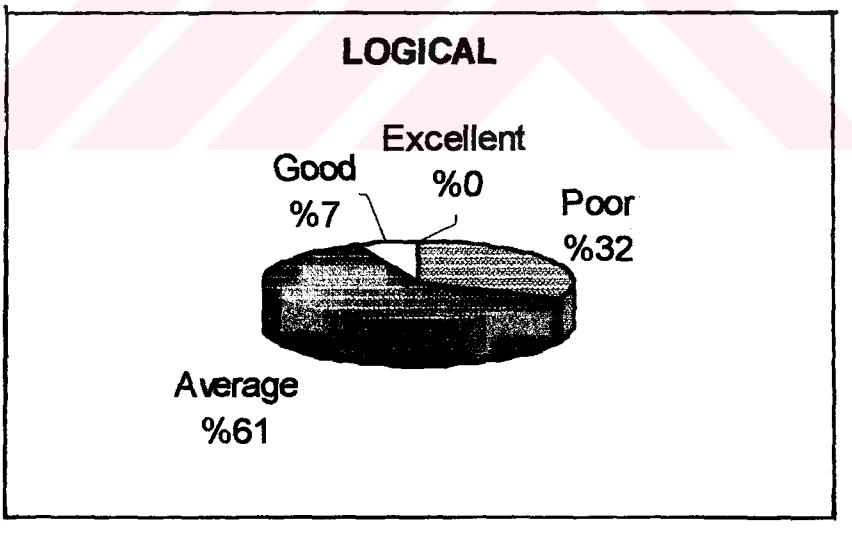
As seen in table 4.1, out of 60 teachers (100 %), only 1 (1,7 %) teacher is poor, 36 (60 %) are average, 15 (25 %) are good and 8 (13,3 %) are excellent in the verbal/linguistic intelligence. It can be clearly seen that verbal/linguistic intelligence is the most dominant intelligence type (98,3 %) when the cumulative percent is taken into consideration. Therefore, it can be argued that since all the teachers come from verbal backgrounds and now they are dealing with all skills of langauge in preparatory class, the verbal/linguistic intelligence seems to be the dominant one among the others.



4.2. Logical/Mathematical Intelligence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Good	4	6,7	6,7	68,3
	Average	37	61,7	61,7	61,7
	Poor	19	31,7	31,7	100,0
	Total	**60**	**100,0**	**100,0**	

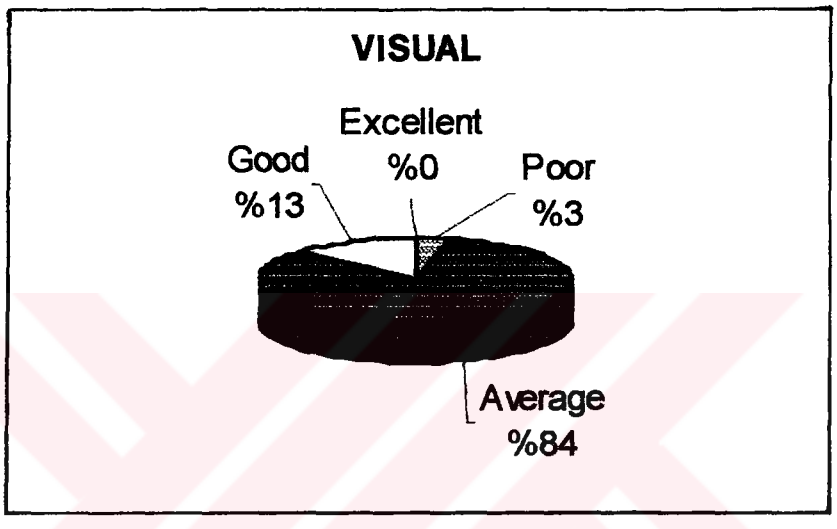
As table 4.2 demonstrates, the logical/mathematical level of the teachers is categorised into 3 groups; since there is no excellent one. Among 60 teachers, 19 (31,7 %) are poor, 37 (61,7 %) are average and 4 (6,7 %) are good in the logical/mathematical intelligence. When the cumulative percent is examined, it is seen that the logical/mathematical intelligence seems to have one of the lowest percents (68,3 %) among the eight intelligence types. Thus, we can say that since English Language Teaching is a social study, it is not surprising that teachers are weaker in Logical/Mathematical intelligence compared to others.



4.3. Visual/Spatial Intelligence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Good	8	13,3	13,3	96,7
	Average	50	83,3	83,3	83,3
	Poor	2	3,3	3,3	100,0
	Total	**60**	**100,0**	**100,0**	

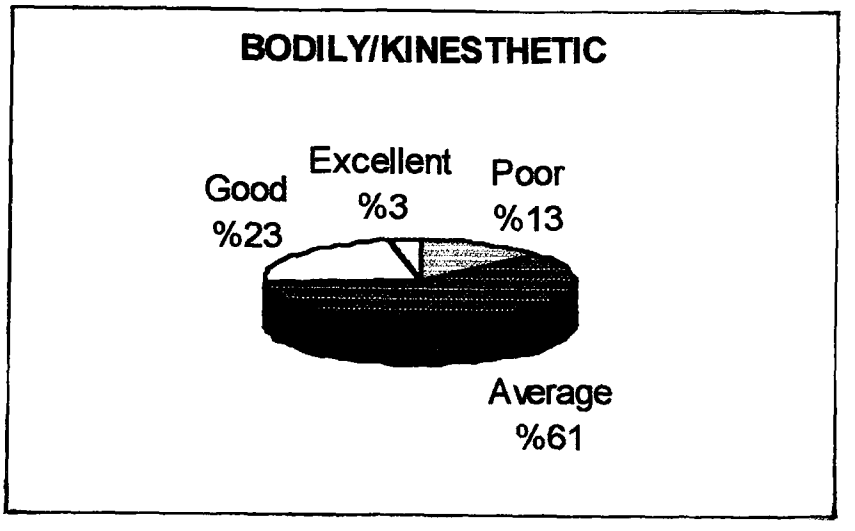
Table 4.3 shows that 2 (3,3 %) teachers are poor, 50 (83,3 %) are average, 8 (13,3 %) are good and there is no one excellent in the visual/spatial intelligence. Therefore, we can say that if visual/spatial intelligence has the highest average rate among the eight, this means that factors such as using visual aids, creating contexts or other visual/spatial related ways are used by majority of the teachers in language teaching. 96,7 % cumulative percent also proves that the visual/spatial intelligence is the second most dominant intelligence among teachers.



4.4. Bodily/Kinesthetic Intelligence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	2	3,3	3,3	63,3
	Good	14	23,3	23,3	86,7
	Average	36	60,0	60,0	60,0
	Poor	8	13,3	13,3	100,0
	Total	**60**	**100,0**	**100,0**	

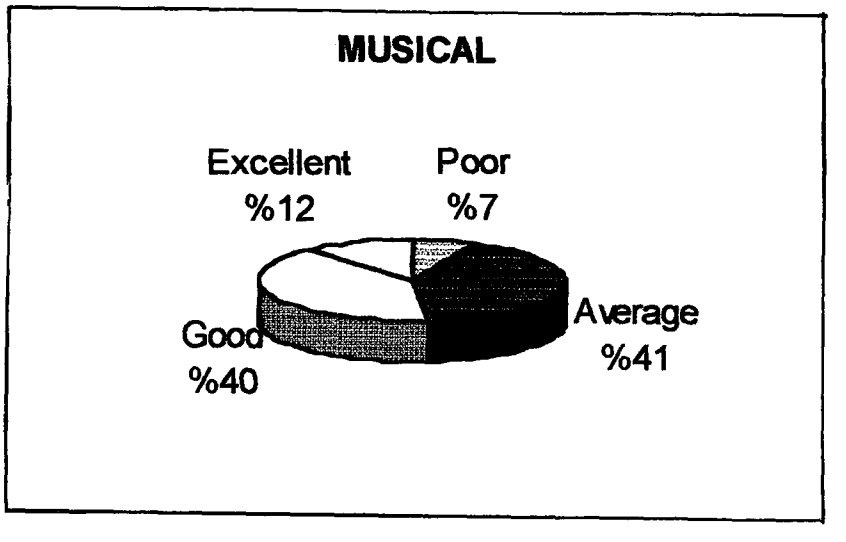
Table 4.4 illustrates that 8 (13,3 %) are poor, 36 (60 %) are average, 14 (23,3 %) are good and 2 (3,3 %) are excellent in bodily/kinesthetic intelligence. When we look at the cumulative percent 86,7 %, it should be admitted that the bodily/kinesthetic intelligence is the third weaker and less preferred intelligence among the eight in ELT classes as most teachers do not do activities that require the students to move in the class.



4.5. Musical/Rhythmical Intelligence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	7	11,7	11,7	53,3
	Good	24	40,0	40,0	93,3
	Average	25	41,7	41,7	41,7
	Poor	4	6,7	6,7	100,0
	Total	**60**	**100,0**	**100,0**	

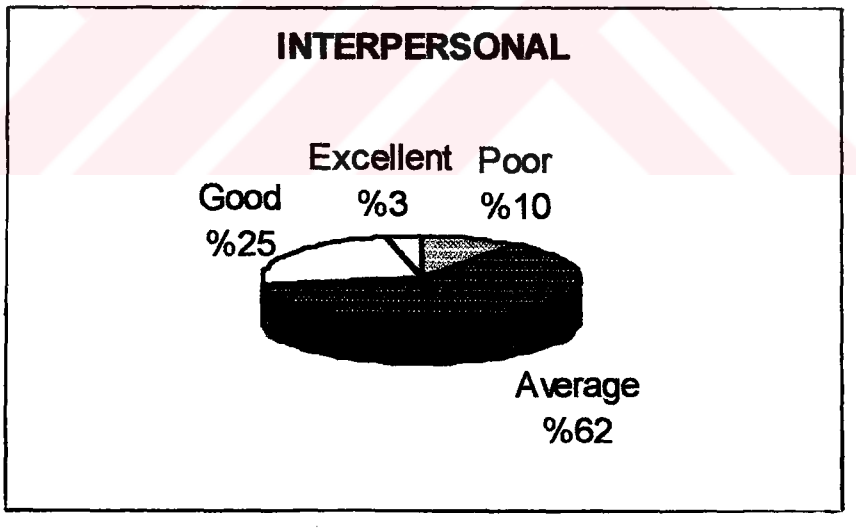
As it is clearly seen in table 4.5, 4 (6,7 %) teachers are poor, 25 (41,7 %) are average, 24 (40 %) are good and 7 (11,7 %) are excellent in the musical/rhytmical intelligence. Cumulative percent reveals that 93,3 % of the teachers can be considered as sensitive to music and rhythm, since it is the third strongest intelligence type among the eight.



4.6. Interpersonal Intelligence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	2	3,3	3,3	65,0
	Good	15	25,0	25,0	90,0
	Average	37	61,7	61,7	61,7
	Poor	6	10,0	10,0	100,0
	Total	**60**	**100,0**	**100,0**	

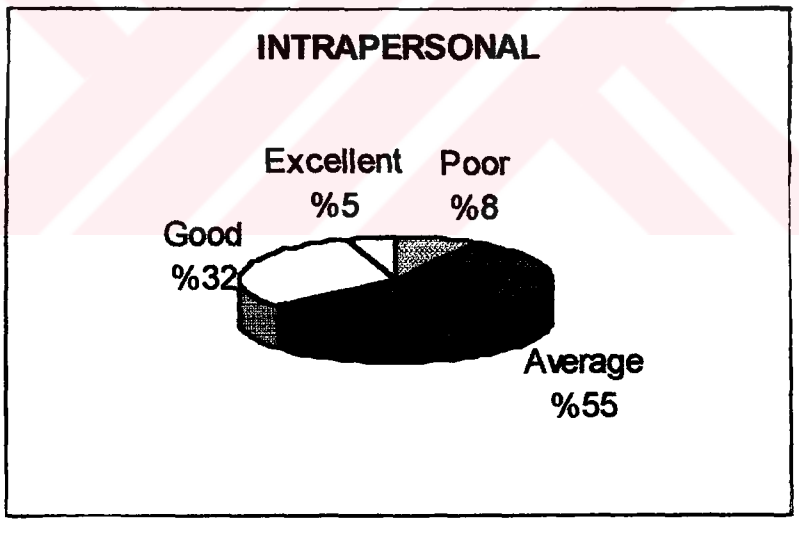
The figures given above in table 4.6 shows that 6 (10 %) teachers are poor, 37 (61,7 %) are average, 15 (25 %) are good and 2 (3,3 %) of them are excellent in interpersonal intelligence. Since it is one of the most important intelligence types in ELT, the frequency distribution of scores received from Interpersonal intelligence and 90 % cumulative percent reveal that the interpersonal intelligence deserves more attention among the others.



4.7. Intrapersonal Intelligence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	3	5,0	5,0	60,0
	Good	19	31,7	31,7	91,7
	Average	33	55,0	55,0	55,0
	Poor	5	8,3	8,3	100,0
	Total	**60**	**100,0**	**100,0**	

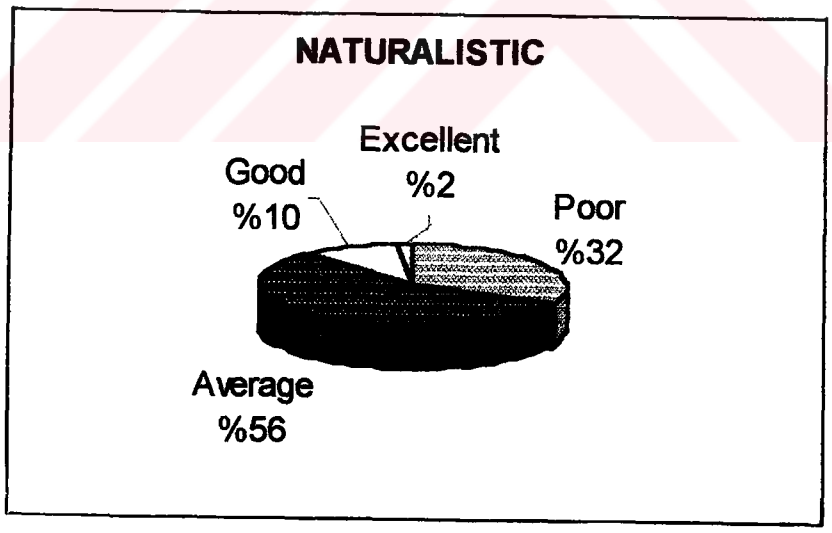
Tablo 4.7 indicates that out of 60 teachers 5 (8,3 %) teachers are poor, 33 (55 %) are average, 19 (31,7 %) are good and 3 (5 %) of them are excellent in the intrapersonal intelligence. When the cumulative percent is examined, with 91,7 %, it is the fourth one among the eight intelligence types, which reveals that most teachers have intrapersonal characteristics.



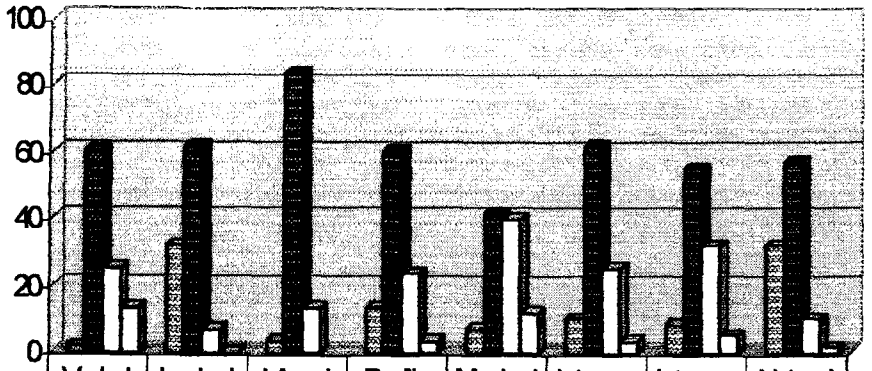
4.8. Naturalistic Intelligence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	1	1,7	1,7	58,3
	Good	6	10,0	10,0	68,3
	Average	34	56,7	56,7	56,7
	Poor	19	31,7	31,7	100,0
	Total	**60**	**100,0**	**100,0**	

Table 4.8 which illustrates the scores received from naturalistic intelligence shows that with 68,3 % cumulative, the naturalistic intelligence is another weak intelligence just like the logical/mathematical intelligence compared to the others. As it is seen 19 (31,7 %) teachers are poor, 34 (56,7 %) are average, 6 (10 %) are good and only 1 (1,7 %) of them is excellent in naturalistic intelligence. Since they do not necessarily need nature in ELT, teachers do not need to be good at it under these circumstances.



General Situation

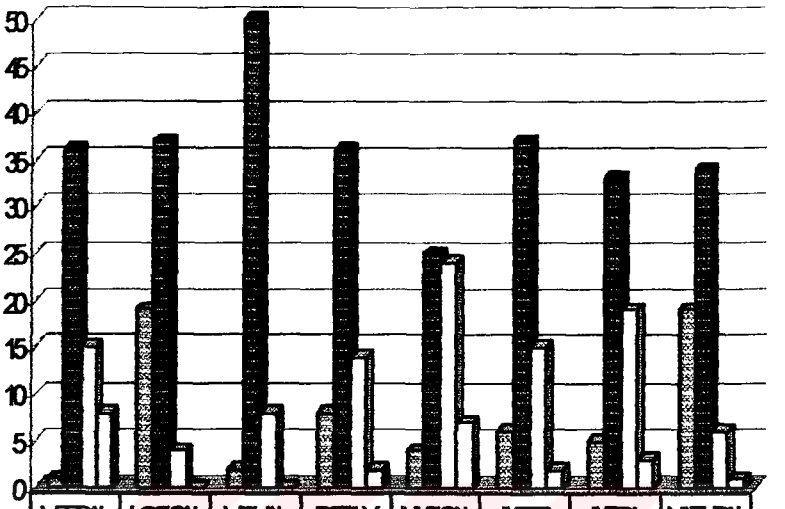


	Verbal	Logical	Visual	Bodily	Musical	Interper	Intraper	Natural
Poor	1,7	31,7	3,3	13,3	6,7	10	8,3	31,7
Average	60	61,7	83,3	60	41,7	61,7	55	56,7
Good	25	6,7	13,3	23,3	40	25	31,7	10
Excellent	13,3	0		3,3	11,7	3,3	5	1,7

	Verbal	Logical	Visual	Bodily	Musical	Interper	Intraper	Natural
Poor	1,7	31,7	3,3	13,3	6,7	10	8,3	31,7
Average	60	61,7	83,3	60	41,7	61,7	55	56,7
Good	25	6,7	13,3	23,3	40	25	31,7	10
Excellent	13,3	0	0	3,3	11,7	3,3	5	1,7

(Table X Percentage Terms)

General Situation



	VERBAL	LOGICAL	VISUAL	BODILY	MUSICAL	INTER	INTRA	NATURAL
Poor	1	19	2	8	4	6	5	19
Average	36	37	50	36	25	37	33	34
Good	15	4	8	14	24	15	19	6
Excellent	8	0	0	2	7	2	3	1

	Verbal	Logical	Visual	Bodily	Musical	Interper	Intraper	Natural
Poor	1	19	2	8	4	6	5	19
Average	36	37	50	36	25	37	33	34
Good	15	4	8	14	24	15	19	6
Excellent	8	0	0	2	7	2	3	1

(Table Y Frequency Terms)

The findings set out as percentages in Table X and in frequency terms in Table Y out of 60 teachers reveal the overall distribution of 8 intelligence types categorised as poor, average, good and excellent.

4.3.2. Cross Tables

Age - Intelligence Type

4.9. Age Categories

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<=30	43	71,7	71,7	71,7
	>30	17	28,3	28,3	100,0
	Total	**60**	**100,0**	**100,0**	

Table 4.9 illustrates that 60 teachers who participated in the study were put into two age categories; thirty and above, and below thirty. As it is seen 43 (71,7 %) of the teachers are thirty and above, 17 (28,3 %) of them are below thirty out of 60.

Age Category * Verbal/Linguistic Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2,394(a)	3	,495
Likelihood Ratio	2,615	3	,455
N of Valid Cases	60		
a 4 cells (50,0 %) have expected count less than 5. The minimum expected count is ,28.			

For Age-Categories versus Verbal/Linguistic intelligence the results were X^2 (3, N= 60)=2,394, p= .495>.05. Thus, we fail to reject our hypothesis that teachers fell into Verbal intelligence categories independent from their age. (N: Number of the subjects, df: A degree of freedom).

Age Category * Logical/Mathematical Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,096(a)	2	,953
Likelihood Ratio	,096	2	,953
N of Valid Cases	60		
a 2 cells (33,3 %) have expected count less than 5. The minimum expected count is 1,13.			

For Age-Categories versus Locigal/Mathematical intelligence the results were X^2 (2, N= 60)=0.096, p= .953>.05. Thus, we fail to reject our hypothesis that teachers fell into Logical intelligence categories independent from their age.

Age Category * Visual/Spatial Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5,852(a)	2	,054
Likelihood Ratio	5,836	2	,054
N of Valid Cases	60		
a 3 cells (50,0 %) have expected count less than 5. The minimum expected count is ,57.			

For Age-Categories versus Visual/Spatial intelligence the results were X^2 (2, N= 60)=5.852, p= .054>.05. Thus, we fail to reject our hypothesis that teachers fell into Visual intelligence categories independent from their age. However, the p value is close to the alpha level, therefore we might think of a slight relation.

Age Category * Bodily/Kinesthetic Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,512(a)	3	,916
Likelihood Ratio	,467	3	,926
N of Valid Cases	60		
a 4 cells (50,0 %) have expected count less than 5. The minimum expected count is ,57.			

