

**MULTIPLE INTELLIGENCES IN THE EFL CLASSROOM**

**A Perspective in Context**

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## **ABSTRACT**

This paper examines the implication of Multiple Intelligences Theory for learning styles in the EFL classroom. The multiple intelligence profiles of students and teachers at two secondary schools were obtained in order to determine their strengths and weaknesses in the different intelligences. In addition, the teachers' and learner's preferences for EFL activities catering for the intelligences were defined. Furthermore, the frequency of use of the EFL activities was examined in order to determine how the various intelligences were actually addressed in the teaching and learning processes. The research was conducted in Rijeka, Croatia, thus providing insights into a specific cultural context. Results showed the need for raising both the teachers' and learners' awareness of the existence of Multiple Intelligences learning styles, and of the far-reaching implications for the teaching and learning of English as a foreign language.

### ERIC descriptors:

- Multiple Intelligences
- Learning styles
- Learning strategies
- Teaching styles
- Class activities
- EFL teaching
- Cultural context

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## CHAPTER 1

### **INTRODUCTION**

Although extensive research has been conducted into students' learning styles and the theory of multiple intelligences (MI), the implications for teaching are not widely known in all contexts. Each EFL context is unique and information about MI theory and the impact it has on the educational philosophy will vary depending on how open or traditional the context is. Consequently, MI theory and different learning styles might be viewed as a foundation for improving teaching practices or as a threat and challenge to established worldviews. Nevertheless, information about learning styles and MI is helpful for everyone, especially for teachers and students as it enables the individual to compensate for his or her weaknesses and capitalize on his or her strengths.

In the Croatian context, there is a need for raising awareness of different styles and strategies and fostering a thorough understanding of MI theory. Individual differences, which are observable in the learner's different intelligences and learning styles indicate a diversity in approaches to learning. Teachers, on the other hand, have preferred teaching styles which may stem from their different intelligences and personal learning styles. Since the teacher's preferred teaching and learning style may not be compatible with the learner's, the outcome is that not all students are provided with equal

opportunities to learn. Mismatches between the learner's intelligences and the teaching style of the instructor can have effects on the quality of learning and on the student's attitudes toward the class and the subject.

This paper will examine the learning styles of students at two Croatian Public Secondary Schools, and the frequency of selected teaching activities used in the EFL classroom. The data collected will be analyzed to establish the degree of correlation between the multiple intelligence profiles of the EFL students and the preferred language learning activities used by the course instructors. Therefore, the teaching techniques and strategies used by the EFL teachers will be examined in light of the multiple intelligence profiles of the students with the aim of aiding teachers' to come to awareness about the learners' diverse styles and realize to what extent these styles are addressed in the foreign language classrooms.

The study has 6 aims:

1. To introduce the learners and EFL teachers to MI theory.
2. To determine the multiple intelligence profile of the students.
3. To determine the multiple intelligence profile of the teachers.
4. To determine whether certain activities which address different intelligences appeal to the learners.
5. To determine whether certain activities which address different intelligences are used in the EFL classroom.
6. To raise the teachers' awareness not only of the MI theory and the different student profiles, but also of the different techniques which support an individualized approach to language learning.

Identification of the techniques used by teachers and insights into MI theory will encourage teachers to examine their techniques and strategies and help them understand themselves and their learners better. Furthermore, teachers will become more conscious of the choices they make which affect their teaching with the aim of understanding their concept of student language-learning capacities in the EFL classroom. Emphasis will be placed on the need to cater for individual differences and provide meaningful tasks for the learners so as to increase the effectiveness of language teaching and learning. In addition, the learners who benefit from the application of MI theory, by becoming aware of their own intelligences and preferred learning styles, will be able to exploit it and foster their own learning potential not only in the EFL classroom but in other subjects and, most importantly, in life.

Finally, this study will help the teachers and learners involved in this study as well as future readers of this IPP to reflect on learning and teaching and gain a better understanding of themselves and each other which will lead to enhancement of the learning process and the development of their intellectual capacities throughout life.

## CHAPTER 2

### **DEFINING THE CONTEXT**

#### An Outlook on Education

Each EFL teaching setting is unique and it has a cultural dimension which is relative and difficult to define in its complexity. One and the same context may be defined in different ways depending on the beliefs, culture and worldviews of the person defining it and his or her sensitivity to and understanding of the context. Therefore, any attempt to define a context is relative and it inevitably reflects personal values and worldviews. “Any language teaching program reflects both the culture of the institution (i.e., particular ways of thinking and of doing things that are valued in the institution), as well as collective decisions and beliefs of individual teachers” (Richards and Lockhart 1996: 38). Consequently, the definition of the Croatian context is a personal perspective and although some statements might seem over-generalized there are regularities within the context which stem from the educational system, culture, teaching environment, politics and history. Therefore some aspects of teaching are more prevalent in this educational system than in others. Moreover, what is considered acceptable or even commendable in teaching within one culture might be disapproved of in this context, and vice-versa.

There are some common characteristics that are present in the Croatian public school system but, as with all generalizations, not applicable to all teachers. Although the need to address individual differences is widely recognized, classes may still be quite teacher centered. The role of the teacher is a result of the educational tradition which has been influenced by cultural and political factors which have played a significant role in shaping the mind-frame of educators, learners and parents. The non-native foreign language teacher's excellence is identified with his or her knowledge of the foreign language. Therefore, in some cases, emphasis is placed exclusively on content and the complexities of the teaching and learning process are neglected.

The political system of the region has had an impact on the educational system and values. The region was under socialist rule for forty-five years. During this period goods were owned collectively and political power was exercised by the whole community. The idea of the equality of people prevailed and difference, uniqueness and individuality were not readily acknowledged. Therefore, learners were not viewed as unique individuals but rather as members of a group. There was little room for individual development within the educational system. Consequently, learners were seen as part of a cohesive group and it was widely believed that standardization in curriculum, teaching and evaluation would be equitable and yield the best results.

Throughout this period, all elementary and secondary schools were public and all learners attending the schools followed the same curriculum and were required to take the same subjects with the exception of a small number of elective subjects. Elementary school education was compulsory and after completion the learners usually enrolled in secondary schools on the basis of their grades and interest. Therefore, the good and

“intelligent learners” aspiring towards college entrance would attend the gymnasium<sup>1</sup>. In secondary schools, the curriculum varied according to the type of secondary school and the stream; however, the same type of school would have the same curriculum throughout the country. At the tertiary level, there was also little possibility of choice. Most of the courses at universities were compulsory and only a small number of electives were offered. Emphasis was placed on acquiring extensive knowledge of a subject with a lot of facts to support it. Acquiring knowledge, rather than experience or process was the prime goal.