For Age-Categories versus Bodily/Kinesthetic intelligence the results were X^2 (3, N= 60)=.512 p= .916>.05. Thus, we fail to reject our hypothesis that teachers fell into Bodily/Kinesthetic intelligence categories independent from their age.

Age Category * Musical Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,596(a)	3	,204
Likelihood Ratio	6,388	3	,094
N of Valid Cases	60		
a 3 cells (37,5 %) have expected count less than 5. The minimum expected count is 1,13.			

For Age-Categories versus Musical intelligence the results were X^2 (3, N= 60)=4.596, p= .204>.05. Thus, we fail to reject our hypothesis that teachers fell into Musical intelligence categories independent from their age.

Age Category * Interpersonal Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3,871(a)	3	,276
Likelihood Ratio	5,385	3	,146
N of Valid Cases	60		
a 5 cells (62,5 %) have expected count less than 5. The minimum expected count is ,57.			

For Age-Categories versus Interpersonal intelligence the results were X^2 (3, N= 60)=3.871, p= .276>.05. Thus, we fail to reject our hypothesis that teachers fell into Interpersonal intelligence categories independent from their age.

Age Category * Intrapersonal Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,858(a)	3	,182
Likelihood Ratio	4,678	3	,197
N of Valid Cases	60		
a 4 cells (50,0 %) have expected count less than 5. The minimum expected count is ,85.			

For Age-Categories versus Intrapersonal intelligence the results were X^2 (3, N= 60)=4.858, p= .182>.05. Thus, we fail to reject our hypothesis that teachers fell into Intrapersonal intelligence categories independent from their age.

Age Category * Naturalistic Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4,471(a)	3	,215
Likelihood Ratio	4,356	3	,226
N of Valid Cases	60		
a 4 cells (50,0 %) have expected count less than 5. The minimum expected count is ,28.			

For Age-Categories versus Naturalistic intelligence the results were X^2 (3, N= 60)=4.471, p= .215>.05. Thus, we fail to reject our hypothesis that teachers fell into Naturalistic intelligence categories independent from their age.

Teaching Experience - Intelligence Type

4.10. Teaching Experience Categories

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-2	5	8,3	8,3	8,3
	12+	6	10,0	10,0	18,3
	3-5	27	45,0	45,0	63,3
	6-8	15	25,0	25,0	88,3
	9-11	7	11,7	11,7	100,0
	Total	**60**	**100,0**	**100,0**	

Table 1.10 illustrates that 60 teachers who participated in the study were grouped into 5 categories; 0-2, 3-5, 6-8, 9-11, 12+. As it is seen, most of the teachers (45 %) have 3 to 5 year teaching experience, on the other hand, only a minority (8,3 %) belongs to the first 0-2 year teaching experience category.

Teaching Experience Category * Verbal/Linguistic Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18,982(a)	12	,089
Likelihood Ratio	14,022	12	,299
N of Valid Cases	60		
a 17 cells (85,0 %) have expected count less than 5. The minimum expected count is ,08.			

For Teaching experience - Categories versus Verbal/Linguistic intelligence the results were X^2 (12, N= 60)=18.982, p= .089>.05. Thus, we fail to reject our hypothesis that teachers fell into Verbal intelligence categories independent from their teaching experience. (N: Number of the subject, Df: A degree of freedom).

Teaching Experience Category * Logical/Mathematical Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,992(a)	8	,537
Likelihood Ratio	9,749	8	,283
N of Valid Cases	60		
a 12 cells (80,0 %) have expected count less than 5. The minimum expected count is ,33.			

For Teaching experience - Categories versus Logical/Mathemetaical intelligence the results were X^2 (8, N= 60)=6.992, p= .537>.05. Thus, we fail to reject our hypothesis that teachers fell into Logical intelligence categories independent from their teaching experience.

Teaching Experience Category * Visual/Spatial Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8,662(a)	8	,372
Likelihood Ratio	8,241	8	,410
N of Valid Cases	60		
a 11 cells (73,3 %) have expected count less than 5. The minimum expected count is ,17.			

For Teaching experience - Categories versus Visual/Spatial intelligence the results were X^2 (8, N= 60)=8.662, p= .372>.05. Thus, we fail to reject our hypothesis that teachers fell into Visual intelligence categories independent from their teaching experience.

Teaching Experience Category * Bodily/Kinesthetic Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9,940(a)	12	,621
Likelihood Ratio	10,560	12	,567
N of Valid Cases	60		
a 17 cells (85,0 %) have expected count less than 5. The minimum expected count is ,17.			

For Teaching experience - Categories versus Bodily/Kinesthetic intelligence the results were X^2 (12, N= 60)=9.940, p= .621>.05. Thus, we fail to reject our hypothesis that teachers fell into Bodily/Kinesthetic intelligence categories independent from their teaching experience.

Teaching Experience Category * Musical Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7,032(a)	12	,855
Likelihood Ratio	8,877	12	,713
N of Valid Cases	60		
a 16 cells (80,0 %) have expected count less than 5. The minimum expected count is ,33.			

For Teaching experience - Categories versus Musical intelligence the results were X^2 (12, N= 60)=7.032, p= .855>.05. Thus, we fail to reject our hypothesis that teachers fell into Musical intelligence categories independent from their teaching experience.

Teaching Experience Category * Interpersonal Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15,005(a)	12	,241
Likelihood Ratio	14,697	12	,258
N of Valid Cases	60		
a 17 cells (85,0 %) have expected count less than 5. The minimum expected count is ,17.			

For Teaching experience - Categories versus Interpersonal intelligence the results were X^2 (12, N= 60)=15.005, p= .241>.05. Thus, we fail to reject our hypothesis that teachers fell into Interpersonal intelligence categories independent from their teaching experience.

Teaching Experience Category * Intrapersonal Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8,594(a)	12	,737
Likelihood Ratio	9,921	12	,623
N of Valid Cases	60		
a 17 cells (85,0 %) have expected count less than 5. The minimum expected count is ,25.			

For Teaching experience - Categories versus Intrapersonal intelligence the results were X^2 (12, N= 60)=8.594, p= .737>.05. Thus, we fail to reject our hypothesis that teachers fell into Intrapersonal intelligence categories independent from their teaching experience.

Teaching Experience Category * Naturalistic Intelligence

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21,933(a)	12	,038
Likelihood Ratio	20,605	12	,056
N of Valid Cases	60		
a 17 cells (85,0 %) have expected count less than 5. The minimum expected count is ,08.			

For Teaching experience - Categories versus Naturalistic intelligence the results were X^2 (12, N= 60)=21.933, p= .038<.05. Thus, we reject our hypothesis that teachers fell into Naturalistic intelligence categories independent from their teaching experience.

To sum up, when all these results were evaluated, it can be concluded that belonging to any of the age categories does not affect possessing more of any of the intelligences, in other words it can be claimed that teachers in different age categories have similar intelligence profiles even though the intelligence profiles tend to be slightly different for visual intelligence.

On the other hand, belonging to any of the teaching experience categories does not affect possessing more of any of the intelligences except of Naturalistic Intelligence. That is to say, not regarding Naturalistic Intelligence the teachers in different teaching experience categories have similar intelligence profiles.

4.4. The Interpretation of the Data Collected from the Students

In the following descriptive statistics every table includes each type of intelligence for each class. N symbolises the number of students in that class. Mean is the summation of all the total scores and the division of the sum to the total number of the scores.

4.4.1. Decriptive Statistics

C - 01

Total	N	Mean
Verbal	15	3,6000
Interpersonal	15	3,2667
Bodily	15	3,2667
Intrapersonal	15	3,2000
Visual	15	3,0667
Mathematical	15	3,0667
Musical	15	2,6000
Naturalistic	15	2,2667
Valid N (Listwise)	15	

Table 01 illustrates that there are 15 students in the class and Verbal/Lingustic intelligence seems to be superior than others with 3,6 mean. As it is seen, Interpersonal and Bodily/Kinesthetic Intelligences share being the second best intelligence types with 3,2 mean. The weakest one is Naturalistic Intelligence with 2,2 mean.

C - 02

Total	N	Mean
Visual	14	3,5000
Bodily	14	3,4286
Intrapersonal	14	3,3571
Interpersonal	14	3,2857
Mathematical	14	3,2143
Verbal	14	2,8571
Musical	14	2,7857
Naturalistic	14	1,8571
Valid N (Listwise)	14	

Table 02 illustrates that there are 14 students in the class and Visual/Spatial Intelligence seems to be dominant with 3,5 mean. The second dominant intelligence

type is Bodily/Kinesthetic (3,4) and the third is Intrapersonal (3,3) in the class C-02. The weakest intelligence is the Naturalist one with 1,8 mean.

C - 03

Total	N	Mean
Mathematical	17	3,7647
Bodily	17	3,6471
Intrapersonal	17	3,6471
Visual	17	3,3529
Interpersonal	17	3,2941
Verbal	17	3,1176
Musical	17	2,5882
Naturalistic	17	2,1176
Valid N (Listwise)	17	

As seen in Table 03, there are 17 students in the class and Logical/Mathematical Intelligence seems to be superior than others with 3,7 mean. As it can be clearly seen, with 3,6 mean Bodily/Kinesthetic and Intrapersonal Intelligences are the second superior ones among the eight. Like the others, the weakest intelligence type is the Naturalist Intelligence with 2,1 mean.

C - 04

Total	N	Mean
Verbal	10	3,6000
Intrapersonal	10	3,5000
Musical	10	3,3000
Visual	10	3,3000
Mathematical	10	3,1000
Bodily	10	3,1000
Interpersonal	10	3,0000
Naturalistic	10	2,6000
Valid N (Listwise)	10	

As Table 04 demonstrates, in C-04 there are 10 students and Verbal/Linguistic Intelligence (3,6) seems to be superior than others. It is clearly seen that Intrapersonal

Intelligence is the second best intelligence type with 3,5 mean. Again, Naturalist Intelligence is the weakest one with 2,6 mean.

C - 05

Total	N	Mean
Bodily	13	4,1538
Verbal	13	3,7692
Interpersonal	13	3,3846
Intrapersonal	13	3,3846
Visual	13	3,3077
Musical	13	3,2308
Mathematical	13	3,0000
Naturalistic	13	2,0769
Valid N (Listwise)	13	

The means above in Table 05 shows that there are 13 students in C-05. The controlling intelligence type is Bodily/Kinesthetic Intelligence with 4,1 mean. The second controlling one is Verbal/Linguistic Intelligence with 3,7 mean. The weakest intelligence in C-05 is the Naturalistic Intelligence with 2,0 just like in other classes.

C - 06

Total	N	Mean
Verbal	14	3,9286
Bodily	14	3,9286
Intrapersonal	14	3,5714
Interpersonal	14	3,4286
Visual	14	3,3571
Mathematical	14	3,0000
Musical	14	2,8571
Naturalistic	14	1,5000
Valid N (Listwise)	14	

Table 06 illustrates that there are 14 students in the class. In C-06 both Verbal/Linguistic Intelligence and Bodily/Kinesthetic Intelligence seem to be the most

ruling intelligence types with 3.9 mean. The weakest one is Naturalist Intelligence with 1,5 mean.

C - 07

Total	N	Mean
Bodily	14	4,2143
Interpersonal	14	4,0000
Mathematical	14	3,5714
Verbal	14	3,3571
Visual	14	3,2857
Intrapersonal	14	3,0714
Musical	14	2,8571
Naturalistic	14	1,7143
Valid N (listwise)	14	

Table 07 indicates that there are 14 students in C-07. As it is seen, Bodily/Kinesthetic Intelligence is the most controlling intelligence type with 4,2 mean. The second controlling one is Interpersonal Intelligence with 4,0 mean. Like other classes, Naturalistic Intelligence is the weakest one with 1,7 mean.

C - 08

Total	N	Mean
Verbal	10	3,6000
Intrapersonal	10	3,5000
Bodily	10	3,5000
Musical	10	3,3000
Visual	10	3,1000
Interpersonal	10	2,7000
Naturalistic	10	2,6000
Mathematical	10	2,5000
Valid N (Listwise)	10	

Table 08 shows that there are 10 students in C-08. The Verbal/Linguistic Intelligence with 3,6 seems to be the dominant and Intrapersonal Intelligence with 3,5

seems to be the second dominant intelligence type in C-08. Unlike other classes, Logical/Mathematical Intelligence with 2,5 mean seems to be the weakest one.

C - 09

Total	N	Mean
Visual	10	3,8000
Intrapersonal	10	3,4000
Mathematical	10	3,3000
Bodily	10	3,2000
Verbal	10	3,1000
Interpersonal	10	2,7000
Musical	10	2,4000
Naturalistic	10	1,8000
Valid N (Listwise)	10	

As seen in table 09 there are 10 students in C-09. It can be clearly seen that the most controlling intelligence type is the Visual/Spatial Intelligence with 3,8 mean and the second controlling one is Intrapersonal Intelligence with 3,4 mean. The weakest intelligence type with 1,8 mean is Naturalistic Intelligence.

C - 10

Total	N	Mean
Bodily	11	3,8182
Mathematical	11	3,7273
Intrapersonal	11	3,5455
Interpersonal	11	3,1818
Visual	11	3,0909
Verbal	11	3,0909
Musical	11	2,7273
Naturalistic	11	1,2727
Valid N (Listwise)	11	

Table 10 shows that in class C-10, there are 11 students. The Bodily/Kinesthetic Intelligence seems to be superior with 3,8 mean and

Logical/Mathematical Intelligence is the second dominant one with 3,7 mean. Again with 1,2 mean Naturalistic Intelligence is the weakest intelligence type among the others.

All Classes

Total	N	Mean
Bodily	128	3,6484
Intrapersonal	128	3,4141
Verbal	128	3,3984
Visual	128	3,3125
Interpersonal	128	3,2656
Mathematical	128	3,2500
Musical	128	2,8438
Naturalistic	128	1,9687
Valid N (Listwise)	128	

Analysis of the data for all classes indicates that there are total 128 students in 10 classes. The results show that students seem to be superior in Bodily/Kinesthetic Intelligence than others with 3,6 mean as the teachers in general seem to be superior in Verbal/Linguistic Intelligence.

When we look at the second controlling intelligence type, it can be seen that students seem to be good at Intrapersonal Intelligence with 3,4 mean as the teachers are good at Visual/Spatial Intelligence in the second place. The findings also reveal that students are bad at Naturalistic Intelligence with 1,9 mean just like teachers.

As mentioned above, some of the intelligence types of teachers as well as students are dominant. Therefore, various integrated MI activities appropriate for the intelligence profiles of teachers and students will be suggested in the following chapter.

CHAPTER 5

SUGGESTED INTEGRATED ACTIVITIES RELATED TO MULTIPLE INTELLIGENCES AND CLASSROOM OBSERVATIONS

5.0. Introduction

In this chapter various integrated multiple intelligences activities suitable from elementary to upper intermediate students are provided. The activities enclosed within were presented for teachers of EFL to help them create learning environments that are not only educational but fun. The activities which are suggested in section 5.1 are only samples which can be adapted in a variety of ways according to the needs, level and the purpose to motivate students and enhance weaker intelligences. At the beginning of each activity, the level, intelligence types, and skills involved are given to complete the specific task. Section 5.2 deals with the reflection of classroom observations with the profile of the teacher and the class during the suggested integrated multiple intelligences activities.

5.1. Integrated Multiple Intelligences Activities

ACTIVITY 1: WORD ACTIVITIES

Level: Intermediate
Intelligence Types: Verbal/Linguistic, Logical/Mathematical, Interpersonal
Skills: Reading, writing

Divide the class into teams of three.

A. Changing Words

Explain the teams that they are going to change one word into another in steps by changing one letter at each step to make a new word. For example: Change EAT to HOT in 2 steps:

EAT
HAT
HOT

1. Change ROPE to RIDE in 2 steps:

ROPE

RIDE

2. Go from BOAT to FOOD in 3 steps:

BOAT

FOOD

3. Change BLACK to CLICK in 3 steps.

BLACK

CLICK

B. Word Stairs

Tell the teams that they are going to build stairs of words, using the clues given below.

All the words begin with the letter "s".

For example:

Line 1: a 3-letter word meaning "male child"

Line 2: a 4-letter word for "what is found at the beach"

Line 3: a 5-letter word for opposite of "sit"

Line 4: a 6-letter word for "cry"

Line 5: a 7- letter word for "greedy"

--SON--

---SAND---

---- STAND----

----- SCREAM-----

------SELFISH------

1. Build these stairs with words beginning with "t".

Line 1: a 3-letter word for a "hot brown drink"

Line 2: a 4-letter word for "opposite of fat"

Line 3: a 5-letter word for "a means of transportation"

Line 4: a-6 letter word for "what you use to speak with"

Line 5: a-7 letter word for "lighthing and ....."

Line 6: a-8 letter word for "a geometric figure"

Line 7: a-9 letter word for "opposite of permanent"

Line 8: a 10-letter word for "a box for viewing moving pictures"

Answers: (Other answers may be correct; these show only one possible path.)

A. Changing Words

1. ROPE - RIPE (or RODE) - RIDE
2. BOAT - BOOT - FOOT - FOOD
3. BLACK - BLOCK - CLOCK - CLICK

Clues (synonyms of missing steps): 1. Ready to be eaten. 2. Strong, heavy shoes. / Part of your body that you stand on. 3. A piece of hard material such as wood or stone. / An instrument for showing time.

B. Word Pyramid

1. Tea
2. Thin
3. Truck
4. Tongue
5. Thunder
6. Triangle
7. Temporary
8. Television

Adapted from: (English Teaching Forum 2001 October: 41)
(Bouchard, 1980: 7)

ACTIVITY 2: WORDSQUARE

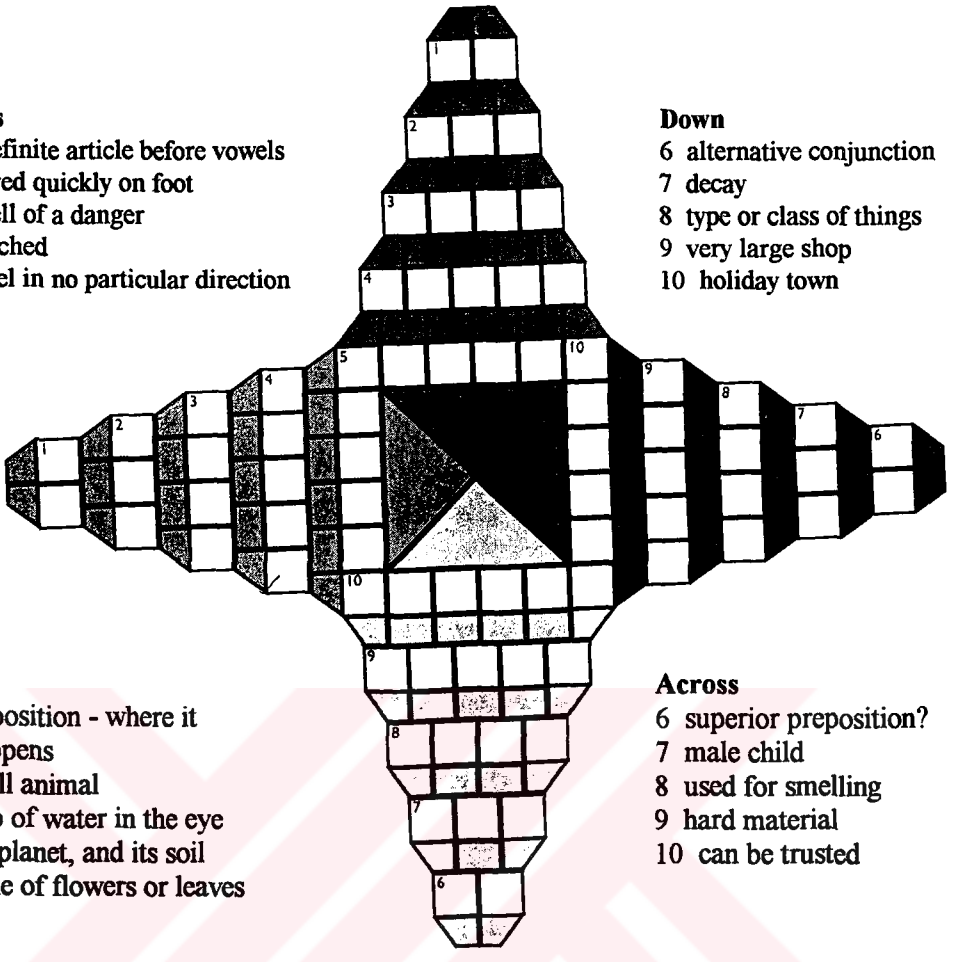
Level: Intermediate - upper intermediate
Intelligence Types: Verbal/Linguistic, Logical/Mathematical, Interpersonal
Skills: Reading, writing

Look at the sequence of the words: As
Sat
Star
Stare
Faster

Each word contains all the letters of the word above it, plus one more. The crossword below is made up of four groups of words like this, with the largest words arranged into a square. Invite the students to solve the puzzle. Students write in the words to the definitions and find the largest words. Then, they check the meanings of the new words in their dictionaries.

Across
1 indefinite article before vowels
2 moved quickly on foot
3 to tell of a danger
4 sketched
5 travel in no particular direction

Down
6 alternative conjunction
7 decay
8 type or class of things
9 very large shop
10 holiday town



Down
1 preposition - where it happens
2 small animal
3 drop of water in the eye
4 our planet, and its soil
5 circle of flowers or leaves

Across
6 superior preposition?
7 male child
8 used for smelling
9 hard material
10 can be trusted

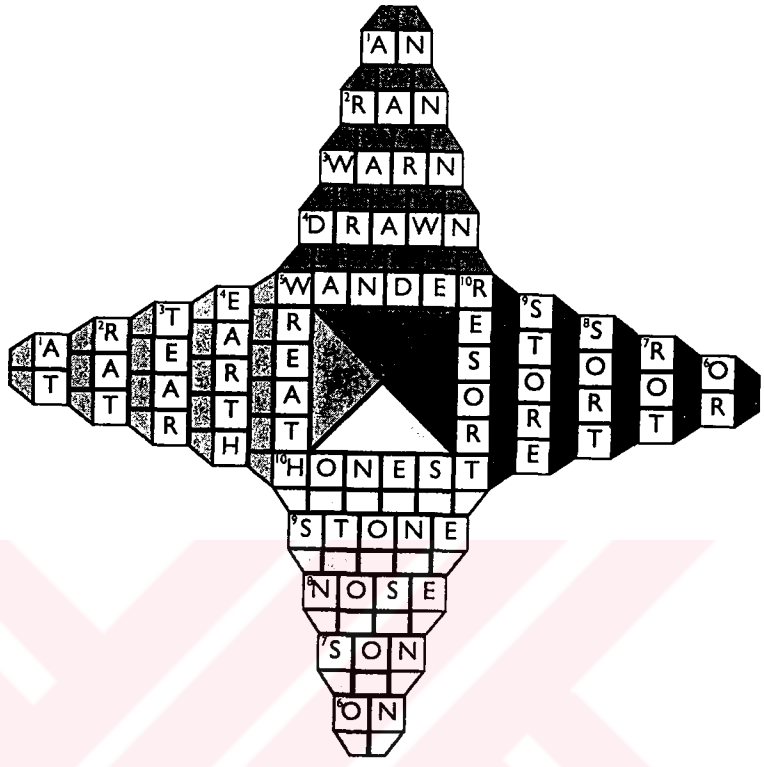
Answers:

Across
1. AN
2. RAN
3. WARN
4. DRAWN
5. WANDER

Down
6. OR
7. ROT
8. SORT
9. STORE
10. RESORT

Down
1. AT
2. RAT
3. TEAR
4. EARTH
5. WREATH

Across
6. ON
7. SON
8. NOSE
9. STONE
10. HONEST



Source: (Maule, 1997: 25)

ACTIVITY 3: MURDER IN THE EFL CLASSROOM

Level: Intermediate - upper intermediate

Intelligence types: Verbal/Linguistic, Visual/Spatial, Interpersonal, Bodily/Kinesthetic, Intrapersonal, Logical/Mathematical

Skills: Reading, writing, speaking, listening

- Inform the class that they are about to solve a murder. Tell them and write on the board that they need to find:

  a. the murderer
  b. the reason for murder
  c. the evidence

- Split the class into three equal groups (AAAA-BBBB-CCCC) and give each member of one group a copy of the same handout. Each handout contains the core information about the scene of the crime, but the different groups' handouts contain different essential evidence.

(Tip: Put each group's instructions on different coloured paper, so you can see at a glance if everybody has the right colour, and is doing the right thing.)

- Working as a group, the students read through the handout, and together make sure they understand the text and vocabulary. They also begin to consider who they think is the murderer.

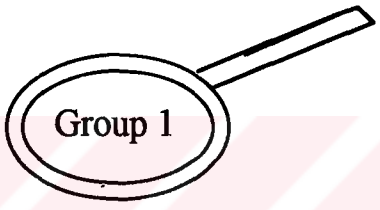
- The groups now split up, and the class forms new groups of four, made up of one student from each of the previous groups (ABCD-ABCD-ABCD). The students now have to combine their evidence and discuss their ideas in order to find the murderer.

- At the feedback stage, students say who they think the murderer is, and why. The teacher can then reveal the truth. An alternative here, if the class time is long enough, would be to have members from groups who disagree about the identity of the murderer get together to try to convince each other of their case.

Follow-up: There are a number of possible follow-ups to this activity, such as writing statements made by the various people involved, or a role play of the police interview with them, or even getting the students to produce in groups their own version of the activity for other groups to solve.

The facts

The body of Jacqueline Smith, a nurse, was found in her room in the nurses' dormitory at 9.30 in the morning. The security guard, Jeff Hughes, was called to unlock the door by Jacqueline's next-door neighbour, Katherine Hague, after Jacqueline was late for duty and would not answer her door. Katherine Hague and the victim shared a partitioned balcony on the third floor, and Katherine could just see Jacqueline's body on the bed, and was worried that she might be ill. Jacqueline was found on the bed, and a doctor's examination confirmed that she had been suffocated with a pillow. There were bruises on her face, and she had pieces of skin and blood under her fingernails. The room was in a mess, with the drawers pulled open and clothes on the floor.



The evidence

A One glove, with the name Sarah Cousins (another nurse at the dormitory), was found in Jacqueline's room near the bed.

* * * * *

B It appears that Jacqueline always had money problems and used to borrow from the staff and nurses at the dormitory.

* * * * *

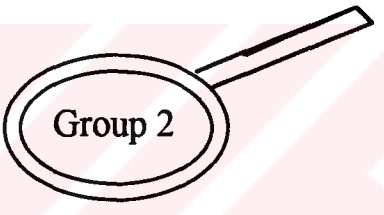
C There had recently been a problem with exam cheating at the hospital, where Jaqueline's and Katherine Hague's papers had been too similar - both women were officially warned, but everyone know that Jacquline was the one who had cheated, and that Katherine was furious for the trouble she had got in to - especially as Katherine was normally a very good student, and now her reputation and chance of the prize for the best nurse were ruined.

* * * * *

D A search of Sarah Cousins' room revealed Jacqueline's wallet, which was found to contain no cash but a lot of cards and documents.

The facts

The body of Jacqueline Smith, a nurse, was found in her room in the nurses' dormitory at 9.30 in the morning. The security guard, Jeff Hughes, was called to unlock the door by Jacqueline's next-door neighbour, Katherine Hague, after Jacqueline was late for duty and would not answer her door. Katherine Hague and the victim shared a partitioned balcony on the third floor, and Katherine could just see Jacqueline's body on the bed, and was worried that she might be ill. Jacqueline was found on the bed, and a doctor's examination confirmed that she had been suffocated with a pillow. There were bruises on her face, and she had pieces of skin and blood under her fingernails. The room was in a mess, with the drawers pulled open and clothes on the floor.



The evidence

A It is believed that Jacqueline had recently borrowed money from another nurse in the dormitory, called Sarah Cousins.

* * * * *

B A nurse called Amelia Chambers says that on the night of the murder, she had gone to Jacqueline's room to confront her about having stolen Amelia's boyfriend, and that they ended up having a fight, which Jacqueline had won. Amelia was suffering from bruises to her face and deep scratches on her arm. She claims she left Jacqueline's room at around 9.00 p.m. that night, and that Jacqueline was very much alive then.

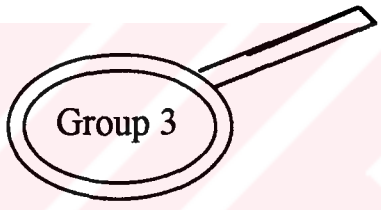
* * * * *

C Sarah Cousins is believed to have just begun a relationship with the security guard, Jeff Hughes.

D No fingerprints were found in Jacqueline's room, and all her personal belongings, such as books, keys, clothes, etc., are still in her room.

The facts

The body of Jacqueline Smith, a nurse, was found in her room in the nurses' dormitory at 9.30 in the morning. The security guard, Jeff Hughes, was called to unlock the door by Jacqueline's next-door neighbour, Katherine Hague, after Jacqueline was late for duty and would not answer her door. Katherine Hague and the victim shared a partitioned balcony on the third floor, and Katherine could just see Jacqueline's body on the bed, and was worried that she might be ill. Jacqueline was found on the bed, and a doctor's examination confirmed that she had been suffocated with a pillow. There were bruises on her face, and she had pieces of skin and blood under her fingernails. The room was in a mess, with the drawers pulled open and clothes on the floor.



The evidence

A Sarah Counsins, another nurse living in the dormitory, has been arrested after being discovered using Jacqueline's credit card to withdraw a large sum of money at 9.36 that morning at a bank in the centre of town (some 20 minutes by bus from the dormitory).

* * * * *

B On interview, Sarah Cousins refuses to say where she got the card from, but her alibi - that she was out at a pub with a friend until midnight - is confirmed by that friend (Jackie Shepherd, who has no other connection with the nurses' dormitory).

* * * * *

C Katherine Hague, the victim's next-door neighbour, says that she heard Jacqueline having a fight in her room with another nurse, Amelia Chambers. She says that Amelia hated Jacqueline for taking her boyfriend, and that Amelia had told people that she was going to 'kill that cow'. She does not recall the time of the fight.

* * * * *

D Forensic tests show that the time of death was between 11.00 p.m. and midnight, and that the skin and blood beneath Jacqueline's fingernails came from at least two different people.

The solution

Jeff Hughes, the security guard, is the killer. His motive was to retrieve money which he had previously lent the victim. This attempt ended up in a fight, during which he murdered her. The crucial fact which points to his guilt is that the door to the victim's room was locked when the body was discovered, and yet her keys were found inside the room. Only Jeff could have locked the door after the crime, with his own set of keys. Realising the gravity of what he had done, he then attempted to implicate his recent girlfriend, Sarah Cousins, by placing one of her gloves in Jacqueline's room, and by giving her Jacqueline's credit card to draw out money which was owed to them, without of course telling her that Jacqueline was dead. The other two people involved, while having some motive (here an interesting discussion can arise about what students regard as being sufficient motive to commit murder!), could not have locked the victim's door behind them when they left. On average, I have found that about 25-33% of the groups come up with the correct answer.



Source: (Muncie, 2000: 33)

ACTIVITY 4: CANOE PROBLEM

Level: Intermediate

Intelligence Types: Verbal/Linguistic, Visual/Spatial, Logical/Mathematical, Interpersonal, Intrapersonal

Skills: Reading, writing, speaking

The class is divided into groups of three. Then each group is given a copy of the same handout and asked to solve the canoe problem. Time limit can be set. If the students are interested in the canoe problem, they can be asked to produce a problem in groups for the class to solve.

Nineteen people need to cross a river. It is to rapid to swim, and there is only one canoe. Only three people can fit in the canoe at one time. One of the three must be an adult.	Only one person is an adult. How many trips across the river will be needed to get all of the children to the other side of the river?
Workspace:	

Answer: 9

Source: (Silver, Strong and Perini, 2000: 12).

ACTIVITY 5: PLAYING WITH WORDS

Level: Intermediate-upper intermediate

Intelligence Types: Verbal/Linguistic, Logical/Mathematical, Interpersonal, Intrapersonal

Skills: Reading, writing, speaking

a. Scrambled words: The students are presented a list of scrambled words on the blackboard and are asked to put them in order in such a way that they make an English word. For Example: FORO makes ROOF. The activity may become more challenging by having scrambled letters that produce two or more words. For example: ODG produces DOG and GOD; ISNG produce SIGN, SING and GINS. Having teams will increase the motivation of the students.

The list of words can be prepared both by the students or the teacher about topics students have studied recently.

➢ Make one word out of each of these:

Weather:	infezerg	Art:	sertupucl	Sports:	ucrot
	Sgnircohc		ylac		gincar
	Eihsn		pertoty		sgynamsict
	Rtdeuhn		scavan		kocyeh

➢ Make two words out of each of these

1. EAFC 2. CULDO 3. OHW 4. EART

➢ Make three words out of each of these.

1. WNO 2. EMAN

Answers:	freezing	sculpture	court
	Scorching	clay	racing
	Shine	pottery	gymnastics
	Thunder	canvas	hockey

Answers: 1. FACE & CAFE 2. CLOUD & COULD
3. WHO & HOW 4. RATE & TEAR

Answers: 1. NOW, OWN, WON 2. NAME, MEAN, MANE

b. Matrix: This activity consists of a box which contains a number of letters. By combining them, students are asked to produce a number of words, all of a different length: a two-letter word, a three-letter word, etc. For example:

T	M	S	R	E	A

1. A 2. ME 3. TEAM 4. STEAM 5. STREAM

O	P	O	N	S

2. NO 3. SON 4. SOON 5. SPOON

G	I	T	S	R	N

1. I 2. IT 3. SIT 4. SING 5. STING 6. STRING

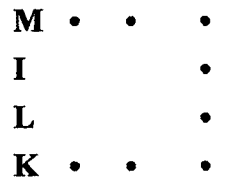
T	E	W	I	R

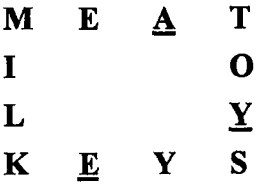
1. I 2. WE 3. TIE/WET 4. TIRE 5. WRITE

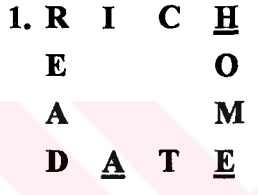
S	T	I	P	L

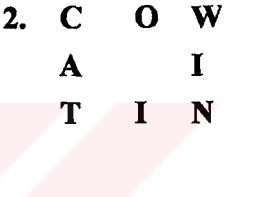
1. I 2. IT 3. SIT 4. SLIP 5. SPLIT

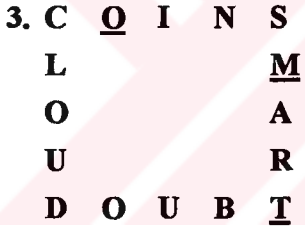
c. Squares: Students are given only one side of a square and have to produce the other three in order to make four words. (One or two letters from each word can be given as a clue). For example:

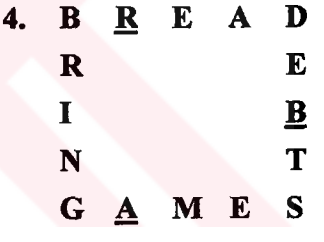












Source: (Tapia, 1998: 38)

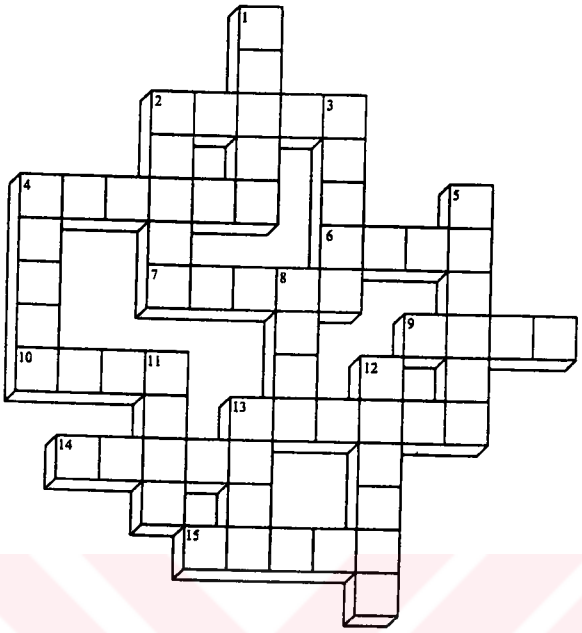
ACTIVITY 6: PASTWORD

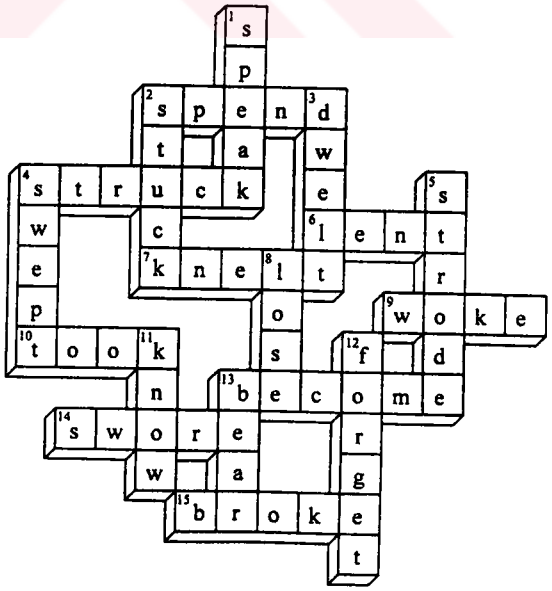
Level: Intermediate - upper intermediate

Intelligence Types: Verbal/Linguistic, Logical/Mathematical, Interpersonal

Skills: Reading, writing

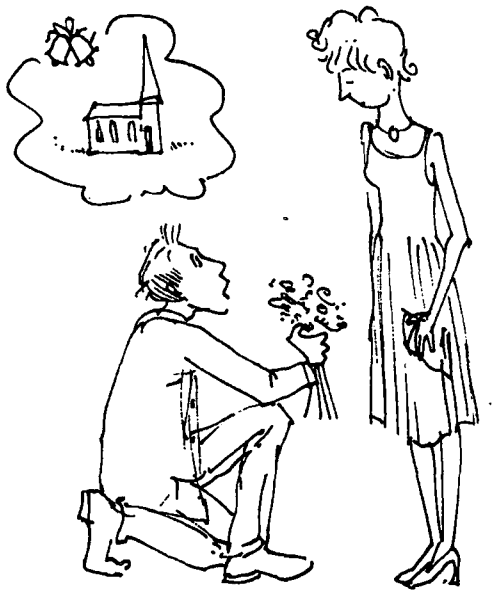
Students are asked to solve the puzzle in pairs. Each of the clues below can be completed either by the base form supplied or by its equivalent past form. Make your choice and fill in the grid below.



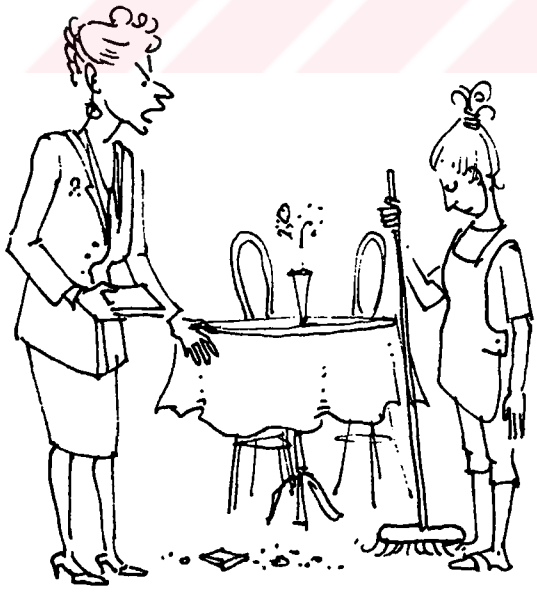

1 s p
2 s p e n 3 d
t a w
4 s t r u c k e 5 s
w c 6 l e n t
e 7 k n e 8 l t r
p o 9 w o k e
10 t o o 11 k s 12 f d
n 13 b e c o m e
14 s w o r e r
w a g
15 b r o k e
t

Across

2	**spend**	We're going to have to _____ some money on this.
4	**strike**	They _____ gold in the Yukon in 1896.
6	**lend**	I'd rather you _____ me more, but if that's all you can afford ...
7	**kneel**	Really, he actually _____ on the floor and asked me to marry him!
9	**wake**	It's after eight - time they _____ up.
10	**take**	I wish I _____ more time over these things.
13	**become**	The situation might _____ quite tricky.
14	**swear**	Everybody _____ a lot.
15	**break**	Supposing the rope _____, we'd fall about 100 metres.



7 across



4 down

Down

1	**speak**	He'd _____about her quite often.
2	**stick**	If she _____ to it she might well succeed.
3	**dwell**	If I _____ on it too much last night, she certainly encouraged me.
4	**sweep**	I thought you said you _____ the floor yesterday morning?
5	**stride**	Imagine if John Wayne just _____ into this pub right now.
8	**lose**	If we _____ today, I may stop coming to see this team.
11	**know**	He says when you _____ the result, you should give him a ring.
12	**forget**	... and then I see her and just _____ why I'm supposed to be there.
13	**bear**	What happened to his new car was too much for him to _____.

Source: (Maule, 1998: 28-29)

ACTIVITY 7: MUSICAL CHOICES

Level: Intermediate - upper intermediate
Intelligence Types: Musical, Verbal/Linguistic, Intrapersonal, Visual/Spatial, Interpersonal
Skills: Listening, writing, speaking

Select several pairs of extracts of music. Each pair should be quite different in style (eg. opera and pop, a slow love song and heavy metal, classical and rap) to create a real contrast. Play about 30 seconds of each of the first two extracts of music to your students. Make sure they know the name of each genre of music.

While they are listening, they are asked to note down the adjectives that describe their moods and feelings. Then they are asked to draw their mood graphs and share it with a friend.

Source: (Sanderson, 1998: 35)

ACTIVITY 8: SINGING STORY

Level: Elementary - intermediate
Intelligence Types: Musical, Verbal/Linguistic, Visual/Spatial, Bodily/Kinesthetic, Interpersonal
Skills: Listening, writing, reading, speaking

The activity gives the students some orientation and interest for listening without the tension of having to understand everything. It also helps them realise how much they can guess from understanding just a few words.

Select a pop song that has some story in it and for which you have the lyrics as well. Pick some key words from the song and write them on the board. Ask students how much they usually understand of the words of pop songs, and what clues they use such as title and refrain. Then invite them to read the key words from the song and make up a story from them. (This could be done in writing, as a homework assignment).

Then play them the song and ask them to focus on two things: If the tunes matched their story at all, and whether they could recognise any of the key words. The song is played again and students complete the missing words. Then call out the correct words and discuss how much they could guess.

After completing the gaps, in their groups, students are divided up into singers and actors (volunteers) and create a video clip for the song. Each group sings and acts out their video clip for the others.