The teacher’s role within such a system was also clearly defined. The teacher was an expert and authority. The role of the teacher was very significant for the proper functioning of the system since the teacher was the conductor and initiator in class. Often learners spoke up only when addressed or called on by the teacher and discipline in class was highly valued. In some elementary and secondary schools, it is still common for learners to show respect for the teacher by standing up when the teacher enters the classroom. The seating arrangement in most classes, in rows, with the teacher’s desk at the front of the classroom is also indicative of the central role of the teacher.

Although the political system changed in 1991, and efforts have been made in the field of teacher education, the impact of ideology can still be felt. Worldviews and values about teaching which were ingrained for many years cannot be changed overnight. Changing teachers’ beliefs about teaching and learning is an ongoing process and the teacher has to believe in a different teaching philosophy before venturing to implement it in the classroom. Since the context and culture have an immense impact on the prevailing

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<sup>1</sup> An academic high school in some central European countries that prepares students for the university.

beliefs about teaching and learning, changing the role of the teacher from the central figure to facilitator and acknowledging learner individuality and differences is and will continue to be a work in progress.

Hofstede's (1986) model of cultural differences as a framework for analysis, supports the close correlation between culture and education and points out some of the differences that can be encountered in different cultural settings. The framework includes four dimensions of cultural differences in teaching and learning:

1. Individualism vs. Collectivism;
2. Uncertainty avoidance;
3. Power Distance;
4. Masculinity vs. Femininity.

The first constraint, having an impact on learning and classroom dynamics, relates to individualism versus collectivism. In a tightly integrated collectivist culture, the learner's responsibility for his or her own learning may not be equal to that in an individualist culture. Likewise, the reasons why a person studies and what he or she hopes to gain through education also differ.

The second differentiation deals with uncertainty avoidance in different cultures. Cultures with low uncertainty avoidance maintain strict codes and believe in absolute truths and are made nervous by unstructured, unclear and unpredictable situations. Therefore, classrooms which cater to individual differences without strict codes and structure might challenge the established worldviews and be perceived as methodologically inadequate. Moreover, these classes may seem to lack discipline and order because of the teacher's lack of expertise.

The third differentiation corresponds to the differences in accepted power distance within a culture. Hence, in large power distance societies, the teacher has a directive role within the classroom and is expected to outline the path. The teacher, who is the central figure, is often viewed as the provider of knowledge and expert who has all the answers and is therefore not contradicted. Consequently, the teacher has the central role in the classroom and is largely responsible for the learning process. Moreover, the effectiveness of learning is closely linked to the excellence of the teacher and not enough importance is placed on the learner's individuality and responsibility.

The fourth differentiation distinguishes between masculine and feminine societies. In masculine societies, traditionally academic subjects are avoided by male students. As a result, the majority of EFL teachers are females. Furthermore, the teacher's expertise is admired, and failure at school has an impact on the learner's self-esteem. Consequently, the students in such settings will be less willing to take risks and more dependent on the teacher's praise and evaluation of progress.

Hofstede also stresses that "our cognitive abilities are rooted in the total pattern of society" (1986: 023). Therefore, learners have different cognitive abilities and different profiles from culture to culture which require different approaches to teaching. Elements of teaching cannot be transferred directly from one culture to another. However, if no attempt is made to implement new teaching elements then a wealth of teaching knowledge and experience will remain unshared.

With the process of globalization, and teachers' and learners' increased mobility from culture to culture, there will be more contact with diverse perspectives of teaching and learning which will stimulate reevaluation of teaching practices and

acknowledgement of diversity. Therefore, the contact of cultures will have an impact on both the learners' and teachers' worldviews and values and consequently on the teaching and learning processes.

There are no clear recipes and solutions for how to make learning more effective within a context, nor do we know what will work best in a given context. Learning and the role of the learner has become more complex with the influence of new research. These new realizations which have pointed out how multifaceted the teacher, learner and context is, have provided new insights, challenges and opportunities. Introducing change into teaching is an ongoing, albeit slow, process because it challenges the established practices which stem from the culture, accepted values and worldviews. Although these changes may be viewed as threats to established patterns of behavior, dismissing new ideas without trying them out would impoverish the teaching profession and deprive the teachers and learners of new experiences.

There is no doubt that there is a need to not only increase awareness of learner differences in the classroom but also to acknowledge and address these differences. Teachers need to reexamine their techniques and strategies in the light of learner differences because all learners are entitled to learning opportunities which will help them develop their potential. If a teacher truly believes that all learners can learn a language, then he or she will create an atmosphere conducive to learning where individual differences are acknowledged.

Finally, the Croatian teaching context would benefit from raising awareness of the theory of Multiple Intelligences and different teaching strategies to accommodate diverse learning styles. A questionnaire completed by thirty senior students at the English

Department of the Faculty of Philosophy in Rijeka, in March, 2002, showed inadequate awareness of learning styles and strategies since as many as 40% had never heard of the Theory of Multiple Intelligences. Furthermore, although 85% of the students surveyed would like their teachers to use different teaching strategies, they stated that the most common form of lesson at the university is the lecture where the students are passive recipients of the subject matter.

Students in their turn have also demonstrated inadequate awareness as to why teachers use different strategies in the classroom. The majority do not realize that different teaching styles and strategies could enhance learning more fully and tap their potential. Instead they believe they are used only to make the lesson interesting.

Teaching does not inevitably lead to learning and although some teachers cater to the different needs of learners, many still believe in and practice uniformity in teaching. Raising awareness of individual learning styles is an essential step before implementing explicit learning style work in classes and will make teaching and learning more fulfilling and effective, so all learners may be successful at learning foreign languages.

CHAPTER 3

**TEACHING AND LEARNING**

An Overview

Learning itself – not just evidence of learning, but learning itself means making some sort of change in those internal resources in my brain. And what we call teaching is then simply helping someone else to make the needed changes in his or her internal resources. (Stevick 1999: 45)

Learners need teachers and teaching cannot be defined apart from learning because they are interdependent. Although learning can take place outside the classroom, not all learning does and the purpose of teaching is to facilitate and foster learning. “There can, after all be learning without teaching, but one cannot claim to have taught unless someone else has learned” (Stevick 1998: 30). While teaching, the teacher always has to bear in mind the learner and learning process and the teacher’s understanding of the learning process will have a profound impact on the techniques, style, and approach used in teaching.

“The subjects we teach are large and complex as life, so our knowledge of them is always flawed and partial”.

“The students we teach are larger than life and even more complex.”

“... We teach who we are.” (Palmer 1998: 2).

Therefore, the reasons which govern a teacher’s decisions in the classroom are the direct outcome of the teaching principles, and profound understanding of the self, the learner and subject matter. Teachers teach as they were taught, or in a way that reflects their beliefs about teaching and learning. Consequently, the belief system and values of the teacher will shape the classes, context, subject matter and affect all the learners in a unique way. Throughout their teaching, teachers draw on their teaching and learning experiences and the teacher’s understanding of the learning process and how learning takes place will define the educational philosophy.

What makes teaching and learning even more complex is that the practices and the role of the teacher and learners vary from culture to culture because the values and worldviews of learners and teachers also vary from culture to culture. Vygotsky emphasized the significance of culture and the importance of the social context for cognitive development. Therefore, experiences will differ in different cultures, as will the role of the learner, teacher and subject matter. If teaching reflects these beliefs and values then the educational philosophy is also affected by culture. Hinkle (2001) states that culture has a broad and deep influence on language use and how language is taught and learned. Consequently, there is no one universally right or wrong way of teaching but an infinite number of ways, depending on the context and situation. There are no prescriptive solutions to teaching and learning because every classroom context is unique and specific for a given moment and that uniqueness will never again be repeated, in that or any other classroom.

Teaching and learning second languages are complex developmental processes. In

the past, the complexity of teaching was neglected and it was believed that teaching inevitably led to learning. Knowledge was believed to be transmitted from the teacher to the learner and emphasis was placed on accumulating extensive knowledge of the subject matter. In fact, the approach which reflected this philosophy and placed great value on knowledge of grammatical rules, vocabulary lists and translations to the native language was the Grammar Translation Method. There is no doubt that in some teaching contexts, the prevailing language teaching methodology still reflects the influence of the Grammar Translation Method. Consequently, the focus on grammatical intricacies, extensive vocabulary memorization, and tests of grammar rules and translations, all reflect the influence of a method which was grounded neither in linguistics nor in psychology. Furthermore, this method required few skills from the controlling teacher.

Graves (2000) suggests viewing the process of teaching on a continuum with two different teacher roles at each end. On one end of the continuum is the teacher who transmits knowledge to the learners, while on the other end is the teacher and learners who negotiate the knowledge and skills and learning methods.

Learning and teaching are now seen as amazing feats with an infinite number of variables constantly interplaying in the process. Understanding how languages are learned requires knowledge of many fields like linguistics, psycholinguistics, sociology, sociolinguistics, culture and others. Therefore, research in these fields has informed and influenced language teaching theories, and research in psychology and linguistics has broadened understanding of how languages are learned. Both linguistics and psychology deal with human behavior and have therefore brought about a better understanding of the learner, teacher and language. Consequently, parallel findings in these two disciplines

have had a major impact on language learning theories and contributed to the development of teaching and learning philosophies.

Prior to 1970, behaviorist psychology formed the basis of how many teachers behaved in the classroom. Behaviorists were concerned with the observable indications of learning and concentrated on the cause-effect relationship. The teacher's job was to modify the learner's behavior and learning was viewed as a sequence of stimulus and response actions. In linguistics, the same interest prevailed and the structural school of linguistics focused only on what was observable and could be perceived and measured in language. Therefore, these linguists focused on identifying and describing the structural characteristics of language. "Both the structural linguists and behavioral psychologists are interested in description, in answering *what* questions about human behavior: objective measurement of behavior in controlled circumstances" (Brown 1994: 11). The findings of behaviorist psychologists and structural linguists supported a language learning theory based on conditioning and gave rise to the audio-lingual method. Language learning was seen as acquiring a set of habits and the role of the learner was passive with no room for interaction. Learners responded to a stimulus which was reinforced by the teacher. This mechanical approach to teaching failed to take into account cognitive factors and the numerous complexities involved in language learning.

Many educational psychologists found the behavioral approach unsatisfying and became more concerned with the unobservable. With the rise of cognitive psychology and generative-transformational school of linguistics, there was a need to go beyond the observable and descriptive. The focus was shifted from the measurable to the way in which the human mind works and efforts were made to understand what goes on inside

the learner's head. "The generative linguist and cognitive psychologist are, to be sure, interested in the *what* question; but they are far more interested in the question, *why*: what underlying reasons, thinking, and circumstances caused a particular event" (Brown 1994: 11). The learner is no longer seen as a passive recipient but an active participant in the learning process who actively constructs knowledge in the social context.

The significance of the individual and his mental activity in the learning process was reiterated by the constructivist movement. The traditional view of learning, as an accumulation of facts or skills, was rejected and the focus was shifted on to individuals constructing personal meaning and making their own sense of the world. Knowledge construction and not knowledge reproduction makes learning meaningful. Constructivism supports the claim that every learner will bring a different experience and different knowledge to the learning process. Therefore, he or she will construct their sense of the situation which will be unlike anyone else's construct. "Thus learning is essentially personal and individual; no two people will learn precisely the same thing from any particular learning situation" (Williams and Burden 1997: 96). Thus, our knowledge and view of the world is in a state of perennial change due to the reciprocal influence of existing knowledge and new information. Teachers can help learners make sense of their learning in ways that are meaningful to the learner. Every learner has a different perspective on the world and will approach a language task differently. What incites a person to learn a language and achieve success will differ from individual to individual and is subject to culture, context and environment because learning does not take place in a vacuum.

Humanistic approaches to language teaching have underscored yet another

significant aspect of the learner, his inner world. The learner's affective domain and the learner's efforts to come to terms with affective factors have long been neglected; however, there is no doubt that affective variables play an important role in learning. Scovel (2000) suggests that, in the future, emotions might prove to be the most influential force in SLA. It is now widely acknowledged that thoughts and emotions have a profound impact on human development. Approaches to teaching like Desuggestopaedia, Community Language Learning and the Silent way, all consider the affective aspects of language learning. Based on psychology, all these approaches are concerned with treating the learner as a whole person and the development of personal identity is fostered in a social context conducive to learning. An advocate of humanism, Stevick (1998: 20), states that every student and teacher desires to be "an object of primary value in a world of meaningful action". He believes that every person develops a self-image but if this self image contradicts or diverges from that of another person then, the self-image is threatened. Therefore, teachers should take into consideration what goes on: 1 inside and between students and teachers in the classroom, 2 between students themselves and 3 inside the individual student. Learning does not take place in isolation and interaction between the teacher, learner and subject is a delicate and dynamic process. Consequently, change in one of these factors will inevitably lead to changes in all the others. Although memory, cognitive skills and motivation are of importance to the teacher, the learners' individuality and emotional needs, which can hinder or foster foreign language learning, should not be neglected. Individual differences should be acknowledged and appreciated for the wealth they contribute to the classroom. "There is tremendous individual variation among language learners. Teachers need to take into account these differences and learn

to work with them in the classroom herein lies the interpretive artistry of teaching”  
(Diane Larsen-Freeman 1991: 337).

Instead of trying to make the learners fit a uniform method of teaching, efforts are being made to understand the learner and tailor teaching to address the specific learner in a given class. “While learning is the goal of teaching, it is not necessarily the mirror image of teaching” (Richards and Lockhart 1996: 52). All learners approach their learning in their personal way and each of them contributes to the classroom in a unique manner as they all have their beliefs, attitudes and emotions which guide their decisions and actions.