Source: (Scharle and Szabo, 2000: 32)

Stay With Me

Don't turn .....
I ..... your love
'Cause You're the only one
That I've been ..... of

Don't turn away
Don't close the .....
'Cause You're the only one
That I've been ..... for

Come hold me tight
I need your .....
Just ..... and ..... me
To the .....
I long to be

Stay with me
Love is all I'm ..... for
Stay with me
Give me strength to .....

Stay with me
And hearts will surely
Find the ..... to go

Stay with me
Be my shelter
When the ....

Goran Karan

Stay With Me (Key)

Don't turn ...**away**.....
I ....**need**..... your love
'Cause You're the only one
That I've been ...**dreaming**..... of

Don't turn away
Don't close the ...**door**.....
'Cause You're the only one
That I've been ...**hoping**..... for

Come hold me tight
I need your ..**light**.....
Just ...**come**..... and ...**take**..... me
To the ...**place**.....
I long to be

Stay with me
Love is all I'm ...**praying**..... for

Stay with me
Give me strength to ..**carry on**.....

Stay with me
And hearts will surely
Find the ...**way**..... to go

Stay with me
Be my shelter
When the ...**angles**..... ..**disappear**.....

Goran Karan

ACTIVITY 9: SEQUENCING SHORT STORIES

Level: Intermediate - upper intermediate

Intelligence Types: Verbal/Linguistic, Logical/Mathematical, Interpersonal

Skills: Reading, speaking

Cut the story up into strips. Also cut the numbers off! What makes this story a little special is that you keep piece '11' of the story. The students must not only sequence the story, they must also tell you where your piece fits into the story.

Chocolates

1	Mr Thinker was married and had two children.
2	He had a secretary called Miss Everson.
3	Mr Thinker began an affair with Miss Everson.
4	He told her that he would leave his wife and run away with her.
5	Later, Mr Thinker felt bad about his affair and decided to stay with his wife.
6	Miss Everson found out that he wanted to return to his wife.
7	However, she didn't tell him that she knew.
8	Instead, she gave him some chocolates.
9	Mr Thinker was surprised but happy to receive the chocolates.
10	Mr Thinker knew that his wife was unsure of his love for her.
11	He gave the chocolate to his wife.
12	That evening, Mr Thinker had to go away on business; however, he was happy because his wife was happy again.
13	When he returned the following day, she lay dead on the sofa.
14	In her left hand, there was the box of chocolates.
15	In her right hand, there was a note.
16	He read: "When you find this note, you will have eaten some of the chocolates. They all contained cyanide. I hate you and I want you to die."

Source: (Taylor, 1997: 32)

ACTIVITY 10: CARTOON STORY

Level: Elementary - upper intermediate

Intelligence Types: Visual/Spatial, Verbal/Linguistic, Logical/Mathematical

Skills: Reading, writing, speaking

Cartoon 1: Students sit in pairs and receive a copy of a cartoon strip. They should guess the last balloon that fits the characters' facial expression and body language. After giving a mutual decision, have the students exchange and read each other's stories in small groups. You may follow with a discussion on what clues they used, how the clues in the character's facial expression or body language were connected to words communicated, and what similarities resulted in the stories.

Cartoon 2: Blank the speech bubbles in a cartoon story including some three to six pictures. Ask students to form pairs, give a copy to each pair, and tell them that the utterances in the speech balloons are removed. First, they have to create their own stories by following the sequence of the strips and exchange their story with the other groups. Then they are given the original speech balloons to match the cartoon strips. After making up a meaningful conversation that fits the drawings, they read it out.

Cartoon 3: Divide the class into groups of four and give them an incomplete cartoon story. First, ask students to match the correct bubbles with the drawings and have students make a guess and exchange each other's possible endings from the clues. Then, give them the possible endings of that cartoon story to choose and complete it with the best picture. Afterwards, the activity can be changed into a class discussion in which groups tell their best ending and their reasons.

Answers:

Cartoon 1

1. I'm going to ask you a question, Schroeder, and I want a straight answer ...
2. Do you think you and I will get married some day?
3. Never! !Never! In ten thousand million billion years!
4. I can't stand those straight answers ...

Cartoon 2

1. Donkey/Dolphin/Dinosaur

Cartoon 3

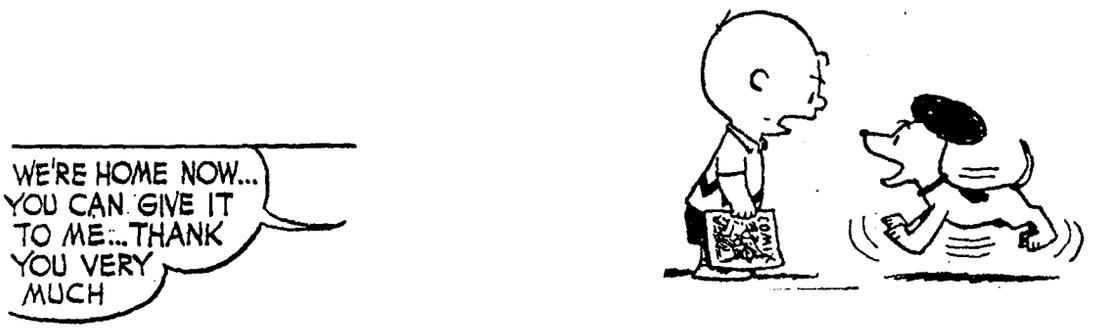
1. All right! All Right! I'll let you carry my magazine
2. Anything to keep peace in the family.
3. We're home now ... you can give it to me ... Thank you very much
4. *Sigh*

Adapted from: (Scharle and Szabo, 2000: 61)
(Schulz, C.M., 1975)

T.C. YÜKSEKÖĞRETİM KURULU
DOKÜMANTASYON MERKEZİ

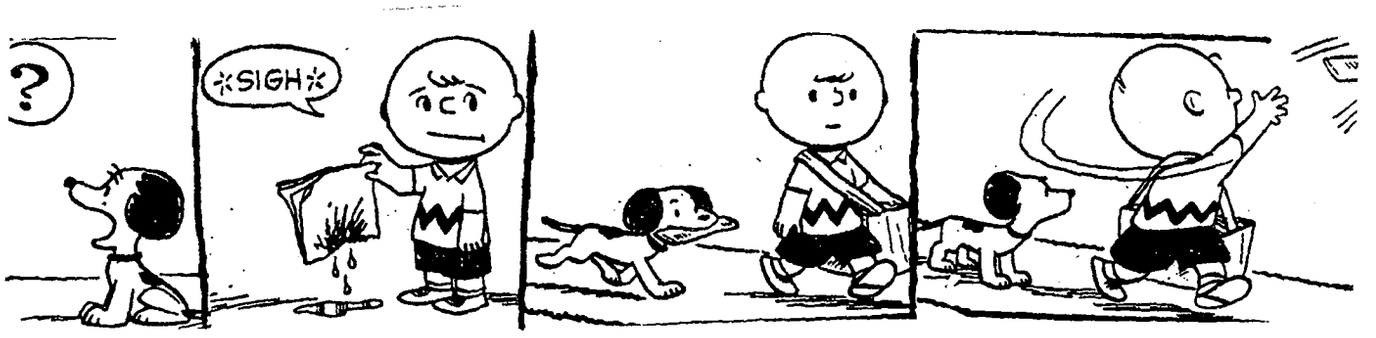

I CAN'T STAND THOSE STRAIGHT ANSWERS ...
I'M GOING TO ASK YOU A QUESTION, SCHROEDER, AND I WANT A STRAIGHT ANSWER ...
NEVER!! NEVER IN TEN THOUSAND MILLION BILLION YEARS!
DO YOU THINK YOU AND I WILL GET MARRIED SOMEDAY?


"A" IS FOR ALLIGATOR...
AND "B" IS FOR BEAR, AND "C" IS FOR CAT....
AND "D" IS FOR...
!
SCHULZ


WE'RE HOME NOW... YOU CAN GIVE IT TO ME...THANK YOU VERY MUCH
COMIX


ANYTHING TO KEEP PEACE IN THE FAMILY


ALL RIGHT! ALL RIGHT!! I'LL LET YOU CARRY MY MAGAZINE


?
SIGH

ACTIVITY 11: THE PERFECT PARTNER

Level: Intermediate
Intelligence Types: Verbal/Linguistic, Logical/Mathematical, Intrapersonal, Interpersonel
Skills: Reading, speaking, writing

The class is divided into groups of three. The story is cut up into 6 strips. First, students are allowed to read their pieces individually and then they should take turns and tell the information they have to the other group members. Afterwards as a group they should put the paragraphs in the correct order. In the next step, teacher allows the students to read the story, elicits the answers and gives feedback. Then, students are invited to write an appropriate final line or expression for the story. It is a good idea to let students do this in their groups and share it with other groups.

The Perfect Partner

Christian Oldfield was a famous and successful fashion designer. His clothes were sold in the world's most exclusive shops. These clothes weren't cheap. A single dress could cost £5.000. Film stars, kings and queens were his regular customers.

Christian was 54. He was a passionate man but his marriages never seemed to last long. He had been married and divorced 5 times. He was still friendly with his ex-wives and met them frequently. For Christian, women were the most desirable things in the world and he spent much of his time chasing them.

One July, Christian was at an international fashion show in Singapore. At a formal dinner party, one evening, he became bored with the people at his table. He lit a cigar and looked round the room at the other tables and the people sitting around them. He stopped abruptly at one table and gazed in astonishment at the most beautiful woman he had ever seen.

The woman was tall, blonde, with a face like an angel. Her eyes sparkled and were as blue as the sea. Her teeth were like snow and her smile warmed his heart. Her figure was simply perfect.

Christian's heart began to beat quickly. He decided that he had to meet this sensual woman. Luckily he noticed that his second wife was also sitting at the table.

She appeared to know the woman. He watched them talking amiably together. Then he took out a small sheet of notepaper and wrote "Who is that incredibly beautiful woman at your table?" He folded the table and handed it to a waiter and told him to give it discreetly to his ex-wife.

Christian's second wife read the note. She looked at her gorgeous friend and then across at Christian. She smiled and wrote something on the notepaper. She sent the note back to Christian, who snatched the note from the waiter. His hands shook as he unfolded it. The note said.

Can you guess the last line of the story?

"....."

Adapted from: (Woolard, 1998: 18)

ACTIVITY 12: THE QUEUE

Level: Intermediate
Intelligence Types: Verbal/Linguistic, Bodily/Kinesthetic, Interpersonal
Skills: Reading, speaking

Copy one card for each student in the class. It is essential to use the cards in the order in which they are printed: i.e. if you have 20 students, use the first 20 cards. If you have fewer than 30 students, you will need to correct the last card in your queue: delete or cut off the line beginning "The person behind you ..." and write in instead "You were the last person in the queue ..., when you got to the ticket office, all the tickets were sold out."

Shuffle the cards and deal them out at random to the students. Tell the students that yesterday they were all queuing for tickets for a musical. They can remember who was in front of them and who was behind them in the queue, but not exactly where they were in the queue.

The object of the activity is to reconstruct the queue as it was. To do this, students will have to move around the class, asking each other questions about what they did in the queue yesterday, in order to find out who was in front of and behind them, and eventually reconstruct the queue by lining up in order.

You were the first person in the queue. You talked about the weather with the person behind you.	You talked about the weather with the person in front of you. The person behind you let you share their umbrella.
You shared your umbrella with the person in front of you. The person behind you caught a train at 6.30 to get in the queue early.	You were very tired as you caught the train at 6.30 to be in the queue early. The person in front of you shared an umbrella with someone else in the queue. The person behind you bought and ate an ice-cream.
You ate an ice-cream while you were waiting. The person in front of you caught a train to be in the queue early. The person behind you had a dog.	You had your dog with you. The person in front of you ate an ice-cream. The person behind you had a lot of shopping bags.
You had a lot of shopping bags with you. The person in front of you had a dog. The person behind you listened to their walkman the whole time.	You listened to music on your walkman while you waited. The person in front of you had a lot of heavy shopping. The person behind you asked you to save their place while they made a telephone call.
You had to make a telephone call and asked people to save your place. The person in front of you listened to a walkman while they were waiting. The person behind you bought a can of coke.	You bought a can of coke to drink while you were waiting. The person in front of you asked you to save their place while they made a telephone call. The person behind you smoked a whole packet of cigarettes.
You smoked 20 cigarettes while you were waiting. The person in front of you drank a can of coke. The people behind you had an argument.	You quarrelled with your friend in the queue. The person in front of you smoked a lot of cigarettes. The person behind you bought twelve tickets.

You quarrelled with your friend in the queue. The person in front of you smoked a lot of cigarettes. The person behind you bought twelve tickets.	You bought twelve tickets for a school trip. The people in front of you had an argument. The people behind you drank coffee from a thermos.
You and your friend bought a thermos of coffee to drink while you were waiting. The person in front of you bought twelve tickets for the show. The person behind you read a newspaper.	You and your friend bought a thermos of coffee to drink while you were waiting. The person in front of you bought twelve tickets for the show. The person behind you read a newspaper.
You read a newspaper while you waited. The people in front of you drank coffee from a thermos. The person behind you dropped a shopping bag and broke some eggs.	You dropped your shopping bag and broke all the eggs. The person in front of you read a newspaper. The person behind you helped you pick the shopping up.
The person in front of you dropped their shopping bag and the vegetables went all over the pavement. You helped to pick them up. The people behind you sang songs.	The person in front of you helped pick up vegetables from a shopping bag that broke. You and your friend sang songs to stop yourselves getting bored.

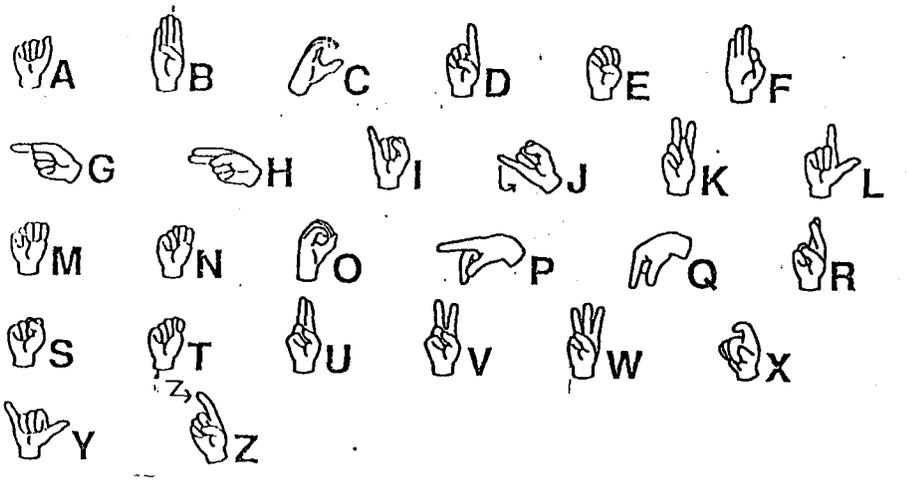
Source: (Hadfield, 1990: xx)

ACTIVITY 13: SIGN LANGUAGE

Level: Elementary - upper intermediate
Intelligence Types: Bodily/Kinesthetic, Verbal/Linguistic, Interpersonal
Skills: Writing, reading

Sign language uses hand gestures rather than written or spoken words. Divide the students into four teams and give a sign language alphabet to all groups. Then ask each group to write a brief written message and sign it to the other group, using the illustrated gestures below. Let the other group decode the message and read it aloud.

SIGN LANGUAGE



MESSAGE TO MY PARTNER

ACTIVITY 14: CLASS THEATRE

Level: Intermediate
Intelligence Types: Verbal/Linguistic, Interpersonal, Bodily/Kinesthetic, Musical
Skills: Reading, speaking, listening, writing

Tell the students that they are going to perform at the class theatre. The class is divided into groups of two, three, four or five. Students are asked to choose the play they like and share the roles. The students are asked to rehearse: memorise their roles, set the scene, choose the music and costume in a week. The fact that the students are physically part of the action, i.e. making entrances or exists, narrating the necessary parts ... etc. seem to assist memorisation of the appropriate target language.

Students perform their play for themselves and their teacher. If possible, you can video them or take photographs to enable the students to see their own performance and to allow other students to watch or see if they wish.



The ghost

Chris*
Joan
Alan
Pat*
A tramp

***Note:** *Chris can be a boy (Christopher) or a girl (Christina)*
Pat can be a boy (Patrick) or a girl (Partricia)

Chris and his/her friends are in a tent in a field. Rain is coming down heavily, and there is a strong wind.

Chris: We can't stay here.
Joan: No, the rain's coming into the tent.
Alan: And the wind's very strong.
Pat: The tent's moving.
Joan: What shall we do?
Chris: We must go.
Joan: Yes, but where?
Pat: I saw an old house near the road.
Chris: Was it empty?
Pat: I don't know, it's very old.
Joan: But perhaps it's dry.
Alan: Yes. We're cold and wet here. An old house will be better.
Chris: Right. Let's go. We'll take our sleeping bags and the food.
They run across the field to the old house. Chris opens the door.
Chris: It's empty. We can go in.
Joan: (*calls*) Hello! ... Hello! (*There isn't an answer*). Yes, it's empty.
Pat: The floor's dry in that corner.
Alan: Right. Let's put our sleeping bags on the floor there.
Pat: Can we eat now? I'm hungry. Who's got the food?
Chris: I have. There are cheese sandwiches and some cake.
Pat: I'll have a cheese sandwich.
Joan: Yes, let's eat. Then we can sleep. We'll sleep well here.
Alan: Why's this house empty? It's a good house.
Chris: It's very old.
Alan: Yes, but it's dry.
Joan: Perhaps there's a ghost.
Alan: A ghost!
Joan: Old houses often have ghosts.
Alan: I don't like ghosts.
Chris: There aren't any ghosts. Now who wants a cheese sandwich?
Joan: I'll have some cake, please.

Suddenly there is a CLANK-CLANK sound. It is coming from the next room.

Alan: What was that?

Chris: What was what?

Alan: That CLANK-CLANK sound.

Pat: Perhaps it was the wind.

Alan: That wasn't the wind.

Pat: Perhaps it was —

There is a CLANK-CLANK sound again. A door opens-CREEEEEEEK.

Alan: Did you hear that?

Chris: Yes. Yes, I did.

Alan: That wasn't the wind.

Pat: There are often noises in old houses.

Alan: I don't like it.

Pat: Go and look, Alan.

Alan: No, thank you! You go.

Pat: I'm cutting the cake. You go, Chris.

Chris: Me? Why me?

Pat: You're the oldest.

Chris: No, I'm not. Joan is.

Joan: Oh, stop it. It's just the wind. Give me some cake, Pat.

The door opens very slowly. It stops.

Alan: Look! The door's opened.

Pat: Oh! Oh!

Alan: I'm going to hide.

He goes to the corner of the room and hides in his sleeping bag. The door moves again and there is a voice — "Ooooooooooooh!"

Chris: It's a ghost! It's a ghost! There's a ghost in the house!

Pat: Run! Quickly! Out of the window!

They run to the window and climb out. The tramp comes in. He is laughing.

Tramp: Ha! Ha! Ha! They've gone and they won't come back! And they've left their food. Yes, cheese sandwiches. Cake. Mmm! Good. Now I can eat. But I want a drink first. I'll get some water from the kitchen.

He goes out of the room. Alan comes out of his sleeping bag.

Alan: Phew! So he's the ghost, is he? Just an old tramp. And he wanted our food. Huh! I'll show him!

He goes out quickly. The tramp comes in again.

Tramp: And now a good meal. I haven't had a good meal for three days. I'm very hungry. What shall I eat first? Yes, a cheese sandwich first and then some cake. (Eats). Mmm! Nice cheese. Very tasty.

Alan's voice comes from the next room. "Ooooooooooh!"

Tramp: What was that?

Alan: *(in the next room)* Ooooooooooooh! Aaaaaaaaah!

The door opens slowly-GREEEEEEEEEK

Alan: I ... am ... the ... ghost ... of ... this .... house.

Tramp: Oh no! Oh no, not a ghost!

Alan: This ... is ... my ... house.

Tramp: No, no! Don't come in. Please!

Alan: You ... are ... a ... bad ... man. You ... must ... die.

Tramp: No, no, please. I'm just an old tramp. No!

He runs to the window, jumps through it, and runs across the garden.

Alan: He won't come here again! Now I can eat and go to sleep. (*He laughs*) Now, where's the food?

Alan is sleeping now. Chris, Joan and Pat come in.

Chris: He's sleeping.

Joan: He's eaten all the cheese sandwiches.

Pat: And he's eaten all the cake.

Chris: The ghost was just that old tramp.

Pat: Yes (*Laughs*) Didn't he run quickly across the garden? What did Alan do to him?

Joan: I don't know. But why didn't Alan come and tell us?

Pat: Because he wanted all the food. That's why.

Chris: Our food.

Joan: It's not right. Look at him! He left us in the wet, and he ate our food!

Chris: What can we do to him?

Joan: I don't know. Let's go into the next room and talk about it.

In the other room.

Joan: Well, what shall we do to him?

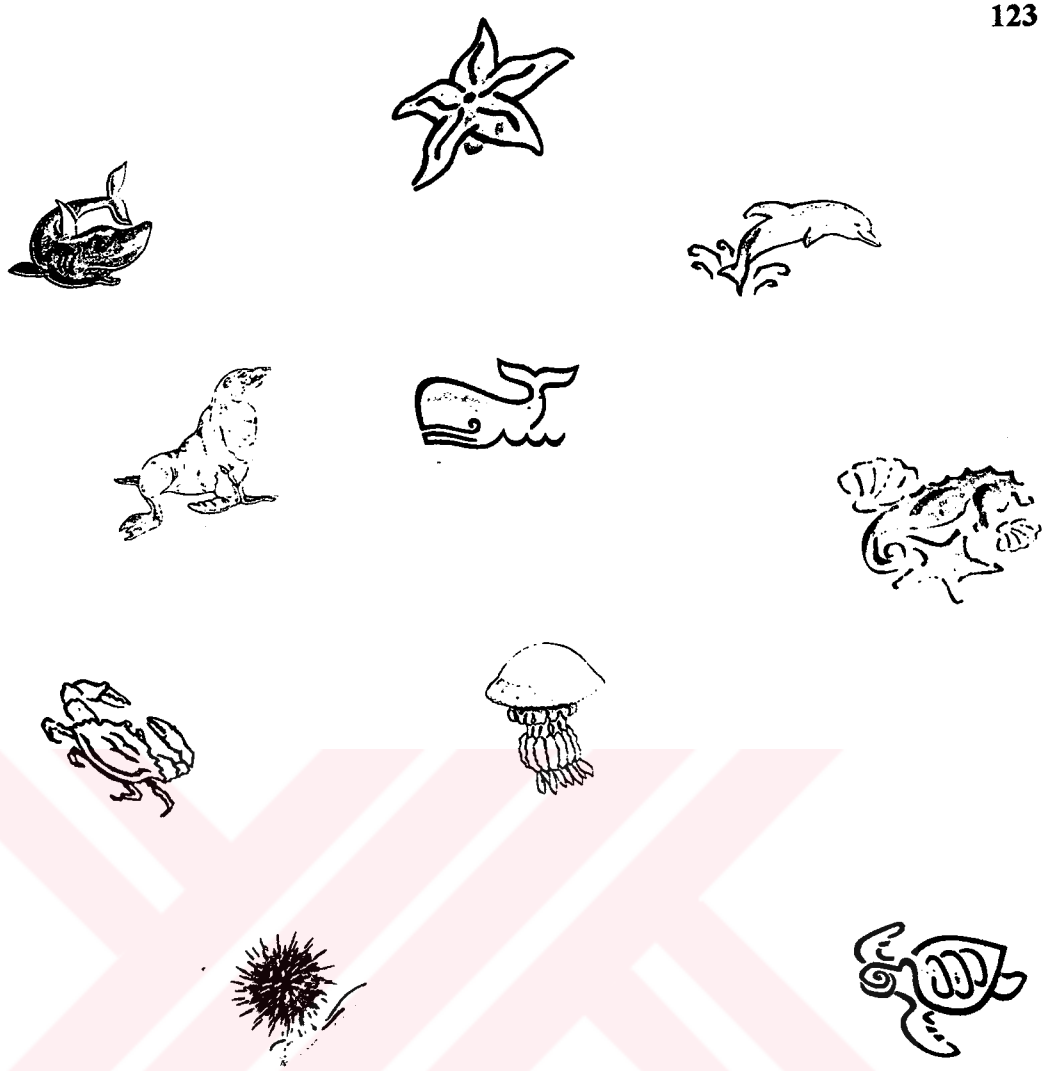
Pat: Let's make ghost noises.
Chris: That's a good idea. Alan will hear them ...
Joan: ... and he'll jump out of the window ...
Chris: ... and he can stay in the tent ...
Pat: ... in the wet and in the wind ...
Joan: ... and *we'll* stay in the house.
Chris: Right. OK. You make the ghost noises, Joan.
Joan: OK.
Chris: You make a noise on the wall, Pat.
Pat: Right!
Chris: And I'll open the door very slowly.
They make their noises.
Alan: (*opening his eyes*) Er ... er ... what's ... what's that?
What's the ...
The noises grow louder and louder.
Alan: Oh no! No! There is a ghost in the house! No! No! HELP!
He runs across the room and jumps out of the window. Pat, Chris and Joan come in. They are laughing.

Source: (Methold, 1981: 5, 12)

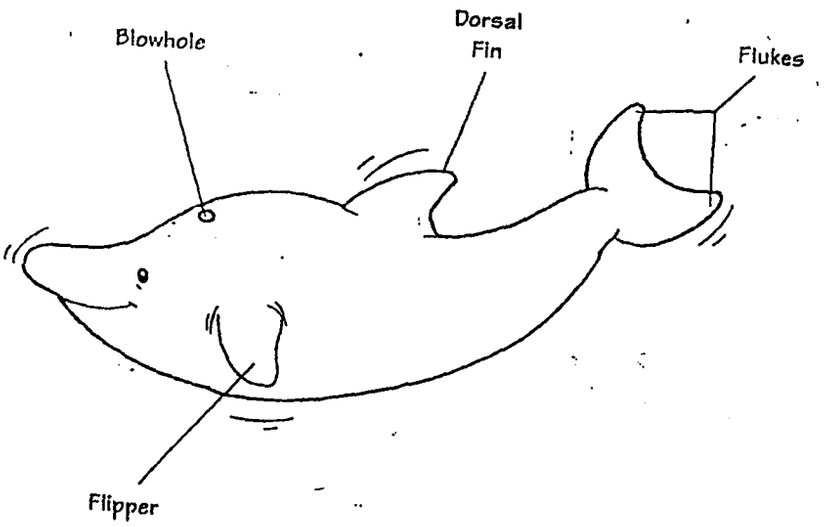
ACTIVITY 15: SHARK & DOLPHIN & WHALE

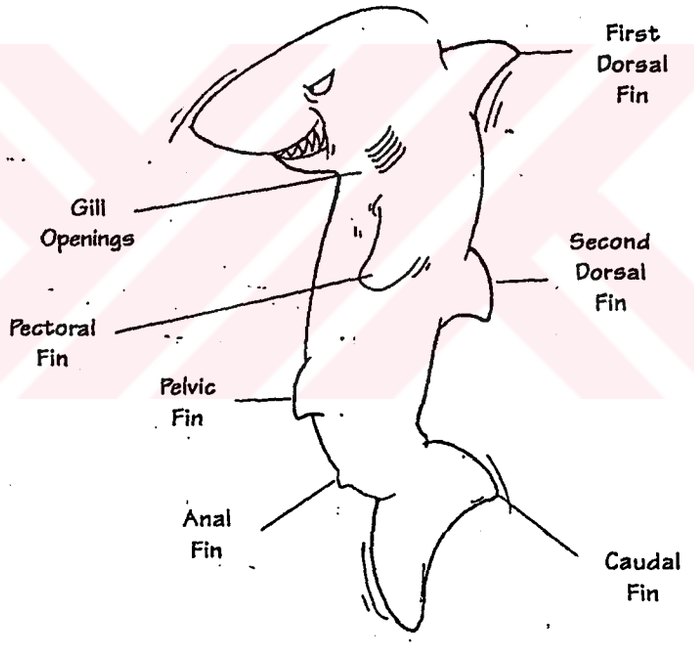
Level: Intermediate-upper intermediate
Intelligence Types: Naturalist, Verbal/Linguistic, Visual/Spatial, Intrapersonal, Interpersonal
Skills: Reading, speaking, listening

Students are asked to sit in groups of three, face to face. Student A is given the first text titled "Shark" and the other student is given the text titled "Dolphin" and the last one is given the text titled "Whale" Afterwards students are told to read their own text and complete the missing information on the pictures individually. Then the students are invited to present the characteristics of the animal to their friends by the help of the picture. Next, they prepare a list including the differences and the similarities of these animals.

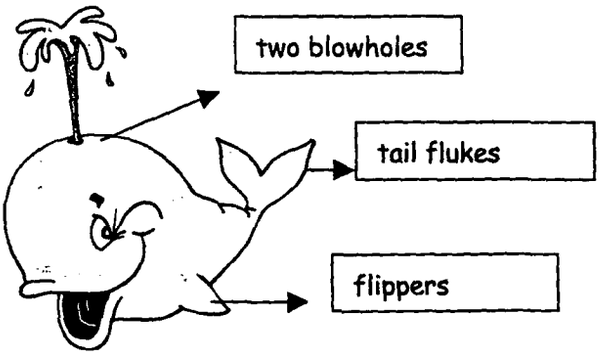


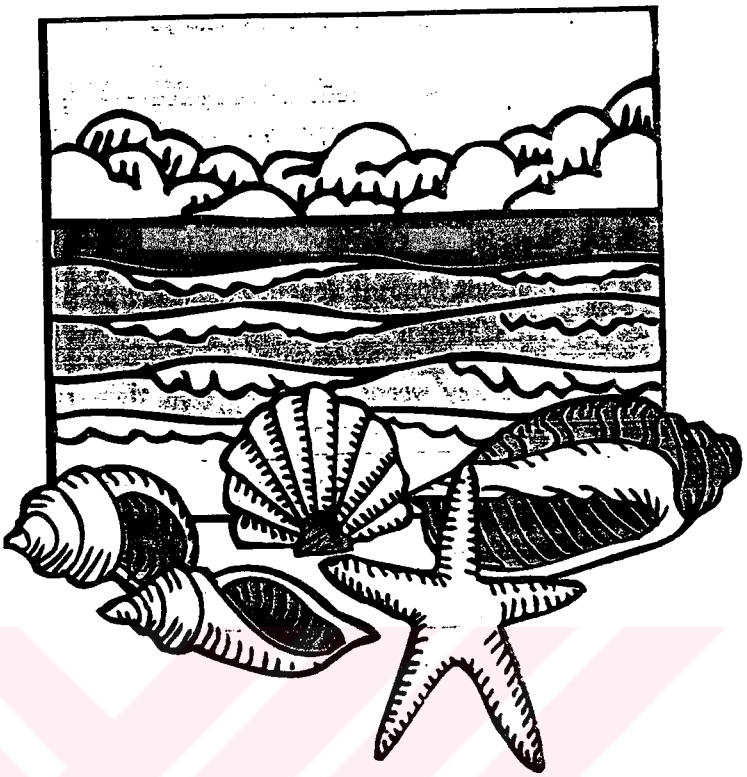
Adapted from: (Kagan and Kagan, 1998: 8, 46/47)
(Gülsen and Tolungüç, 2001: 78)





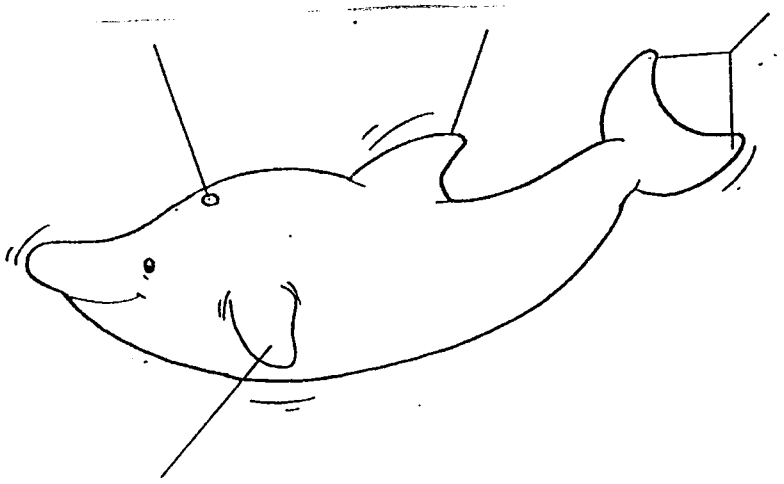
Physical Appearance:





Dolphin

The dolphin is actually a whale, the smallest whale in the family. Like whales, the dolphin is a mammal. Baby dolphins are born alive and they feed on their mother's milk until they are ready to hunt for themselves. Dolphins have lungs and breathe air through their blowhole on top of their head. They close their blowhole to dive underwater. They are warm-blooded and have a steady body temperature. There are 25 kinds of saltwater dolphins and 6 kinds of freshwater dolphins. The largest dolphin is up to 12 feet and weighs 1,500 pounds. Dolphins have no sense of smell, but have the best hearing of any animal. Dolphins use echoes to find food. They make clicks and when the clicks return, they know about the size, shape, speed, and direction of the object their sonar detected. Dolphins have a skeleton made of bones, and slick rubbery skin to propel them through the water. Dolphins have a strong tail that spreads into two wide flukes, a dorsal fin on their back and two flippers, one on each side. Dolphins have round, cone-shaped teeth.



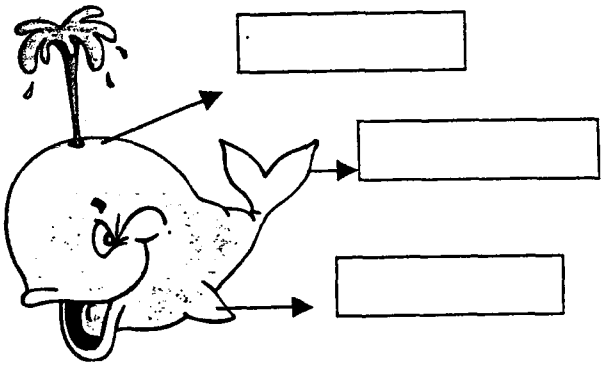
Shark

Although sharks are different from most fish, they are still considered a fish. Most sharks are born alive, but some are hatched out of eggs. When born, sharks are independent and ready to hunt. Sharks breathe underwater by drawing water into their mouths and letting it pass over their gills. The gills take the oxygen out of the water. There are more than 350 different kinds of sharks today. Whale sharks are the largest of all sharks and can be 45 feet long and 40.0000 pounds. Most sharks are saltwater fish, but some can survive in the freshwater too. A shark's skeleton is made of cartilage and their skin is covered by tiny teeth, called denticle which makes their skin very rough. The shark has two dorsal fins, two pectoral fins on each side, two pelvic fins on the bottom, an anal fin near the tail, and a tail, called the caudal fin. Sharks have a very good sense of hearing and a highly developed smell. In fact, up to two-thirds of a shark's brain is devoted to smell. They use their noses to sniff out their prey. Sharks have rows of sharp teeth. Their teeth fall out easily and a new tooth takes its place. Sharks can grow a new tooth in as little as 24 hours!



Gray Whales

Adult gray whales are 13 to 15 meters long and weigh 22 to 38 tonnes. The females are larger than the males. When they are born, calves measure about five meters. Gray whales have a long and narrow shape. Their skin is smooth, and it is like a hard-boiled egg without the shell. Their head is quite long, one-fifth the total body length. They breathe through their blowholes, i.e. the openings in the top of their head. Gray whales have brown eyes, about the size of an orange. Their eyes are quite small and far back on their head so there is some uncertainty among scientists about how good their eyesight is. Gray whales steer themselves with their flippers and power themselves with the flukes of their tail. The tail can weigh up to 180 kilos.



ACTIVITY 16: EARTHQUAKE LEGENDS

Level: Intermediate - upper intermediate
Intelligence Types: Naturalistic, Verbal/Linguistic, Visual/Spatial, Intrapersonal, Interpersonal
Skills: Reading, writing, speaking

Divide the class into groups and ask them to discuss the following questions

Have you ever been in an earthquake, flood, hurricane, lightning storm or any other natural diasters?

Could you describe the event from your perspective? What happened? How did you feel?

(The following earthquake legends are taken from the FEMA for Kids page of the U.S. Federal Emergency Management Agency Web site)

Students work in groups. Each group is given one of the legends with a piece of paper and coloured pens. The students' task is to read and draw these legends on a large sheet of paper. Groups have to prepare a poster presentation and explain that legend to the class. After presentation, it can be nice to put all the posters on display.

After this activity, as a follow-up, a competition takes place. For the competition about the idioms related to environment, students work in groups again. Teacher distributes the first idiom and an example sentence to each group and ask students to guess the meaning in 1 minute. The groups write the answers on a piece of paper and raise when the time is over. They are allowed to take one guess. If they are correct, they get a point. The competition goes on with the next idiom.

earthquake legends

India: The Earth is held up by four elephants that stand on the back of a turtle. The turtle is balanced on top of a cobra. When any of these animals move, the Earth trembles and shakes.

Latvia: A god named Drebkuhls carries the Earth in his arms as he walks through the heavens. When he's having a bad day, he might handle his burden a little roughly. Then the Earth will feel the shaking.

West Africa: The Earth is a flat disk, held up on one side by an enormous mountain and on the other by a giant. The giant's wife holds up the sky. The Earth trembles when he stops to hug her.

Romania: The world rests on the divine pillars of faith, hope, and charity. When the deeds of human beings make one of the pillars weak, the Earth shakes.

Mozambique: The Earth is a living creature, and it has the same kinds of problems people have. Sometimes it gets sick with fever and chills and we can feel its shaking.

East Africa: A giant fish carries a stone on his back. A cow stands on the stone, balancing the Earth on one of her horns. From time to time, her neck begins to ache, and she tosses the globe from one horn to the other.

Colombia: When the Earth was first made, it rested firmly on three large beams of wood. But one day the god Chibchacum decided that it would be fun to see the plain of Bogota under water. He flooded the land, and for his punishment he is forced to carry the world on his shoulders. Sometimes he's anry and stomps, shaking the Earth.

West Africa: A giant carries the Earth on his head. All the plants that grow on the Earth are his hair, and people and animals are the insects that crawl through his hair. He usually sits and faces the east, but once in a while he turns to the west and then back to the east, with a jolt that is felt as an earthquake.

"wordologies"

quake in one's boots - to be afraid
stop quaking in your boots, Jim. We are not hiring a new employee to replace you.

over the hill - too old to do something
When my grandfather turned 80, he felt like he was over the hill.

under the weather - not feeling well
I am a bit under the weather today, so I may see a doctor

on cloud nine - very happy
She was on cloud nine after she received her promotion

in deep water (also in hot water) - in a dangerous or vulnerable situation
I was in deep water when I deleted the document by mistake.

keep one's feet on the ground - to get firmly established
The new secretary just started and has already gotten her feet on the ground.

head in the clouds - oblivious; unaware of what is going on
During the staff meeting, Bob had his head in the clouds. Afterward, he had no idea what we had been discussing.

get one's second wind - to be rejuvenated; to become more active or productive
Although I was very tired after scanning the first 10 chapters into the computer, I got my second wind and finished the final 10 chapters without falling asleep.

kick up a storm - to become a nuisance; to make a disturbance
Jim really kicked up a storm at the conference reception we had in Miami, so on the trip home everyone was angry at him.

from the ground up - from the beginning; from start to finish
I dedicated myself from the ground up to complete the magazine on time.

water under the bridge - a closed or fin ished matter
After they signed the new contract, our prior disagreements were water under the bridge.

between a rock and a hard place - in a very difficult situation
My supervisor did not prepare me for the meetting, so I was between a rock and a hard place when they started asking me questions.

take by storm - to favorably impress or overwhelm
The new football star has taken the team by storm. He's scored six goals in his first four matches!

take the wind out of someone's sails - to challenge someone's boasting; to disappoint
We tried Bob's proposed solution to fix the computer, but it failed miserably. That took the wind out of his sails.

(Adapted from: Jordan, 2001: 46).

ACTIVITY 17: LIFE MAP

Level: Intermediate
Intelligence Types: Visual/Spatial, Verbal/Linguistic, Intrapersonal, Interpersonal
Skills: Writing, speaking, reading

Divide the class into groups of three or four. Copy one board for each group and a couple of sets of career cards, which you retain (the board is printed on two pages so either copy onto two A4 sheets and stick them together or copy the double spread onto an A3 sheet). You will also need dice and counters or coins for each group.

Give out one board, dice and counters to each group. The players should all place their counters on "START".

The first player should throw the dice and move the counter forward. When the student comes to a decision square, he/she must stop, even if the turn isn't finished. Every time someone comes to a DECISION SQUARE, he/she should stop and ask the other players for advice on what to do. If the turn isn't finished, he/she can move on the necessary number of squares in the direction chosen. If the turn is finished, he/she will have to wait till the next turn, before moving on. Then it is the next player's turn.

When they get to the circle at the end, they will ask the teacher for the card with their number on and see what career they ended up with!

If there are roads that no one in the class took, this leads well into a follow-up writing activity "Oppurtunities I missed". Ex: If I hadn't married the one-eyed trapeze artist, what would have happened?

LIFE AID

Ask for card 15

YES Decision 4 NO

You fall in love with a one-eyed trapeze artist who wants you to join the circus.
Do you get married?

Ask for card 14

NO Decision 4 YES

You're a police trainee.
You don't like it and you're poor.
You meet a suspicious-looking character who says he'll give you a lot of money if you help him
Do you agree?

YES Decision 3 NO

You're unemployed.
It's hard to get a job.
You see an ad for the police.
Do you apply?

Ask for card 13

STAY Decision 2 LEAVE

You hate it!
Do you leave or stick it out?

Ask for card 12

NO Decision 4 YES

You get a part as an extra in a film.
Then you meet someone, fall in love and want to get married,
but they object to your acting career.
Do you give it up?