Over the years, there has been an increased awareness of the learners’ needs and responsibilities. Efficiency in learning has been linked with the affective filter and the learners’ active involvement in their learning. “Learner-centered classrooms are those in which learners are actively involved in their own learning process” (Nunan and Lamb, 1996: 9). Learners have to learn for themselves and in recent years there has been a progressive move away from traditional teacher-centered expository instruction towards learner-centered experiential learning. Learners will learn better if the teacher is sensitive to the learners’ differences and provides instruction which will incorporate diverse learning styles. If learning cannot take place without active involvement, then the teacher must provide multiple learning situations which will foster active involvement of all students. The learner is involved in a process of problem solving and discovery and is a maker of knowledge.

“Learning can be viewed as a cognitive process, involving mental activity, an affective process, involving emotional connection and risk taking, and a social process,

involving learning with others” (Stevick, 1998 cited in Graves, 2000).

This unites the psychological, humanistic and social perspective on learning.

Although some of the factors involved in learning have been defined, there are still numerous unanswered questions in the area of individual differences. In addition, there is no blueprint to explain how individuals make sense of their own learning and how teachers can address learner differences in the language learning process. However, efforts can be made to concentrate on the unique contribution of every individual and to understand each learner and assist him or her to learn more effectively. If language learning success is based on affective, social and cognitive factors and individual differences, then the teacher must address these issues when teaching. The more a teacher is aware of the complexities of learning the more he or she can enhance the teaching process and foster learning. “Teachers possess the power to create conditions that can help students learn a great deal or keep them from learning at all” (Palmer 1998: 6). Therefore, the teacher who appreciates diversity and acknowledges individuality will better cater to the learner’s singular needs and provide various learning situations which will help students learn.

The students’ personality differences which have an impact on their learning are clearly visible in the classroom. Knowledge of these factors will help develop awareness of the different needs of learners and will guide the teacher to accommodate them in the classroom.

Learning styles research has made a significant contribution to language teaching by increasing our awareness of the need to take individual learner variations into

consideration and to diversify classroom activities in order to reach a wider variety of learners. (Arnold and Brown 1999: 17)

Learner and teacher awareness of different learning styles and different intelligences can provide a scaffolding of more effective teaching and increase learner motivation, confidence and self-esteem. Kohonen (1999) claims that using different learning styles can aid in creating a positive atmosphere in the classroom. Acknowledging personality differences and providing meaningful tasks, will provide multiple opportunities for learning and result in more effective learning for all learners. Therefore, knowledge of learning styles and multiple intelligences will enable learners to understand and take control of their learning maximizing their potential in the process.

Closely connected to learning styles are learning strategies which are the resources used by learners when dealing with learning tasks and solving problems. It has been already stated that cognitive psychology claims that learners are not passive in their learning but are actively involved in solving problems and completing tasks. Williams and Burden (1997) explain that research into language learning strategies has attempted to investigate how individuals deal with the task of learning something and determine the strategies that are effective for the particular type of learning. Identification of some of the strategies used by good language learners has, in recent years, given rise to the idea that they can be taught to learners with the aim of improving all learners' success in language learning. As a result, in recent years explicit strategy training has received significant attention. Consequently, a teacher can attempt to foster learners' strategies while attempting to cater for individual differences with the aim of increasing effectiveness in language learning.

Throughout history the role of the teacher and learner and subject matter has been changing as a result of new understandings of the factors involved in the teaching and learning processes. People internalize the environment in different ways and cognitive, physical and affective domains merge in this process. A holistic view of teaching and learning has underscored the different variables which contribute to the complexity of these issues. If individual differences are one of the key factors in teaching and learning, then raising teachers' awareness of multiple intelligences, styles and strategies will enable teachers how to help their learners take control of their learning and conduct it in a personal and meaningful manner. Understanding styles and strategies will point to the teachers' and learners' strengths and weaknesses and will challenge teachers to reexamine their teaching techniques and cover materials in a way that best fits the diversity of the classroom. Since learners and teachers have different intelligences, preferences and natural styles, they should be understood and mutually acknowledged in the foreign language classroom. Therefore, it would be beneficial if teachers would examine their preferred teaching techniques in the light of these diverse learning styles and multiple intelligences, because acknowledging diverse learning styles in the classroom and helping students use all the means available to them, will contribute to the success of both teacher and learner. Finally, inquiry into learning styles, learning strategies and the theory of Multiple Intelligences will assist teachers and learners not only in becoming more effective but also in gaining a profound understanding of themselves and each other.

## CHAPTER 4

### **LEARNING STYLES**

#### The Learner and Learning Styles

Increased focus on the learner has highlighted the learner's inner capacities which have important implications for learning and teaching and touch a whole range of psychological, contextual, and methodological issues. Cognitive psychology research and its revelations concerning the human mind have pointed out that learners vary in their approaches to learning new material. How an individual perceives the environment and reacts to it will depend on his or her learning style. "Learning styles are internally based characteristics, often not perceived or consciously used by learners, for the intake and comprehension of new information" (Reid 1998: ix). Richards and Rogers (1996) suggest that predispositions to specific approaches to learning are largely dependent on personality types. Consequently, learners have preferences which are visible characteristics and manifestations of their individuality. This individuality is reflected in the classroom and the implications for the teacher are that no one method or textbook will meet the needs of all learners because of their individual preferences.

Research on learning styles has produced a proliferation of categories, some based on binary contrasts and cognitive dimensions, which attempt to define the learner and to

show how complex this field is. First, successful learners use multiple learning styles. Second, learners usually adhere to their preferred learning styles; nevertheless, over time, learning styles can be expanded and new learning styles can be added to the repertoire. Third, “styles are not universal but are preferences that individuals employ in different learning situations” (Scovel 2001: 95). Therefore, the learning style employed can vary depending on the context and task requirements. Consequently, the learner will choose from his or her preferred learning styles depending on the circumstances. Fourth, since learning styles vary, depending on the learner’s individuality, one learning style cannot be singled out over another and there is no such thing as a good or bad learning style.

There is a possibility that with style, even though there may be a continuum of some sort with more or less of an attribute being possessed, all the advantages may not accrue to only one end of the continuum. (Skehan 1994: 237).

Therefore, one feature of a learning style does not outweigh another. A learner’s preference for a learning style should be encouraged and it should not be assumed that his or her way of working is wrong. Acknowledging language learners’ uniqueness highlights individual needs. Catering to the learners’ diverse needs means encouraging different learning styles in order to make the learning experience more relevant, meaningful and self-directed.