YES Decision 3 NO

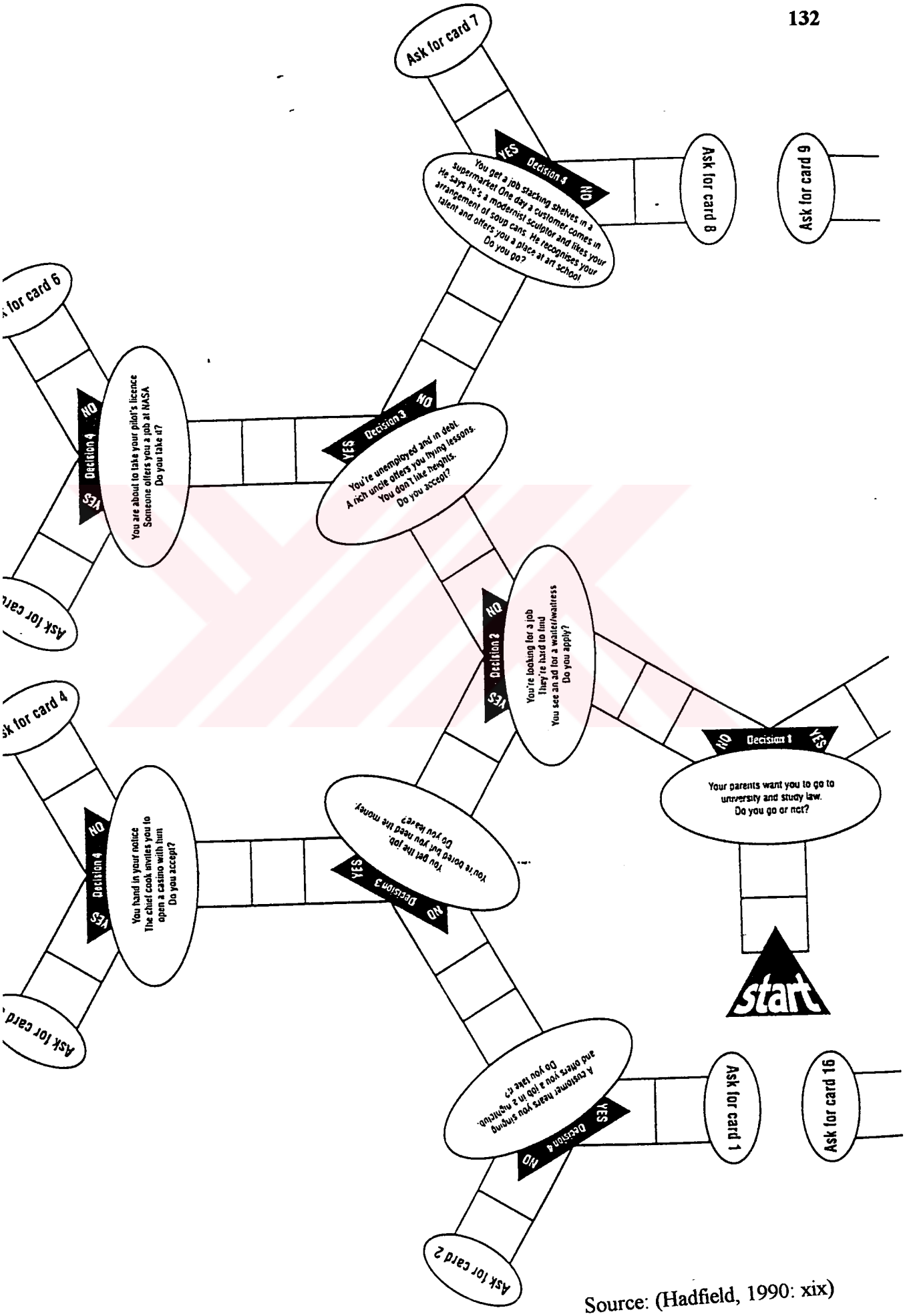
You're a qualified lawyer.
You are looking for a job when you meet a talent scout who is stunned by your good looks and asks you to audition for a film.
Do you go?

Ask for card 11

YES Decision 3 NO

You become a lawyer.
A colleague shows you how to make money by fiddling your expenses.
Do you do it?

Ask for card 10



Source: (Hadfield, 1990: xix)

1 You became a popstar.	2 You became head waiter.
3 You became a millionaire.	4 You became a tramp.
5 You became an astronaut.	6 You failed your flying exam and became a baggage handler.
7 You became an artist.	8 You became a chief shelf stacker.
9 You became a very successful politician.	10 You got arrested on suspected fraud charges.
11 You became a film star and won four Oscars.	12 You found an office job with a good pension
13 You became a spy.	14 You became a police officer.
15 You became an acrobat and worked in a circus.	16 You became a blank clerk.

ACTIVITY 18: LET'S TELL US

Level: Intermediate

Intelligence Types: Verbal/Linguistic, Visual/Spatial, Bodily/Kinesthetic, Interpersonal, Intrapersonal

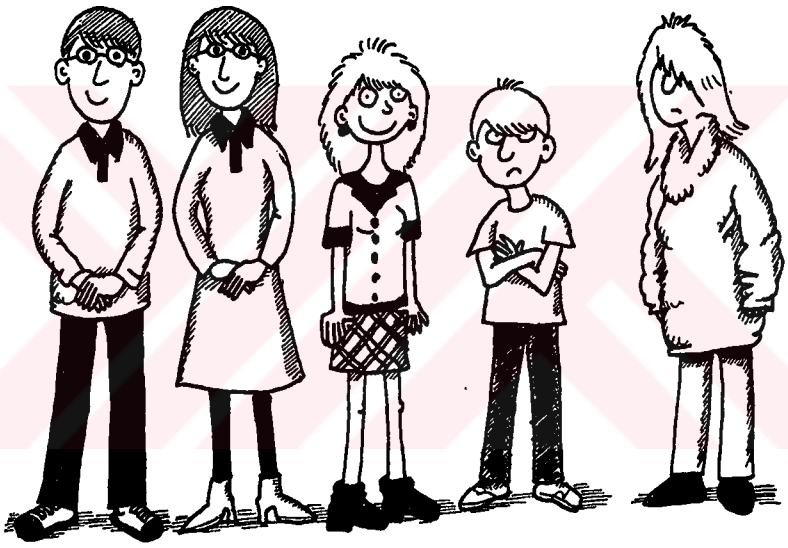
Skills: Listening, speaking

Students are divided into groups of three or four. Each group chooses a name for themselves. The first group comes to the board and sits back to back, so two members of the group see the picture on the board and two of them only listen. Each group is given two minutes to describe the picture in details. Then the teacher asks three questions prepared in advance, to the listeners of the group. If they answer all questions, they get 3 points. Then the next group comes and describes another picture.

ACTIVITY 19: HOW OLD AM I?

Level: Pre-intermediate - intermediate
Intelligence Types: Verbal/Linguistic, Logical/Mathematical, Interpersonal, Intrapersonal
Skills: Reading, writing, speaking

First, each student is given the text then asked to read it and answer the questions individually. Later, students are divided into groups of three and asked to compare their answers with their group members. It is a good idea to let the students create their own problem and share it with other groups.



Hello! Let me introduce my family.

I have two sisters, Abigail and Jill, and two brothers, Graham and Robert. Abigail is twenty years-old. Jill is six years younger than Abigail, but she is two years older than Robert. Robert is four years younger than me, and he is eight years younger than Graham. I love my family ...

Could you find me in the picture?

1. How old am I?
2. Who is the youngest in the family?
3. How old is Robert?
4. Is Jill older than me?
5. Am I the oldest in the family?
6. Who are the twins?

Key:

1. 16
2. Robert
3. 12
4. No, she is not.
5. No, Graham and Abigail are the oldest.
6. Graham and Abigail

Source: (John and Liz Soars: 2000, 34 Headway Pre-Intermediate Workbook)

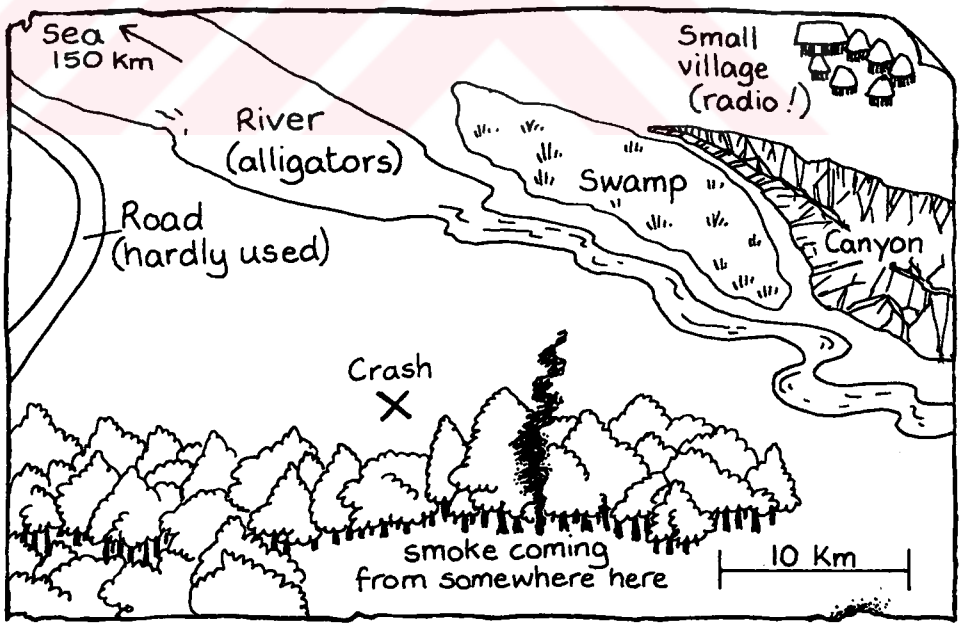
ACTIVITY 20: SURVIVAL

Level: Intermediate - upper intermediate

Intelligence Types: Verbal/Linguistic, Logical/Mathematical, Visual/Spatial, Interpersonal, Intrapersonal, Naturalist.

Skills: Reading, writing, listening, speaking

First, tell the class *a lost in the forest story* and make it dramatic to attract their attention. Then include a disaster of some kind, eg. minibus crashes miles from anywhere, injuries etc. Divide the students into groups of three and give each group the map and the notes. Allow them a good amount of time to read and examine the sketch carefully. Students must plan what they should do to have the best chance of survival.



Notes

9 P.M. moonlit night
We've crashed!
3 badly hurt – Jo serious – needs urgent help! 2 of us O.K.

What to do?

Wait till daylight? (Jo might die)
Find who's lit the fire (cannibals?)
Head for the road, river or village? How long will it take? — only food and water for 1 day!

SURVIVAL

One day a group of friends Cathy, Jo, Tom, Mary, Carol and Betty decided to go on a trip. It was their summer holiday so they thought going to Africa would be an unforgettable adventure. One of them Jo, was a pilot and they all agreed that he could take them where they wanted to go.

The day before the trip they went shopping and bought all the equipment and food they needed for the journey. Since they were planning to stay in a camp, they also bought tents.

The big day came and early in the morning they met at the airport. They took their places in the plane, which they had rented for two weeks, and they set off for Africa. They were all very excited and happy unaware of the end that was waiting for them.

After two hours of flight, they were near the place where they were going to camp, when suddenly the plane started to shake. They thought that they were going through a turbulence but, actually, they were in big trouble. Jo told them that he had to land the plane in order to prevent crashing. He said: "Don't panic! There is something wrong in the engine. So I will try to land as quickly as possible. It will not be easy but I have to try."

Fortunately, Jo was very successful. He managed to land the plane but unfortunately, it hit a tree and the wings blew up. Because of the shock they all fainted. When they woke up, they found themselves in a strange place and the sun was about to set ...

Adapted from: (J. Scrivener, 1994)

ACTIVITY 21: THE ADVERTISING AGENCY

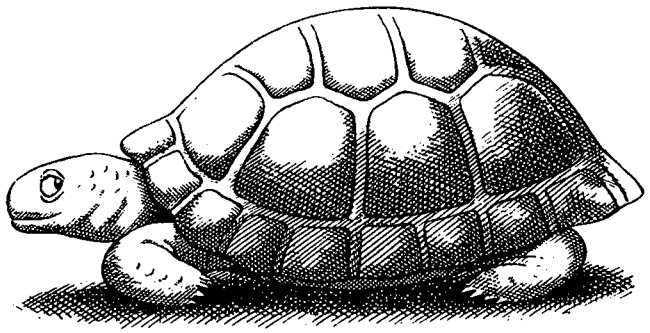
Level: Intermediate - upper intermediate
Intelligence Types: Verbal/Linguistic, Visual/Spatial, Bodily/Kinesthetic, Interpersonal, Naturalist
Skills: Listening, reading, speaking, writing

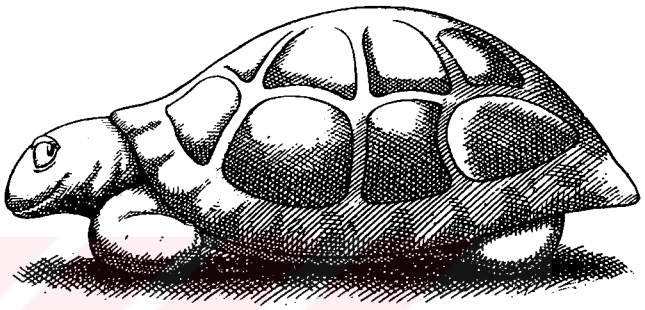
Divide the students into groups of three to five. Ask students, in small groups, to write down everything that they think a tortoise might be used to advertise. Suggestions such as caravans, house, etc. may be made, but many surprising ideas may be expressed as well. When the students have spent five minutes listing the items, show them the Citroen advertisement and discuss the link between the animal and the car.

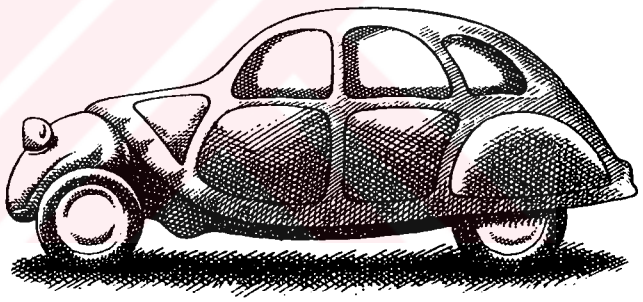
Then, in their groups, ask them to decide on a product they wish to advertise. When they have decided on the product, ask the students to think of an animal which expresses the characteristics of the product, and would prove a good selling point.

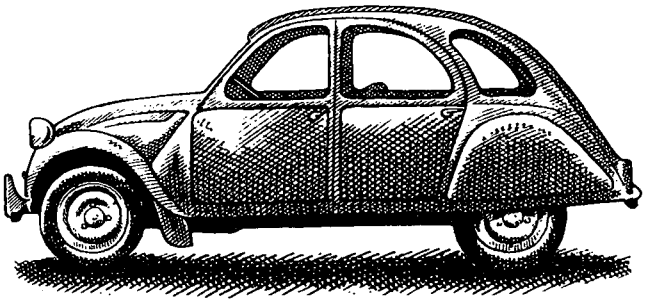
Give the students time to work out their ideas, and ask them to present their product to the whole class.

(With groups which would spend too long making the initial decision on a product, you can distribute cards with the name of an object, such as a washing machine, a camera or a typewriter. You can also give the same object to the whole class to see what different ideas they come up with. This solution is preferable with a low level class because it restricts the amount of vocabulary required.)









IT TAUGHT US ALL WE KNOW.

It's not all bad being a tortoise. They do live to a very old age.

They suffer few mechanical breakdowns.

They have a very poor appetite for consuming petrol.

They're not, as we know, the swiftest of creatures.

But need we remind you of the story of the tortoise and the hare?

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PRICE CORRECT AT TIME OF GOING TO PRESS AND INCLUDES CAR TAX, VAT AND FRONT SEAT BELTS. DELIVERY AND PLATES EXTRA. CITROEN CARS LTD, MILL STREET SLOUGH SL2 5DE. TEL SLOUGH 23616. DOT FUEL FIGURES. URBAN CYCLE, 41.5MPG (6.8L/100KM), CONSTANT 56MPH 52.3MPG (5.4L/100KM).

Source: (G. Porter, 1987: 123)

ACTIVITY 22: VOCABULARY RACE

Level: Intermediate - upper intermediate
Intelligence Types: Verbal/Linguistic, Logical/Mathematical, Visual/Spatial, Bodily/Kinesthetic, Interpersonal
Skills: Reading, listening, speaking

Make a list of ten words you want the class to revise. Write each word on a separate piece of paper. Divide the class into four groups. Explain that you are going to show one representative of each group a word which they will then have to convey to the other members of their group. The first group to guess the word will get a point.

Allocate to each group a different technique for presenting vocabulary.

Miming, drawing, contextualizing, defining.

Example of contextualizing:

Word: jealous

A man goes to a party with his wife who is a very attractive and talented woman. She spends the whole evening talking to other men who are very interested and amused by everything she says. The husband sees all this and is not very pleased, in fact he feels ...?

One representative from each group comes to the front of the class. Show them all the first word. They return to their groups and try to get the word across to their group using only the technique they were given for example miming.

As soon as one group guesses the word they should shout *stop*. The group gets a point.

Source: (Campbell, 1995: 56)

5.2. Classroom Observations

In the previous years, during the systematic peer observations that take place four times in a year among the colleagues the classroom behaviour of teachers were analysed. Therefore, the problem that each teacher brings such individual differences in intelligence profiles into classroom had been determined. Therefore, in this study, in order to find out a solution to the problem above, in the light of the statistical analysis results, 10 of the teachers were chosen randomly and given different suggested integrated activities related to Multiple Intelligences according to their intelligence profiles and they were observed in their classes.

The attitude of the teachers towards the activities, which indicates intelligence profiles of teachers has a crucial role in ELT class. MI Theory has caused us to reexamine our teaching by exploring our own pattern of intelligences. By developing our own weaker intelligences, we can teach more effectively those students with a different intelligence profile than our own.

In this part, sufficient description of 10 subjects involved and the reflections during the classroom observations were presented.

Teacher 1 / Class C01

Inventory No: 33
Age: 26
Experience: 1 year
Department: ELT
MA: Currently doing
Ph.D: 0

Intelligence Profile:

Verbal/Linguistic: 10	Logical/Mathematical: 7
Visual/Spatial: 10	Bodily/Kinesthetic: 3
Musical: 0	Interpersonal: 8
Intrapersonal: 7	Naturalistic: 1

Class Profile Means:
1. Verbal/Linguistic (3,6)
2. Interpersonal (3,2)
3. Bodily/Kinesthetic (3,2)

Suggested Activities: 6&7/11&12

Reflections:

When the teacher's intelligence profile was examined, it was seen that she is dominant in Verbal and Visual Intelligences, and weaker in Musical and Bodily/Kinesthetic ones. On the other hand the superior intelligence type of the class is first Verbal then Interpersonal and Bodily/Kinesthetic intelligence.

During the classroom observation, it was observed that the teacher created such a real and good context that students could easily felt themselves in the created context and got motivated in pre-stage. Another influence of intelligence profile observed was that she spent more time, made students talk and guess in pre-stage instead of giving more time the Bodily/Kinesthetic activity itself. It could be easily seen that the words and the meanings were dealt with during the musical activities by the teacher. Since most students were verbal and interpersonal, the class eagerly participated in the activity. It can be claimed that there was a harmony between the class and the teacher but although Bodily/Kinesthetic and Musical students eagerly took part in the activities, they were given less feedback than the others.

Teacher 2 / Class C02

Inventory No: 2
Age: 36
Experience: 13 years
Department: ELT
MA: 0
Ph.D: 0

Intelligence Profile:

Verbal/Linguistic: 13	Logical/Mathematical: 3
Visual/Spatial: 6	Bodily/Kinesthetic: 8
Musical: 13	Interpersonal: 13
Intrapersonal: 10	Naturalistic: 8

Class Profile Means:
1. Visual/Spatial (3,5)
2. Bodily/Kinesthetic (3,4)
3. Intrapersonal (3,3)

Suggested Activities: 4&5

Reflections:

As the teacher is dominant at least in four intelligences, it was found that multiple ways of learning were used without the Logical/Mathematical Intelligence.

The teacher was given both Verbal/Linguistic and Logical/Mathematical activities and it could be observed that when the teacher finished writing the problem on the board, few Logical/Mathematical dominant students had already found the answer and raised their hands. Since the teacher was told the answer before, she didn't tend to discuss the possible ways but just like many groups of students, she drew a sketch on the board and only confirmed the answer. The correct answer made the Mathematical students happy. On the other hand while they were doing the activity related to words the teacher was more motivated and divided the class into teams. Students were supported to produce more alternative answers in a competition. Most students were enthusiastic about finding the correct answer in groups.

Teacher 3 / Class C03

Inventory No: 58
Age: 27
Experience: 4 years
Department: Literature
MA: 0
Ph.D: 0

Intelligence Profile:

Verbal/Linguistic: 9	Logical/Mathematical: 5
Visual/Spatial: 11	Bodily/Kinesthetic: 10
Musical: 7	Interpersonal: 6
Intrapersonal: 10	Naturalistic: 6

Class Profile Means:
1. Logical/Mathematical (3,7)
2. Bodily/Kinesthetic (3,6)
3. Intrapersonal (3,6)

Suggested Activities: 3&9

Reflections:

During the classroom observation, it was observed that in completing tasks or engaging in activities the teacher relied on her strongest intelligence that is Visual/Spatial and Bodily/Kinesthetic. This reliance on the most developed intelligences caused her to be passive and give the leading roles to the students who are strong in the Logical/Mathematical Intelligence. In both activities, she tended to group the students and in each stage students are asked to change their groups, which helped the students get involved in the activity. During the explanation and visualisation of the context and problem, the teacher was very successful, moreover, in arranging the groups and monitoring, the students felt the support of the teacher; on the other hand because of different intelligence profiles between students and the teacher, it was clearly seen that most of the students were not interested in the first activity, some were not in the second one. Like other teachers who are weaker in Logical/Mathematical Intelligence, the teacher was less enthusiastic in solving and discussing the crime than completing the bubbles in a cartoon.