Learning styles research has indicated how complex the learning process is and has attempted to enhance understanding of how learning takes place. Numerous learning styles classifications have pinpointed some learner characteristics drawing attention to specific variations among individuals. These learning preferences of individuals are

categorized and commonly presented as dichotomies of opposing traits. Therefore, learners are often believed to fall strictly into one of the mutually exclusive categories. However, Wallace (1991) notes that as with most psychological types, not many people fit into a distinct category and most are somewhere in the middle, in the grey zones. Therefore, the human tendency to classify, and some teachers' beliefs that learning styles research has enabled easy classification of learners' profiles, pose great risks to the learners. Although such straightforward and clear-cut classification may seem convenient and allow for easy identification of students, there is a great danger of narrowing the learner's choice of learning styles. If a learner believes she or he learns best employing a certain learning style, he or she may reject other styles or may not be willing to explore them. Therefore, there is no doubt that a clear-cut explicit categorization of a learner can prevent him or her from exploring different learning styles because of the supposition that belonging to one category or predisposition for certain learning styles excludes other categories or learning styles. In fact, learners can create a preconceived notion of their personality and learning style which can lead to an overgeneralization about their strengths and weaknesses. Consequently, learners' settling for a given profile may limit their potential and reduce their willingness to experiment, explore and extend their learning styles. This can reduce their willingness to learn more about themselves as language learners and become less analytic about learning styles.

Teachers, on the other hand may also wrongly label a student as belonging to a certain learning style category with the same adverse consequences. Therefore, Reid (1998) warns of the potential danger of classifying and stereotyping learners, thus limiting instead of enhancing, their potential. Since learners grow, develop, and become

more mature over time, they undergo a process of constant change. Likewise, their profiles might change and develop throughout time or from one situation to another. Wallace claims that “students in higher education abandon less effective learning styles and develop more effective styles” (1991: 24). Viewing learning styles as static and immutable and excluding all other learning styles except the ones ascribed to a person can do extensive damage. Therefore, learning style classifications should be approached with caution and should be used to inform the teaching and learning process, not to restrict it. There are risks as well as opportunities in the implications of learning style theory.

Different cultures value different learning styles and Wallace (1991) warns that learning styles research should not be applied uncritically to all cultural contexts. Although it is dangerous to generalize and link a particular learning style with members of a certain culture, research has shown that certain common features of learning styles preferences within members of a culture do exist. Joy Reid (1987) notes that different modes of thinking are characteristic of different cultures. Reid further points out that difficulty in language learning may be due to the fact that instructors use materials and methods which suit native speaker styles but not those of the nonnative speakers. Wallace (1991) claims that attitudes toward learning are influenced by cultural factors as well as personal factors. Therefore, it would be useful for learners to extend their learning styles, especially if they plan on pursuing their education in different cultural and linguistic contexts. Furthermore, teachers need to be made aware that culture and personality influence learning styles.

Reid also found that “learners from a specific major field also preferred specific learning styles” (1998: 18). This is especially significant for teachers who teach ESP in different contexts. Although, in ESP, considerable importance has been assigned to topics, vocabulary, tasks and even grammar, not enough thought has been given to the preferred learning styles of these learners. Research suggests that prospective engineers, artists, doctors and other learners, who are not English majors, have different preferred learning styles. Dudley-Evans (2001) states that learners’ needs in ESP are often defined in terms of a learning or occupational situation in which English plays a key role. Thus, the varied needs of learners who are studying ESP have not been adequately analyzed and their preferred learning styles not identified or addressed in the classroom. As a result, there is a need to build awareness that not only specific language, but also specific dominant learner styles in context need to be acknowledged within an ESP setting. There can be no doubt that the emphasis should be changed from the “what” in teaching to “how” and “why”. Research into the learning styles of the learners should be conducted with the aim of improving classroom environments.

Humanistic approaches to language teaching have stressed the prominent role of affect in language learning. There is a direct correlation between affect and learning styles. In her suggestions for diminishing language anxiety, Oxford proposes that teachers “provide activities that address varied learning styles and strategies in the classroom” (1999: 67). Learners, in order to want to learn a foreign language and retain their self-esteem as language learners, need to be able to experience what it means to succeed in the language classroom. Therefore, there can be no doubt that the learner’s attitude towards the foreign language will, among other factors, also be determined by

how the learner feels in the language learning context. A motivated learner will set goals and will use multiple approaches to achieve them. Mitchel and Miles (1998) also state that researchers have found a relationship between language attitude, motivation and achievement in the second language. Therefore, if by acknowledging different styles the learners become more successful at learning, they will feel more comfortable in the learning environment and will be better able to achieve their language learning goals. Consequently, this will have an impact on their motivation, self-esteem and attitude towards the foreign language. Joy Reid states the following benefits of raising learners' awareness about their learning strengths: "higher interest and motivation in the learning process, increased student responsibility for their own learning, and greater classroom community" (1998: 301). Hence, affective factors contribute to more effective learning and will encourage students to become life-long learners.

Although classifications of learning styles vary, there are certain general characteristics that are true of all learning styles, regardless of the classification. These general characteristics were best described by Reid (1998: 302) who listed five points common to all learning style classifications:

- *Every person, student and teacher alike, has a learning style and learning strengths and weaknesses;*
- *learning styles exist on wide continuums, although they are often described as opposites;*
- *learning styles are value neutral: that is, no one style is better than others (although clearly students will be affected by their school systems most of which value some learning styles over others);*

*- students can be encouraged to stretch their learning styles so that they will be empowered in a variety of learning situations; and*

*- often, students' strategies can be linked to their learning styles.*

Learning styles are value neutral. Nevertheless they are relative to a context and in certain contexts some styles are valued more than others. Culture and styles are interrelated and certain teaching and learning styles are predominant in certain cultures. Consequently, in some contexts certain forms of teaching and learning will be accepted and others rejected, which clearly points to the need to extend students learning styles and raising teachers' awareness that the acceptable and recognized teaching and learning styles are not necessarily the best and may not cater to the learners' diversity of styles. There is a range of implications stemming from the recognition of variety of learning styles. Some of these implications represent opportunities and challenges, others may be risks and danger challenging the accepted beliefs and practices. As a result, teacher education in this field should be approached with caution because it will challenge the established worldview of the teacher or teaching context and may be perceived as a threat rather than a basis for critical reflection on classroom practice aimed at expanding teaching styles and catering to learner differences.

Furthermore, students in different cultures have different degrees of ambiguity tolerance and may resist contexts that are not explicit and tightly structured because they may feel that they are not conducive to learning. Therefore, student awareness of learning styles and the teacher's beliefs and efforts have to be raised prior to implementing change. Resistance to introducing change to the established delivery of instruction will

probably diminish once the students experience the benefits of diverse learning styles and realize the benefits of becoming more empowered in different learning situations.

It has been already stated that there is an increased need to consider individual differences in the classroom and also suggested that it is necessary to extend teaching techniques to reach a greater number of learners and make teaching more equitable. Felder and Henriques (1995) state that how much a student learns in the class is dependent on the learner's native ability and prior preparation and by how compatible the learner's approach to learning is with the teacher's approach to teaching. There can be no doubt that a learner, whose preferred learning style may be visual, has different needs than a learner who learns in the kinesthetic mode. Consequently, teacher awareness of styles is needed because a teacher who functions in the visual mode may teach to that learning style assuming that he or she is reaching all learners unaware that all the other learning styles are being neglected. Therefore, teachers should beware of teaching only to the learning style which reflects their own preferred learning mode. Thus, the teacher is responsible for providing learning opportunities for the students. However, Scovel (2001) points out that styles are limited because learners in a particular situation will probably decide to use a particular learning style and will choose from the available repertoire.

In effective classrooms both the teachers and the learners learn; learning is not a one way process and if the learner is to benefit from this effort to improve the teaching and learning context then he or she has to be actively involved in shaping it. Knowledge of different learning styles is crucial if teachers would like to provide opportunities for all. On the other hand, they can draw insights from the learners and inform their teaching. It has been suggested that teachers should encourage students to extend their learning

styles. However, in order to be able to extend their learning styles the students first have to be aware of their learning styles. Awareness of their preferred learning styles will allow the students to provide the teacher with feedback when the teaching style does not match their learning style. If the teacher uses different teaching styles and activities in the classroom it is obvious that not all the activities will be appreciated by all students all the time but will be appreciated by every student at some time. Therefore students need to be made aware that although some teaching styles will suit them, others will suit their peers better and for each to learn they will have to be more tolerant of the complexity of learning and acknowledge diversity. Students providing constructive feedback to the teacher will encourage the teacher to take risks and experiment with activities he or she may not be comfortable with because they differ from the his or her styles. This will also empower the students to take a more active role in their learning and raise the awareness that they can enhance their own learning. In contrast, non-constructive criticism on the part of the learner which may stem from lack of knowledge, awareness or tolerance to different learning styles, may discourage the teacher from implementing change and resort to including only the learning styles which are valued by the teacher or educational context. This is particularly true for teacher-centered contexts where students are not used to collaborating on the way classroom instruction is delivered because teaching is believed to be the sole responsibility of the teacher. Asking for students' opinions may also be perceived as a sign of weakness and inadequacy. Moreover, in certain contexts students are used to being taught in a particular way and if they are encouraged to go beyond their comfort zones and encouraged to include learning styles other than the valued or preferred style, they might feel threatened and unwilling to change or take

risks. This might have a negative impact on their learning experience and the opinion of the teacher. Besides, some students may not want to expand their learning styles to become more autonomous in their learning.

Research into learning styles has benefited and will continue to benefit the English language classroom environment. In the literature, there are several classifications of learning styles which have attempted to describe how people learn. Although there are certain characteristics which are common to these classifications, each classification is unique in its own right. While none has provided an exhaustive description of the learner, they have delved into a field which has turned out to be complex and has demonstrated that each learner has an untapped potential. Felder and Henriquez (1995: 22) propose that some learning style dimensions can be defined in terms of what type of information the student perceives preferentially and through which modality. Furthermore they suggest that styles define how a student processes information and progresses towards understanding, and lastly, with which organization of information the student is most comfortable. Therefore, attempts have been made to understand the needs of learners by trying to clarify how they acquire, retain and retrieve information. There is no doubt that in the future other learner characteristics will be analyzed and that new classifications of learning styles will be introduced, which will help both the students and teachers better use their talents and abilities.

No model or description of learning styles is in itself useful to the teacher or learner if they are not willing to apply it. Models do not provide clear cut distinctions or solutions in themselves but do help develop a multiple perspective on the complex nature of learning and a profound understanding of how students learn and how they can make

the best of each learning opportunity. Therefore the more classifications teachers are familiar with the better they will be able to interpret and comprehend their own, as well as their students' behavior.

Brown (1994) states that psychologists and educators have identified numerous learning styles; however, not all of them have received the attention of second language researchers. Therefore, only the major classifications of learning styles, which have had an impact on language learning, will be discussed.

### Field-Dependent and Field-Independent Learning Styles

The dichotomy field-dependent and field-independent attempts to discern how well a person can perceive a particular item in a field of other items. Therefore, the field-dependent field-independent classification distinguishes between people who can discriminate parts from a whole and those who view the parts as embedded in the field, which is perceived as a unified whole. Ehrman (1998) claims that there has been uncertainty whether field-dependence and field-independence are learning styles or abilities, whether they should include personality factors or refer exclusively to cognitive functioning. In short, field-independence is considered to be a learning style which best describes learners who prefer to learn materials out of context whereas, field-dependence, often described as the absence of field-independence, depicts learners who prefer learning material in context.

Additional characteristics have shown that field-independent individuals are task-oriented, and set their own paths in life and are cool in their interaction with others. On the other hand, field-dependent learners are dependent on external structure and context,

favoring interpersonal relations. Some research on field-dependence-independence has established its influence on learning and students' outcomes and suggests that field-dependent learners generally perform less well than field-independent individuals in most instructional environments. Field-dependent persons depend more on self and seem readily to learn material that has a social context whereas field-independent students appear to be more adept to the unstructured classroom than their field-dependent counterparts. It has also been suggested that field-dependent learners rely more on the teacher and peer support but the field-independent students are more analytical and need less teacher direction. Brown (1998) points out that field-independent persons tend to be more independent, competitive and self-confident while field-dependent persons are more socialized, empathic and sensitive to the feelings of other people.

This has implications for language learning because it is believed that field-independent learners like to concentrate on the details of language, such as grammar rules, and enjoy playing with words and sentences. They like puzzles and grammatical analysis and patterns or even drilling. They can focus well on the task they have selected to concentrate on. Because of their attention to its parts, they are sometimes unable to see the “big picture”. In contrast, field-dependent learners focus on the whole picture and do not care so much about the details. In fact, they are more interested in conveying an idea than worrying about whether it is grammatically correct. It has been hypothesized that a field-dependent person will be successful at learning the communicative aspect of a second language but is disadvantaged in situations which call for accuracy. Such a student will excel at communicative activities and will like role plays, but may be disheartened by grammatical instruction where the focus is on form and accuracy or

precision. It seems classical classroom language instruction lends itself to field-independent styles and language learning outside the classroom lends itself to the field-dependent style.

Student variations can be explained by the constructs field-dependent and field-independent. The literature has shown that “persons tend to be dominant in one mode of field-independence-dependence or the other, that field-dependence-independence is a relatively stable trait and that field-independence increases as a child matures” (Brown 1994: 106). However, we cannot look at learners as clearly and exclusively fitting into only one of the learning styles. Instead, each of these learning styles exists on a wide continuum and each learner has his or her own unique place on this continuum.

Depending on the context, individuals may vary in their field-dependence or independence. That is, a person has an inclination for one construct but it will vary according to the context. Brown (1994) also points out that there are also cultural implications to the construct and in authoritarian societies with strict child rearing practices there will be more field-dependent types while in democratic societies with freer rearing norms there will be more field-independent persons.