Teacher 4/ Class C04

Inventory No: 10
Age: 27
Experience: 5 years
Department: Literature
MA: 0
Ph.D: 0

Intelligence Profile:

Verbal/Linguistic: 9	Logical/Mathematical: 3
Visual/Spatial: 9	Bodily/Kinesthetic: 6
Musical: 11	Interpersonal: 12
Intrapersonal: 4	Naturalistic: 8

Class Profile Means:
1. Verbal/Linguistic (3,6)
2. Intrapersonal (3,5)
3. Musical (3,3)

Suggested Activities: 8&16

Reflections:

During the application of the activities, it was observed that the teacher dominantly used cooperative grouping in her classroom. She divided the class into groups and then assigned the tasks. The instructions were both written on the board and were repeated by the students. By monitoring the groups she checked the groups. It was clearly examined that since she is weaker in intrapersonal intelligence unlike many students, when she noticed something wrong, she immediately interfered the group to point out the mistake rather than allowing time to the group members to think and find out it by themselves. The point that can be considered important is that she spent more time than needed on the activities she is weak but more quick and confident in her dominant areas especially communicative ones. After students completed their task, the teacher had each group share their task and result with the rest of the class, which can be considered as a typical behaviour of teachers who have dominant interpersonal intelligence.

Teacher 5/ Class C05

Inventory No: 31
Age: 35
Experience: 9 years
Department: Psychology
MA: Yes
Ph.D: Currently doing

Intelligence Profile:

Verbal/Linguistic: 10	Logical/Mathematical: 8
Visual/Spatial: 7	Bodily/Kinesthetic: 1
Musical: 7	Interpersonal: 8
Intrapersonal: 14	Naturalistic: 1

Class Profile Means:
1. Bodily/Kinesthetic (4,1)
2. Verbal/Linguistic (3,7)
3. Interpersonal (3,3)

Suggested Activities: 11&12&15

Reflections:

One of the most eye-catching point which attracted attention was that although most of the teachers observed preferred to start the activities in cooperative groups, this teacher started one of the activities with a paragraph writing about earthquake memories of the students and the other with a class discussion in pre-stage. She was especially good at giving the feeling of the topic but quite passive in encouraging the students to share their ideas in groups and to gather them for shared activities. In Bodily/Kinesthetic activities there were lots of Bodily/Kinesthetic dominant volunteers who were eager to take a responsibility in the activity. In this activity, unlike the students the teacher was less active than the previous one so in the activity the teacher only tended to tell the students their turns when there was a problem. But it can be said that the students were very active and seemed to be enjoyed. In the next activity, some students who were active in drawing were quite passive in guessing the meaning of the idioms. It was observed that the teacher gave less time to drawing than needed but she was more involved in the activity during the

guessing the meanings of the idioms. Although different students participated in the lesson in different stages, in pre-stages more teacher-student interaction was examined between the Verbal/Linguistic dominant students and the teacher but more student-student interaction between Bodily/Kinesthetic Intelligence dominant students.

Teacher 6 / Class C06

Inventory No: 49
Age: 24
Experience: 4 years
Department: ELT
MA: Currently doing
Ph.D: 0

Intelligence Profile:

Verbal/Linguistic: 8	Logical/Mathematical: 3
Visual/Spatial: 5	Bodily/Kinesthetic: 4
Musical: 13	Interpersonal: 1
Intrapersonal: 7	Naturalistic: 4

Class Profile Means:
1. Verbal/Linguistic (3,9)
2. Bodily/Kinesthetic (3,9)
3. Intrapersonal (3,5)

Suggested Activities: 3&6&7

Reflections:

When this teacher's strengths and weaknesses were taken into consideration, activities which include dominantly Musical and Verbal and Logical Intelligences were given. During the application, it could be easily observed that most students who have Verbal/Linguistic Intelligence eagerly tended to guess the story of the song from the title and few visual students were drawing figures related to the song although they were not told to do. An important point was that unlike other teachers the teacher preferred giving a sheet to each student and wanted them to work individually instead of working in groups before listening to the song. During this self study, Intrapersonal dominant students seemed to keep their silence, took the responsibility

of looking the words up in the dictionary and complete the song individually. Many Verbal dominant students asked the teacher if they could translate the stanzas of the song. After translating, the song was played 3 times by the teacher and students were asked to sing if they wanted. In the next activities, unlike the teacher, very few Logical students tend to go step by step, draw a chart to solve the murder, on the contrary, the teacher was less interested in reasons or specific clues than some students. The teacher focused on who the murderer was rather than eliciting the progress of murder. In this atmosphere, it was also observed that many students who have weaker Logical Intelligence seemed to get interested when they joined into other groups.

Teacher 7 / Class C07

Inventory No: 17
Age: 26
Experience: 3 years
Department: Interpretation and Translation
MA: 0
Ph.D: 0

Intelligence Profile:

Verbal/Linguistic: 6	Logical/Mathematical: 8
Visual/Spatial: 3	Bodily/Kinesthetic: 6
Musical: 7	Interpersonal: 9
Intrapersonal: 6	Naturalistic: 1

Class Profile Means:
1. Bodily/Kinesthetic (4,2)
2. Interpersonal (4,0)
3. Logical/Mathematical (3,5)

Suggested Activities: 9&14

Reflections:

In completing the tasks and engaging in the activities, the teacher immediately grouped the students, which the class participated voluntarily. As most students and the teacher were weak in Naturalistic Intelligence, the students had difficulty in doing the task but the pictures and working in their groups helped them to overcome the difficulties. In the next activities, the cartoons attracted the attention of many students, only students who have weak Verbal and Visual Intelligence did not show willingness about guessing and completing the bubbles in the first stage, on the other hand the groups who are Visual and Verbal were volunteers and they created very interesting statements for speech bubbles. Although the teacher did not create an example bubble statements for the students, she was very supportive and praised interesting ideas, moreover, she encouraged them to put the cartoons on the walls and share them with the others. All groups walked round and read the other stories. It was also observed that there were more teacher-student interaction between Mathematical/Logical dominant students and the teacher especially in matching and in putting the sentences in the correct order.

Teacher 8 / Class C08

Inventory No: 55
Age: 37
Experience: 10 years
Department: Linguistics
MA: 0
Ph.D: 0

Intelligence Profile:

Verbal/Linguistic: 14	Logical/Mathematical: 6
Visual/Spatial: 13	Bodily/Kinesthetic: 14
Musical: 12	Interpersonal: 14
Intrapersonal: 11	Naturalistic: 10

Class Profile Means:
1. Verbal/Linguistic (3,6)
2. Intrapersonal (3,5)
3. Bodily/Kinesthetic (3,5)

Suggested Activities: 1&2

Reflections:

Since the teacher is dominant in most of the intelligence types except Mathematical/Logical and Intrapersonal Intelligences we can say that although she tended to spend less time on puzzles, the classroom was full of visualisation, movement, verbal skills and sounds of language.

Although the teacher has strong Verbal and Interpersonal Intelligences, there was only one type of interaction: teacher-student. In this situation, the only drawback of the strengths of the teacher was that the teacher preferred to interact to each and every student and did everything until she received the correct answer. By giving either synonyms, definitions, or miming, she tried to elicit the answer at once rather than giving some time to think. As a result, most students who are dominant in Intrapersonal Intelligence were observed to keep their silence and be scared during the lesson. On the contrary, all Bodily/Kinesthetic and Verbal and Musical dominant students easily got the words from the teacher's gestures, definitions or sounds and it

can be claimed that most of the students participated since the teacher addressed most equally.

Teacher 9/ Class C09

Inventory No: 6
Age: 30
Experience: 6 years
Department: Linguistics
MA: 0
Ph.D: 0

Intelligence Profile:

Verbal/Linguistic: 14	Logical/Mathematical: 4
Visual/Spatial: 11	Bodily/Kinesthetic: 12
Musical: 13	Interpersonal: 10
Intrapersonal: 7	Naturalistic: 11

Class Profile Means:
1. Visual/Spatial (3,8)
2. Intrapersonal (3,4)
3. Logical/Mathematical (3,3)

Suggested Activities: 8&5

Reflections:

The influence of the intelligence profile on the teacher's teaching style was apparent throughout the lesson. When the students who have strong Verbal/Linguistic Intelligence participated in the lesson, the teacher tended to give supportive and positive feedback, on the other hand when Logical/Mathematical dominant students express their ideas the teacher let them speak but she was rather passive in giving feedback. Another influence of intelligence profile of the teacher observed was that when other tasks related to Visual, Interpersonal, Intrapersonal ... etc. intelligences were applied, the teacher tended to address all equally because of the average combination of her intelligence profile; so that the majority of the class who has Visual/Spatial and Intrapersonal Intelligence could be involved in the lesson.

Teacher 10 / Class C10

Inventory No: 32
Age: 25
Experience: 2 years
Department: ELT
MA: Currently doing
Ph.D: 0

Intelligence Profile:

Verbal/Linguistic: 3	Logical/Mathematical: 8
Visual/Spatial: 9	Bodily/Kinesthetic: 6
Musical: 6	Interpersonal: 5
Intrapersonal: 9	Naturalistic: 5

Class Profile Means:
1. Bodily/Kinesthetic (3,8)
2. Logical/Mathematical (3,7)
3. Intrapersonal (3,5)

Suggested Activities: 1&9&21

Reflections:

Unlike most teachers, this teacher had a weaker Verbal/Linguistic Intelligence, which inevitably troubled few Verbal/Linguistic dominant students in the class. It was observed that when there was an unfamiliar word, he used visualising vocabulary strategy instead of giving definitions, synonyms, or miming. The activity given was so Visual/Spatial and Verbal/Linguistic Intelligences integrated that although the teacher mainly focused on serial figures in the cartoon stories, both the teacher and the students who are weaker in Verbal Intelligence were given an opportunity to get involved in the activity. Another clearly observed point was that, in the next activity Logical/Mathematical dominant students were more active in finding a solution and exchange ideas with the teacher, on the other hand students who are stronger in Visual Intelligence could follow and find a solution effectively by following the pictures that were drawn by the teacher. Giving place to both individual and group study made most of the students participated in the activities in different stages of the lesson. It would be better if the teacher had explained the unknown vocabulary by also

using gestures and hands when the general tendency of the class is taken into consideration.

To sum up, analysis of the results obtained from the tables, observations, and responses from the teachers provide support for the hypothesis that there can be differences between the profiles of students and their teacher, moreover, teachers' intelligence profiles influence their teaching styles, principles and practises.

It can be claimed that teachers tend to be more in favour of the activities that include their own dominant intelligence type and their attention is mostly devoted to it, on the other hand they tend to be passive and spend less time on the activities that focus on their weaker intelligences.

Different reflections of the observations revealed that teachers adapt their intelligence profile to their teaching styles, in other words, teachers' intelligence profiles dominate their teaching styles. On the other hand, it was observed that by the help of integrated MI activities the teachers, who are weak in those intelligences where their students are strong, give their students an opportunity to participate in the lesson and let them use their strengths.

CHAPTER 6

CONCLUSION

The Theory of Multiple Intelligences has formed the basis for reforms in education and teaching.

According to The Theory of Multiple Intelligences proposed by H. Gardner, individuals own different talents and skills because they do not have one fixed profile of intelligence but there are at least eight types of intelligences that each individual possesses in varying degrees. These eight intelligences are: Verbal/Linguistic Intelligence, Logical/Mathematical Intelligence, Visual/Spatial Intelligence, Bodily/Kinesthetic Intelligence, Musical Intelligence, Interpersonal Intelligence, Intrapersonal Intelligence and Naturalistic Intelligence.

In the light of the Theory of Multiple Intelligences, this study revealed that each teacher and student possess their own individual intelligence profiles. It is important to be aware of the fact that since each individual is unique, all students learn in their own different ways and we, as teachers, also have our stronger and weaker intelligences which inevitably affect the way we teach.

When the great number of failures in ELT classes are taken into consideration, the difference in dominant intelligence types between teachers and their students appears as a crucial problem in language teaching.

First of all, this study mainly sought to investigate the ways to reduce the problems observed during the regular peer-observations between colleagues caused by the effects of the different individual intelligence profiles among teachers on English Teaching and the difference in dominant intelligence types between teachers and their students. Therefore, not only the problems which both the teachers and students come face to face because of individual differences are pointed out, but also different types of integrated MI activities are suggested to add variety in EFL classrooms.

This study starts with a literature review to analyse The Theory of Multiple Intelligences to provide background information. In this chapter, the changing vision of intelligence and the description of intelligence types are presented.

The next chapter concentrates on the individual differences and the relationship between MI and English Teaching and also explains how MI Theory applies to your teaching.

In the following chapter, the analysis of the data collected from both teachers and students have been presented. Therefore, an MI inventory has been applied to find out the MI profiles of 60 preparatory teachers teaching at Başkent University. After identifying their dominant and weaker intelligence types, 10 teachers out of 60 are chosen randomly. Then, students of these teachers (10 classes) are given another MI inventory in order to determine the general intelligence tendency of the class. Therefore, the difference of dominant intelligence types between the class and the teacher has been presented. The results of both the teachers' and students' inventories have reflected that there are clear differences between the dominant intelligence types between the students and their teachers.

In the next chapter of the study, by taking the teachers' dominant and weaker intelligence types into consideration, various integrated MI activities are suggested to each teacher to address most or all types of intelligences equally. In addition to this, with some information about the teacher and the general intelligence tendency of the class, the reflections of the classroom observations during the application of the suggested activities are presented.

These results in this study showed that teachers need to be aware of not only their own intelligence profiles but also should be informed about their students' MI profiles by administrating an MI inventory at the beginning of the term to make allowances for them. Thus, it will not only lead to the improvement of their teaching styles, but also the improvement of the student motivation and learning throughout the year.

It is widely accepted that teaching is not only an art but also a science, that is, teaching can be improved and more effective when various teaching techniques are adopted. That's why, the institutions can provide a training for several reasons: Firstly, in-service training can help teachers develop awareness of their own intelligence profiles and control over their teaching behaviour. Secondly, it can guide teachers in the analysis and enhancement of weaker intelligences in their classrooms so it can stimulate the development of their teaching styles by trainings for each intelligence

including specific strategies which can be added to teachers' repertoire in order to reflect the different ways of being smart in EFL classrooms.

It can also be thought that since MI Theory is not an education programme, it allows teachers a wide mental model from which to create activities in class and improve themselves as educators. Thus, teachers may apply the theory in the way they consider most appropriate for their class and institution.

As teachers, we can not put all our energy and effort into creating complex MI lessons including all types of intelligences but we must have realistic, practical, easy to use methods such as MI activities. It is clear that using MI activities is the easiest way to begin to integrate MI into our classrooms. By using and also creating simple MI activities as part of any lesson, teachers can teach the way that they are and just add the theory of MI on to that and make MI instruction as an inseparable part of the daily experience of their classes.

It should be acknowledged that any individual activity may focus on one particular intelligence, but will at the same time relate to several different ones. By bringing variety into classroom procedures, in this case using integrated MI activities, teachers can contribute to students' involvement, enjoyment as well as to the language learning process.

Another important point is that since self and peer observations aim at ongoing professional development, both enable teachers to look at their own class from another point of view. For this reason, we should encourage our teachers to observe either one another or themselves.

There is no doubt that teachers are people who can make contributions to the environment they live in. That's why, teachers who give great importance especially on peer observation can get new ideas and inspiration from their colleagues.

As we all know, the largest journey starts with a single step, so we have discovered a simple truth in education: The greatest sustained change results from the smallest changes in instruction. It is not difficult for a teacher to ask one of the colleagues to visit his class with the suggested observation tool (Appendix 4) to familiarise himself with MI. By this way, the teacher will try to attach importance to all types of intelligences equally and get feedback as well.

It is clear that peer-observation is one of the best means of finding out what works best in a particular teaching environment objectively and how others are bringing MI into their classes.

The last important final point drawn from this study should be mentioned here: It is universally accepted that as societies change, their needs change, too. That's why, each country or each institution has to determine what kind of an education it must provide to its students.

Curriculum development is one of the key elements in achieving the desired goals in ELT, in other words, it involves keeping records who, how, how much, and what to teach.

It should not be forgotten that the purpose of MI is not to replace traditional content with MI content. Rather than replacing one proven system with another, it aims to add more tools to instruction. Acknowledging that students and teachers are smart in different ways, now we should question our curriculum:

If each student or teacher is smart in many ways, should not we align our curriculum with the intelligences to nourish the development of each intelligence in every teacher and student?

If each student learns and if each teacher teaches in different ways, should not we improve our curriculum in different ways to give an opportunity for every student and teacher?

Realistically, we can not expect teachers to completely redesign their curriculum or plan all new MI lessons involving eight types of intelligences and rebuild students' educational experiences based on MI. There is no doubt that it is not fruitful to change the whole way, in addition to that throughout the year in the reality of programmes, there is no time to design special content for each individual student. Needless to say, it would be a very black and white way of looking at things. Unlike other educational reforms, MI is not prescriptive. On the contrary, there may be as many ways of applying MI as there are teachers.

Since teachers just like students have different intelligence profiles, curriculum unit that is formed by teachers who have different dominant intelligence types can do it for teachers. If we share ideas with our colleagues and develop our own curriculum

by taking each other's strengths into consideration, our classrooms will be full of visualisation, movement, analysing, melodies and naturalist observations. So lessons will become more engaging and meaningful for students as well as for teachers. In other words, curriculum unit can provide food for every taste and expectation.

This study concluded that the more ways we provide, the more opportunities each teacher and student have to honour their uniqueness

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APPENDICES

APPENDIX 1

Dear Colleagues,

The findings of this inventory will be used in a scientific study. Your answers will be appreciated. Before completing the questionnaire, fill in the information sheet completely.

Thank you for your participation and precious support in advance.

Aslıhan ARIKAN

Background Questions:

Name : .....

Sex : ( ) Female ( ) Male

Age : .....

What department did you graduate from? .....

What is your total teaching experience? ..... years ..... months

Do you have master's degree? ( ) Yes ( ) No

If you have master's degree or if you are currently doing your master's indicate the department: .....

Do you have Ph.D? ( ) Yes ( ) No

If you have Ph.D or if you are currently doing your Ph.D, indicate the department: ...

.....

Multiple Intelligence Inventory

Tick the statements that you think describe you.

1.	I love reading books.	
2.	I feel more comfortable when something has been measured, categorised, analysed, or quantified in some way.	
3.	I always pay attention to the colours I wear.	
4.	I enjoy spending time in a park doing a physical activity.	
5.	I find myself tapping rhythms on the table while waiting.	
6.	I prefer going out with friends rather than staying home alone.	
7.	Processing my thoughts alone is very important to me.	
8.	I am good at recognising different types of birds and plants.	
9.	Words and languages fascinate me.	

10.	I have plants in my home and office.	
11.	I would love to design an advertisement board to showcase ideas.	
12.	Choosing the best metaphor in a poem is a joy for me or my conversation includes frequent references to things that I've read.	
13.	I am interested in documentaries.	
14.	I lose track of time when I am in a library or a bookstore.	
15.	I like recording events with a camera or camcorder.	
16.	When I have my meal, I enjoy listening to background music.	
17.	I practice a new skill rather than simply reading about it.	
18.	When I read a novel, I often compare personal choices I would make.	
19.	Solving number problems is easy for me.	
20.	I am more productive when I work with a team.	
21.	I have attended personal growth sessions to learn about myself.	
22.	People often ask me to explain the meaning of words I use.	
23.	I can comfortably imagine how something might appear if it were looked down upon from directly above, in a bird's eye view.	
24.	I have a pleasant singing voice.	
25.	I often spend time chatting with friends.	
26.	I am goot at dancing, sewing or woodworking.	
27.	My life would be dull without music.	
28.	I often look at the sky and tell different types of clouds and wheather they bring.	
29.	I love spending time outdoors.	
30.	After I've been to a concert, I hear melodies in my mind for days.	
31.	When I cook, I measure things exactly.	
32.	I frequently use slides and pictures in my lessons.	
33.	I am partial to textbooks with illustrations, graphs and charts.	
34.	I often see cause-effect relationship in things.	
35.	When I write, I tend to base stories on personal experience.	
36.	I was interested in Biology lessons at school	
37.	I would much rather learn new material with a group of people.	
38.	When I have a problem, I seek out another person for help.	
39.	I use chants and music in my lessons.	
40.	Spending time with lots of people makes me nervous.	

41.	I like telling stories and jokes.	
42.	I find it difficult to sit still for long.	
43.	My favourite activity is keeping a personal diary or journal.	
44.	I willingly take an active part in school sports day.	
45.	I like to be involved in many forms of outdoor activities.	
46.	I have special hobbies or interests that I keep pretty much to myself.	
47.	I use the blackboard, the overhead projector or charts and posters when I teach.	
48.	It's easy for me to tell the weeds from the plants.	
49.	I consider myself independent.	
50.	My students help me to decide on the content and learning process in my classes.	
51.	I am involved in social activities and clubs.	
52.	I frequently listen to music in the car, at work, or at home.	
53.	I enjoy spending time by myself.	
54.	I enjoy visiting art galleries.	
55.	I like working with my hands.	
56.	I can tell when music sounds are off-key.	
57.	I enjoyed math classes in school.	
58.	Movies or slides really help me to learn new information.	
59.	I would rather create my own materials and lessons.	
60.	My best thinking surfaces when I brainstorm with other people.	
61.	I ask many questions about how things work.	
62.	I always organise a time schedule to plan my week.	
63.	Helping others to complete a project brings me a lot of satisfaction.	
64.	I have a good sense of rhythm.	
65.	I like spending time in nature.	
66.	Sometimes I get up early to watch the sunrise.	
67.	Listening to music makes me feel better.	
68.	I often ask my students to do reading and writing in my classes.	
69.	Whenever I buy fish, I love cleaning and cooking them.	
70.	Spelling is easy for me	
71.	As I walk in the woods, I often pause quietly to observe habits within wildlife.	