Finally, the field dependence-independence learning styles classification is attractive to language teachers because it can better explain why learners in the same language class respond to language learning differently. For example, it is possible to understand why some learners are better at communicative fluency while others at accuracy, or why learners prefer grammatical explanations to authentic input. In short, teachers have discerned differences among students according to their preferences for

working with material in or out of context, and inclination for form and accuracy or communication and fluency.

### Left-Brain and Right-Brain Learning Styles

Neurolinguistic research has revealed insights into the functioning of the brain and its role in second language acquisition. The theory of the structure and functions of the brain suggests that the two different sides control different modes of thinking. Violan-Sanchez (1998) states that although brain research has been slow in penetrating classrooms, it can provide powerful insights to enhance learning. If learners prefer one mode of functioning over another then this will have an impact on how they approach learning. It is believed that with maturation, certain functions are assigned to either the left or right hemisphere of the brain. The left hemisphere is connected with intellectual, analytic and logical functions while the right hemisphere is associated with social and emotional requirements. Furthermore, linear and mathematical processing of information is associated with the left hemisphere, whereas holistic and subjective processing of information is conducted by the right hemisphere as are visual, tactile and auditory stimuli. It may seem that the hemispheres of the brain operate as separate entities; however, it must be remembered that they function as a whole, and both hemispheres are involved in problem solving. However, the characteristics attributed to each side of the brain serve as a guide for ways of learning things and reinforcing learning.

Kinsella and Sherak (1998) claim left brain learning style strengths to be abstract and linear processing with a strong focus on details. Such learners are reflective, cautious and dislike intensive input which may overwhelm them. The “opposite” to such learners

are right-brain learners who are emotional, holistic, intuitive and subjective. Such learners seek patterns and view items as a part of a whole. Unlike learners with left-brain learning style dominance, learners with right-brain learning styles are impulsive learners who appreciate massive miscellaneous input. Stevick (1982) points out that right brain dominant learners are better at working holistically, with metaphors and artistic expression, while left-brain dominant learners are better at classifying, producing separate words and dealing with the specifics of a language. Rogers (1983, cited in Rinvolutri, 1999) claims that in education learning has traditionally been considered to be an orderly, left-brain activity because of the linear and logical functioning of the left-brain which accepts only what is sure and clear. On the other hand, he states that whole person learning means including the right brain also. The right brain understands the essence, is aesthetic rather than logical, and fosters creativity.

It would be useful for the language teacher to bear in mind that left-brain dominance characterizes learners who like planned and structured environments, are analytic readers and prefer dealing with facts. These students like routines which are fixed and prefer formal study. These learners are also comfortable with multiple choice tests and respond well to verbal instruction. At the other end of the continuum are right-brain learners who are more comfortable in fluid and spontaneous contexts and are synthesizing readers who prefer dealing with elusive information and manipulating objects. Such learners prefer open-ended questions and assignments and intuitive problem-solving. Formal instruction favors left brain learners; therefore teachers should make allowances for right brain learners by trying to include more role play, intuitive learning, creativity and flexibility in the classroom. The differences in learning

preferences indicate that different language learning approaches will favor different learning style dominance. For example, Hooper Hansen (1999) suggests that Desuggestopedia, as a language learning method is probably favored by right-brain learners.

It can be seen that there is a correlation between field-independence and left brain learning styles as well as field-dependence and right brain learning styles (Brown, 1998). Both are based on dichotomies with parallel types of cognition. However, Scovel (2001) points out the dangers of defining learning styles as polarized pairs. He states that there is a problem in defining a learning style as the absence of its opposite analogue. In addition, this kind of pairing of opposites doesn't allow for individual or cultural variation as well as variation depending on task requirements. Furthermore, certain styles are dominant in certain cultures. However, "...these style differences do not seem to correlate consistently with language learning performance" (Scovel 2001: 104). Therefore, it seems that learning styles do not correlate with learners' success at tests. Finally, as with all learning, people learn languages in different ways and success at language learning cannot be attributed to the dominance of one hemisphere of the brain. However, hemispheric dominance can help account for and enlighten teachers on learner diversity. To foster whole brain experience teachers need to use instruction techniques that connect both sides of the brain.

### Ambiguity Tolerance

It is clear that, cultural differences in teaching and learning can be attributed to ambiguity tolerance within a context. Hofstede (1986) proposes that there are differences

in teacher-student and student-student interaction related to uncertainty avoidance. Therefore, learners differ in their level of comfort with material and teaching that is not clearly structured or explicit. This has an impact on the students' preferred learning styles and teacher's preferred teaching styles. As with other aspects of the learner, a mismatch between the expectations of the teacher and students due to the difference in tolerance of ambiguity the impact may be detrimental to language learning. Mismatches between the teacher, whose culture differs from that of the students, do occur. These teaching styles contradict the students' convictions of the role of the teacher and his or her responsibility in the learning process. Students who are used to highly structured and explicit teaching believe that a teacher who doesn't explicitly provide all the information does not foster learning. Furthermore, the students may feel that the teacher is not doing his or her job. Therefore, raising the teacher's and student's awareness is necessary so as to avoid conflict of opinion and ineffectuality in the teaching learning process.

It is possible to look at ambiguity tolerance globally, on a cultural level and characterize learners according to their openness to contradictory and unstructured material. However, individuals within a given culture are also more or less tolerant of ambiguity. Therefore, it is clear that within a culture each learner varies in the extent to which he or she is willing to accept unstructured and inexplicit material. It is difficult to predict how tolerant to ambiguity a context will be because of the cultural implications and individual factors that come to play.

Success at language learning has been linked to ambiguity tolerance. Brown (1994) points out that a second language learner comes in contact with a lot of contradictory information while learning a second language. Not only is the culture

different but also the inconsistent rules, grammatical categories, idiomatic expressions, vocabulary and pronunciation. When encountering these differences in second languages, the learner's knowledge system and beliefs will be challenged. Therefore, it is necessary for the language learner to accept these ambiguities, at least until he or she becomes more familiar with them. Furthermore, Ehrman (1999) claims that learning a language for communicative purposes is a demanding feat which entails considerable uncertainty. Consequently, due to the complexity of language learning and usage, tolerance of ambiguity is an important factor which contributes to success in language learning. Likewise, intolerance of ambiguity and discomfort with all that is incompatible with the learner's system and language, will have an impact on the affect and motivation of the learners, thus making them anxious and unwilling to learn. Rebecca Oxford (1999) suggests that awareness of the learner's needs and cultural background knowledge can be used to encourage moderate risk-taking and tolerance of ambiguity in a non-threatening environment, thus reducing the affective filter and fostering language usage and learning.