72.	I believe that most things have a rational explanation.	
73.	I enjoy the challenge of teaching another person or groups of people.	
74.	I enjoy solving jigsaw or other visual puzzles.	
75.	Open-ended questions are usually difficult for me.	
76.	When I enter a classroom, I notice whether the positioning of the students and teacher supports the learning process.	
77.	I work more effectively to background music.	
78.	People come to me for comfort and moral support.	
79.	I always do activities that require the students to move about in my classes.	
80.	I enjoy having pets at home.	
81.	It is easy for me to find my way around in unfamiliar cities.	
82.	I play a musical instrument or sing in a choir.	
83.	I am considered to be someone that people come to for advice.	
84.	I have a good vocabulary in my native language.	
85.	I prefer group sports to solo sports.	
86.	I often get my best ideas when I am out for a walk or doing some physical activities.	
87.	I am good at sports.	
88.	I know the tunes to many songs or musical pieces.	
89.	I am interested in new developments in science.	
90.	I was always a volunteer in doing experiments in the lab. at school.	
91.	In all four seasons, I learn from and enjoy observing nature change.	
92.	I especially like to read articles and books with many pictures.	
93.	I consider myself a good letter writer.	
94.	Learning new dance steps and moving to music brings me real satisfaction.	
95.	English, social studies and history were easier for me at school than maths and science.	
96.	I frequently use hand gestures or other forms of body language when conversing.	
97.	I engage in at least one sport or physical activity regularly.	
98.	I like playing chess and brain-teaser games.	

99.	I enjoy learning about rocks.	
100.	It is easy for me to follow exactly what other people do.	
101.	I have some specific and realistic goals for my life.	
102.	I encourage quiet time and time to reflect in my classes.	
103.	I can easily remember people's names or the words of a song.	
104.	I regularly spend time alone to meditate of think about important life questions.	
105.	I consider myself a leader and often assume leadership roles.	
106.	I often draw or doodle during staff meetings.	
107.	I choose activities for my students to work on alone or independently.	
108.	I can understand and interpret graphs easily.	
109.	I am good at explaining how to solve problems.	
110.	I like gardening.	
111.	Geometry was easier for me than algebra at school.	
112.	I draw well.	
113.	I often remember advertisement jingles.	
114.	I go to the library alone to study.	
115.	I enjoy word games like scrabble or crossword puzzles.	
116.	I am good at persuading people.	
117.	I love to figure out how my computer works.	
118.	I often use problem-solving activities in my classes.	
119.	I write about things I read or experience.	
120.	I often hum or whistle a tune.	

Verbal/Linguistic: 1, 9, 12, 14, 22, 41, 47, 68, 70, 84, 93, 95, 103, 115, 119.

Logical/Mathematical: 2, 19, 31, 34, 57, 61, 62, 72, 75, 89, 98, 108, 109, 117.

Visual/Spatial: 3, 11, 15, 23, 32, 33, 54, 58, 74, 76, 81, 92, 106, 111, 112.

Bodily/Kinesthetic: 4, 17, 26, 29, 42, 44, 45, 55, 79, 86, 87, 94, 96, 97, 100

Musical/Rhythmical: 5, 16, 24, 27, 30, 39, 52, 56, 64, 67, 77, 82, 88, 113, 120

Interpersonal: 6, 20, 25, 37, 38, 50, 51, 60, 63, 73, 78, 83, 85, 105, 116

Intrapersonal: 7, 18, 21, 35, 40, 43, 46, 49, 53, 59, 101, 102, 104, 107, 114

Naturalistic: 8, 10, 13, 28, 36, 48, 65, 66, 69, 71, 80, 90, 91, 99, 110

APPENDIX 2

INVENTOR	AGE	EXPERIEN	MA	Ph.D	DEPARTME	VL	LM	VS	BK	MR	INTER	INTRA	NATUR.
1	28	5	0	0	1	11	4	6	9	7	7	10	6
2	28	8	0	0	1	10	9	7	11	14	7	8	10
3	27	6	2	0	2	11	4	9	11	8	9	9	3
4	37	4	0	0	2	11	4	5	5	4	9	8	4
5	29	7	2	0	1	5	2	9	6	7	9	6	4
6	30	6	0	0	3	14	4	11	12	13	10	7	11
7	28	3	0	0	1	9	12	9	6	13	8	10	7
8	24	1	0	0	2	15	9	11	10	15	11	13	4
9	27	6	0	0	2	14	8	9	13	14	13	11	10
10	27	5	0	0	2	9	3	9	6	11	12	4	8
11	26	4	0	0	1	10	4	5	4	13	10	10	1
12	34	9	0	0	1	8	4	6	8	7	11	4	3
13	30	9	0	0	3	7	2	9	3	13	7	9	5
14	27	5	0	0	2	8	4	5	4	5	3	4	5
15	25	4	0	0	1	11	3	6	11	13	7	10	8
16	27	5	2	0	1	8	7	7	14	10	9	6	3
17	26	3	0	0	4	6	8	3	6	7	9	6	1
18	24	2	0	0	1	9	8	10	10	13	14	10	3
19	47	24	1	0	3	7	6	7	2	6	5	5	5
20	45	12	0	0	2	10	10	8	9	12	12	9	8
21	25	2	1	0	1	14	9	8	13	12	12	11	12
22	25	3	0	0	2	12	9	10	11	12	10	6	5
23	36	10	2	0	2	12	8	13	12	8	8	12	14
24	35	5	0	0	3	11	6	10	13	9	8	11	11
25	27	6	0	0	1	9	7	9	6	11	9	15	7
26	29	5	0	0	1	9	12	10	11	12	10	12	7
27	33	6	0	0	2	9	5	5	6	8	7	4	2
28	36	13	0	0	1	13	3	6	8	13	13	10	8
29	26	4	0	0	1	7	7	6	5	5	6	7	0
30	28	6	2	0	2	8	3	2	4	1	3	7	8
31	35	9	1	2	5	10	8	7	1	7	8	14	1
32	25	2	2	0	1	3	8	9	6	6	5	9	5
33	26	1	2	0	1	10	7	10	3	0	8	7	1
34	27	5	0	0	2	12	8	9	12	8	13	13	6
35	31	7	0	0	1	14	10	12	11	9	11	12	12
36	28	5	0	0	1	9	5	9	9	9	11	12	5
37	54	25	0	0	2	11	4	6	6	9	7	11	7
38	25	4	0	0	2	9	5	9	6	9	10	7	2
39	28	5	2	0	1	14	10	10	8	12	11	11	6
40	26	4	0	0	1	10	9	10	9	14	6	13	8
41	34	13	0	0	1	14	4	11	10	13	7	9	5
42	28	6	2	0	2	13	8	9	9	11	9	14	13
43	29	6	0	0	2	6	5	6	8	6	4	5	4
44	28	5	0	0	1	7	8	7	6	3	4	6	5
45	27	6	1	0	2	7	5	7	5	7	7	5	2
46	27	5	0	0	1	10	7	8	8	15	11	9	5
47	26	4	0	0	1	11	5	9	6	11	7	9	7
48	28	7	1	0	2	12	5	10	7	14	7	8	10
49	24	4	2	0	1	8	3	5	4	13	1	7	4
50	35	10	0	0	2	10	6	8	9	11	12	11	7
51	41	9	0	0	3	10	12	12	8	12	12	8	10
52	29	7	0	0	3	5	2	6	6	11	4	11	8
53	31	7	0	0	1	11	9	8	12	10	7	12	11
54	57	36	1	0	1	8	10	6	9	8	7	3	5
55	37	10	0	0	3	14	6	13	14	12	14	11	10
56	28	5	2	0	1	7	11	7	6	14	7	11	4
57	26	5	1	0	1	9	2	5	7	12	10	7	7
58	27	4	0	0	2	9	5	11	10	7	6	10	6
59	28	4	0	0	1	12	2	10	6	7	9	11	3
60	28	5	0	0	1	10	7	10	12	11	11	11	5

APPENDIX 2

VERBAL	LOGICAL	VİSUAL	BODILY	MUSICAL	INTERPER	INTRAPER	NATURAL	AGE-CAT	EXP-CAT
Good	Poor	Average	Average	Average	Average	Average	Average	<= 30	3-5
Average	Average	Average	Good	Excellent	Average	Average	Average	<= 30	6-8
Good	Poor	Average	Good	Average	Average	Average	Poor	<= 30	6-8
Good	Poor	Average	Average	Poor	Average	Average	Poor	>30	3-5
Agerage	Poor	Average	Average	Average	Avergae	Average	Poor	<= 30	6-8
Excellent	Poor	Good	Good	Good	Average	Average	Good	<= 30	6-8
Average	Good	Average	Average	Good	Average	Average	Average	<= 30	3-5
Excellent	Average	Good	Average	Excellent	Good	Good	Poor	<= 30	0-2
Excellent	Average	Average	Good	Excellent	Good	Good	Average	<= 30	6-8
Average	Poor	Average	Average	Good	Good	Poor	Average	<= 30	3-5
Average	Poor	Average	Poor	Good	Average	Average	Poor	<= 30	3-5
Average	Poor	Average	Average	Average	Good	Poor	Poor	>30	9-11
Average	Poor	Average	Poor	Good	Average	Average	Average	<= 30	9-11
Average	Poor	Average	Poor	Average	Poor	Poor	Average	<= 30	3-5
Good	Poor	Average	Good	Good	Average	Average	Average	<= 30	3-5
Average	Average	Average	Excellent	Average	Average	Average	Poor	<= 30	3-5
Average	Average	Poor	Average	Average	Average	Average	Poor	<= 30	3-5
Average	Average	Average	Average	Good	Excellent	Average	Poor	<= 30	0-2
Average	Average	Average	Poor	Average	Average	Average	Average	>30	12+
Average	Average	Average	Average	Good	Good	Average	Average	>30	12+
Excellent	Average	Average	Good	Good	Good	Good	Good	<= 30	0-2
Good	Average	Average	Good	Good	Average	Average	Average	<= 30	3-5
Good	Average	Good	Good	Average	Average	Good	Excellent	>30	9-11
Good	Average	Average	Good	Average	Average	Good	Good	>30	3-5
Average	Average	Average	Average	Good	Average	Excellent	Average	<= 30	6-8
Average	Good	Average	Good	Good	Average	Good	Average	<= 30	3-5
Average	Average	Average	Average	Average	Average	Poor	Poor	>30	6-8
Good	Poor	Average	Average	Good	Good	Average	Average	>30	12+
Average	Average	Average	Average	Average	Average	Average	Poor	<= 30	3-5
Average	Poor	Poor	Poor	Poor	Poor	Average	Average	<= 30	6-8
Average	Average	Average	Poor	Average	Average	Excellent	Poor	>30	9-11
Poor	Average	Average	Average	Average	Average	Average	Average	<= 30	0-2
Average	Average	Average	Poor	Poor	Average	Average	Poor	<= 30	0-2
Good	Average	Average	Good	Average	Good	Good	Average	<= 30	3-5
Excellent	Average	Good	Good	Average	Good	Good	Good	>30	6-8
Average	Average	Average	Average	Average	Good	Good	Average	<= 30	3-5
Good	Poor	Average	Average	Average	Average	Good	Average	>30	12+
Average	Average	Average	Average	Average	Average	Average	Poor	<= 30	3-5
Excellent	Average	Average	Average	Good	Good	Good	Average	<= 30	3-5
Average	Average	Average	Average	Excellent	Average	Good	Average	<= 30	3-5
Excellent	Poor	Good	Average	Good	Average	Average	Average	>30	12+
Good	Average	Average	Average	Good	Average	Excellent	Good	<= 30	6-8
Average	Average	Average	Average	Average	Poor	Average	Poor	<= 30	6-8
Average	Average	Average	Average	Poor	Poor	Average	Average	<= 30	3-5
Average	Average	Average	Average	Average	Average	Average	Poor	<= 30	6-8
Average	Average	Average	Average	Excellent	Good	Average	Average	<= 30	3-5
Good	Average	Average	Average	Good	Average	Average	Average	<= 30	3-5
Good	Average	Average	Average	Excellent	Average	Average	Average	<= 30	6-8
Average	Poor	Average	Poor	Good	Poor	Average	Poor	<= 30	3-5
Average	Average	Average	Average	Good	Good	Good	Average	>30	9-11
Average	Good	Good	Average	Good	Good	Average	Average	>30	9-11
Average	Poor	Average	Average	Good	Poor	Good	Average	<= 30	6-8
Good	Average	Average	Good	Average	Average	Good	Good	>30	6-8
Average	Average	Average	Average	Average	Average	Poor	Average	>30	12+
Excellent	Average	Good	Excellent	Good	Excellent	Good	Average	>30	9-11
Average	Good	Average	Average	Excellent	Average	Good	Poor	<= 30	3-5
Average	Poor	Average	Average	Good	Average	Average	Average	<= 30	3-5
Average	Average	Good	Average	Average	Average	Average	Average	<= 30	3-5
Good	Poor	Average	Average	Average	Average	Good	Poor	<= 30	3-5
Average	Average	Average	Good	Good	Good	Good	Average	<= 30	3-5

APPENDIX 3

"ÇOK YÖNLÜ ZEKA TÜRLERİ"

ÖĞRENCİ ANKETİ

Sevgili Öğrenciler,

Bu anket sizin baskın olan zeka türlerinizi belirlemek amacıyla hazırlanmıştır. Toplanacak veri bilimsel bir çalışmaya ışık tutacağından aşağıdaki ifadelere vereceğiniz cevabı, **"EVET"** veya **"HAYIR"** bölümlerinin altındaki boşluklara (√) işaretiyle belirtiniz. Ankete geçmeden önce kişisel bilgi kısmını eksiksiz tamamlayınız.

Katkılarınızdan dolayı teşekkür ederim.

Aslıhan ARIKAN

Kişisel Bilgiler

Adınız : .....

Cinsiyet : ( )E ( )K

Bölümünüz : .....

Sözel / Dil Zekası	**EVET**	**HAYIR**
1. Kitap, dergi ve gazete okumaktan hoşlanırım.	( )	( )
2. Kelime oyunlarını çok severim.	( )	( )
3. Benim için Türkçe ve Sosyal Bilgiler gibi dersler, Matematik ve Fen Bilgisi gibi derslerden daha cazip ve kolaydı.	( )	( )
4. Fıkra ve Hikaye anlatmayı severim.	( )	( )
5. İnsanların isimlerini kolaylıkla hatırlayabilirim.	( )	( )

Mantıksal / Matematiksel Zeka		
1. Sayıları kafamda rahatlıkla hesaplayabilirim.	( )	( )
2. Matematik ve Fen Bilgisi okuldaki en favori derslerimdi.	( )	( )
3. Her olayın mutlaka mantıklı bir açıklaması olduğuna inanırım.	( )	( )
4. Bir olgunun belli bir şekilde kategorilere ayrılarak, analiz edilerek veya hesaplanarak açıklanması beni tatmin eder.	( )	( )
5. Sayılarla ilgili oyunlar oynamayı severim.	( )	( )

Görsel / Uzamsal Zeka	**EVET**	**HAYIR**
1. Genellikle gözlerimi kapattığımda açık ve net imgeler görürüm.	( )	( )
2. Yönümü veya gideceğim yeri kolaylıkla bulabilirim.	( )	( )
3. Yeni bir bilgiyi öğrenirken film ve slaytlar daha çok yardımcı olur.	( )	( )
4. Okulda Geometri ile ilgili konular Cebir dersinden daha kolaydı.	( )	( )
5. Genellikle resimli okuma materyallerini tercih ederim.	( )	( )
Bedensel Zeka		
1. Bir yerde uzun bir süre için hareketsiz oturmaktan hoşlanmam.	( )	( )
2. Başkaları ile konuşurken genellikle ellerimi veya bedensel jest, mimik ve hareketleri çok kullanırım.	( )	( )
3. Fiziksel aktiviteleri çok severim ve en az bir spor dalında düzenli olarak egzersiz yaparım.	( )	( )
4. Yeni bir beceriyi öğrenirken okumak yerine o beceriyi pratik etmeye ihtiyaç duyarım.	( )	( )
5. Genellikle boş zamanlarımı ev dışındaki faaliyetlerle harcarım.	( )	( )
Müzikal / Ritmik Zeka		
1. Şarkı söylemeye uygun güzel bir sesim vardır.	( )	( )
2. Bir müzik aleti çalarım veya koroda şarkı söylerim.	( )	( )
3. Müzik dinlemeyi çok severim.	( )	( )
4. Bir müzik parçasını tekrarlamam için bir, iki kez dinlemem yeterlidir.	( )	( )
5. Bir konuyu öğrenirken veya ders çalışırken, sık sık ritim tutar ve melodiler mırıldanırım.	( )	( )
Sosyal Zeka		
1. Genellikle etrafimdaki kişiler benden öğüt isterler.	( )	( )
2. Birçok yakın arkadaşım vardır.	( )	( )
3. Sosyal ve kültürel aktivite ve kulüplere katılmaktan zevk alırım.	( )	( )
4. Genellikle kendimi grup lideri olarak algılarım (veya başkaları bu özelliğe sahip olduğumu söylerler.)	( )	( )
5. Bireysel sporlar yerine, grup sporlarını (futbol, voleybol, tenis ... vb) tercih ederim.	( )	( )

Özedönük Zeka	**EVET**	**HAYIR**
1. Kendi zayıf ve güçlü yönlerimi çok iyi birilim.	( )	( )
2. Kendime ait bir hobim vardır.	( )	( )
3. Hayatımla ilgili düşündüğüm ve ulaşmaya çalıştığım önemli amaçlarım vardır.	( )	( )
4. Günlük önemli olayları not ettiğim bir günlük tutarım.	( )	( )
5. Yalnız vakit geçirmekten hoşlanırım.	( )	( )

Doğacı Zeka		
1. Bitki ve hayvanlar hakkında diğer insanlardan daha çok bilgim vardır.	( )	( )
2. Doğal ortamlarda yapılan (kamp, balık tutma ... vb) aktiviteleri severim.	( )	( )
3. Biyoloji, zooloji, astroloji ... vb. konulara ilgi duyarım.	( )	( )
4. Bitki ve hayvan türlerini kategorilerne ayırmak konusunda başarılıyımdır.	( )	( )
5. Doğadan yaprak, çiçek, kaya parçaları ... vb. nesneleri toplamayı severim.	( )	( )

APPENDIX 3

"MULTIPLE INTELLIGENCES"

STUDENT QUESTIONNAIRE

Dear Students,

The following questionnaire has been prepared to find out your dominant intelligence types. Since the findings of the inventory will be used in a scientific study, indicate your opinion by ticking (✓), under **"YES"** or **"NO"** column.

Before completing the questionnaire, fill in the personal information part.

Thank you for your precious support.

Aslıhan ARIKAN

Personal Information

Name : .....

Sex : ( ) M ( ) F

Department : .....

Verbal / Linguistic Intelligence	**YES**	**NO**
1. I like reading books, magazines and newspapers.	( )	( )
2. I love word games.	( )	( )
3. English or social studies were easier for me at school than maths and science.	( )	( )
4. I like telling stories and jokes.	( )	( )
5. I can easily remember names.	( )	( )

Logical / Mathematical Intelligence		
1. I can easily compute numbers in my head.	( )	( )
2. Maths and/or science were among my favourite subjects in school.	( )	( )
3. I believe that most things have a rational explanation.	( )	( )
4. I feel more comfortable when something has been measured, categorised, analysed, or quantified in some way.	( )	( )
5. I like playing brain-teaser games.	( )	( )

Visual / Spatial Intelligence	YES	NO
1. I often see clear, visual images when I close my eyes.	( )	( )
2. It is easy for me to find my way around in unfamiliar cities.	( )	( )
3. Movies or slides really help me to learn new information.	( )	( )
4. Geometry was easier for me than algebra at school.	( )	( )
5. I especially prefer reading articles and books with many pictures.	( )	( )
Bodily / Kinesthetic Intelligence		
1. I find it difficult to sit still for long periods of time.	( )	( )
2. I frequently use hand gestures or other forms of body language when conversing with someone.	( )	( )
3. I like sports and I engage in at least one sport or physical activity regularly.	( )	( )
4. I need to practice a new skill rather than simply reading about it.	( )	( )
5. I like to be involved in many forms of outdoor activities.	( )	( )
Musical / Rhytmical Intelligence		
1. I have a pleasant singing voice	( )	( )
2. I play a musical instrument or sing in a choir.	( )	( )
3. I love listening to music.	( )	( )
4. I can easily repeat the tunes to many songs after listening a few times.	( )	( )
5. I frequently make tapping sounds or sing melodies while working, studying or learning something new.	( )	( )
Interpersonal Intelligence		
1. I am considered to be someone that people come to for advice.	( )	( )
2. I have many close friends.	( )	( )
3. I like to get involved in social activities and clubs.	( )	( )
4. I consider myself a leader and often assume leadership roles. (or others say so.)	( )	( )
5. I prefer group sports like football, volleyball to solo sports.	( )	( )

Intrapersonal Intelligence	**YES**	**NO**
1. I have a realistic view of my strengths and weaknesses.	( )	( )
2. I have special hobbies or interests that I keep pretty much to myself.	( )	( )
3. I have some specific and realistic goals for my life.	( )	( )
4. I keep a personal diary or journal to record the events of my inner life.	( )	( )
5. I enjoy spending time by myself.	( )	( )

Naturalistic Intelligence		
1. I know more about plants and animals than other people.	( )	( )
2. I like camping, fishing, or other activities relating to the natural environment.	( )	( )
3. I show great interest in subjects like biology, zoology, astronomy ... etc.	( )	( )
4. I am good at recognising and classifying plants and animals.	( )	( )
5. I like to collect things from nature like rocks, flowers, leaves ... etc.	( )	( )