Although ambiguity tolerance is perceived as a unified term, Ehrman distinguishes three levels of function of ambiguity tolerance: "*Intake; Tolerance of ambiguity proper; and Accommodation*" (1999: 75). The first level allows information in. At the second level, intake has been accomplished and the learner has dealt with the contradictions or incomplete information. At the third level, the learner, based on the degree of abstraction, develops hierarchies of information and integrates the new information to the existing. This third level is borrowed from Piaget (1967) who described learning as a tension filled process where incoming information is changed so it can fit with the existing knowledge. This process of *assimilation* is closely linked to the

process of *accommodation* whereby the existing knowledge is modified on account of the new information. Therefore, tolerance of new, incomplete and conflicting information has a direct bearing on the learning process because it modifies knowledge which in turn has an impact on the way new information is understood.

In contrast to ambiguity intolerance, it is also believed that excessive ambiguity tolerance may have a negative effect on learning because such learners may be irresolute and accept all ideas and material without critical reflection. Consequently, new material may be incorporated automatically without understanding. Hence, Brown (1994) claims that linguistic rules may be learned mechanically as meaningless chunks and not incorporated into a whole system.

Although there are few research findings about ambiguity tolerance and success at language learning, there can be no doubt that either complete tolerance or intolerance of ambiguity cannot foster language learning. Finally, excessive ambiguity tolerance may lead to irresolution, and lack of ambiguity tolerance to a rigid mode of thinking which will hinder creativity and the learning process.

### Reflective and Impulsive Learning Styles

Cognitive functioning distinguishes between people who arrive at decisions quickly and impulsively or slowly after considerable reflection. Thus, learners may process information actively and react in classrooms impulsively or may process information introspectively and react only after careful deliberation. Learners who come to a decision quickly or provide a response spontaneously and intuitively may seem to be

“better learners”. On the other hand, learners who arrive at decisions after careful deliberation may be wrongly labeled as insecure and slow.

Few studies have been conducted on the impacts of reflective and impulsive learning styles on second language acquisition. As these learning styles function differently in the classroom, the approaches to learning will vary. It is likely that the impulsive learner will take more risks and guess at answers more readily. Consequently, such learners will probably make more errors in the process and it is important for the teacher to handle the errors gently and not to discourage the learner’s impulsive tendency to guess, which is a useful strategy for learning languages. Reflective learners, on the other hand, are slower in responding or completing tasks. They will need more time to think and consider the options. They will answer a question only after careful deliberation and certainty about the correct answer. Although these learners may be correct in the answer they supply, their somewhat slower pace may be interpreted by the teacher as hesitation resulting from lack of knowledge. The teacher needs to give reflective students enough time, more time to work on a response and not push them to provide immediate answers. Pushing reflective students to work at a pace and manner that does not suit them may cause them to feel insecure and raise the affective filter.

The rate of progress of reflective and impulsive students in second language acquisition will also vary. Brown (1994) claims that learners with impulsive learning styles pass through various semigrammatical stages of interlanguage while reflective learners remain longer at a particular stage and take larger leaps from one stage to another. Therefore, since students progress differently through the stages of interlanguage, teachers must be cautious when examining and reviewing the student’s

progress in the second language because learner development may be misinterpreted. Finally, these two learning styles raise awareness of the differences in learners as they make their way through the maze of language learning

### Analytic and Relational Styles

The distinction between analytic and relational learning styles is closely related to the distinction between left brain and right brain learning styles, respectively. “Analytic and relational classroom learners differ strikingly in their perceptual ability and information processing strengths, as well as in their task orientation and social-relation values and skills” (Kinsella and Sherak 1998: 91).

Analytic learners favor left-brain learning styles and objective and linear presentation of material. In class they like routines and predictable activities. Analytic learners can easily focus on detail and are comfortable with working independently on tasks. Due to their individual approach, these learners are prone to competitiveness and in classrooms, they are less interested in others. The preferred subject matter and activities are abstract and factual. In language learning these learners can deal more easily with grammatical structures and enjoy activities which involve dissecting sentences and extensive linguistic analysis.

In contrast to analytic learners, relational learners have a predisposition for affective and experiential learning. They prefer right-brain learning styles and the learning has to be relevant, with some kind of personal meaning in the subject matter. These students will take risks and use their intuition in problem solving. Since they are sensitive to the feelings of others, relational learners like working with and are motivated

by their peers. In instruction they like variety and diversity and are appreciative of the teacher's support or praise. When learning a language they will find little value in the structural analysis of language and will prefer holistic strategies like word guessing and reading for the main idea. Felder and Henriquez (1995) claim that global learners will respond well to unstructured approaches to language learning like Community Language Learning.

Teachers should bear in mind that although analytic and relational learners differ in the way they process material, they have the same intellectual capacities. Furthermore, in reality there are no clear-cut relational and analytic learners. The learners cannot be divided as neatly fitting into the two categories. Sherak and Kinsella (1998) claim that classes do not consist of only two types of learners. Students usually use both analytic and relational faculties and have characteristics in different relations that belong to both styles.

Instead of categorizing learners or trying to develop taxonomies of students, it is advantageous to analyze instruction and classroom activities in terms of these learning styles. Therefore it would be useful to bear in mind that while some students are comfortable with highly structured tasks which require analytic abilities, they may perceive little value in group activities. This results from their need for more structure. Furthermore, being achievement oriented, these learners find little value in collaborative endeavors. Others on the other hand, enjoy sharing perspectives and peer learning and will repudiate tasks that require precision and analysis. They learn better through concrete experience and interaction with others and can be discouraged by highly competitive analytic learners. Teachers who are aware of these differences can adapt

instruction, tasks and activities to cater to different needs and promote classroom collaboration. By providing flexible opportunities in the classroom the performance of miscellaneous learners will be increased.

However, not all educational cultures value equally, or place the same emphasis on competitive individual learning and affective and experiential learning. Therefore, teachers and learners should be aware of these differences and that reservations towards certain forms of instruction might stem from the clash with the established form of instruction and their worldviews. In brief, raising awareness to teacher and student diversity and different forms of instruction may prompt both the teachers and students to appreciate variety and understand and acknowledge different students' preferences.

### Perceptual Learning Styles

Perceptual learning styles distinguish through which modality sensory information is best perceived. These learning styles fall into six categories: visual, auditory, kinesthetic, tactile, group and individual learning. In the language learning classroom the styles most exploited are visual and auditory, and kinesthetic and tactile seem to be marginal. However, especially with younger learners, these styles can play a significant role in the learning process. Furthermore, preferences for group and individual learning will depend on the culture as well as the learner's personality traits. Felder and Henriquez (1995) warn that group work should be approached with caution because often students initially respond negatively to cooperative learning. Therefore, students should be introduced to cooperative skills to realize the potential of group work. The teacher's task is to raise awareness of individual differences and allow for these differences in the

teaching process by adapting the teaching methods to the individual learners or by helping students develop their learning style abilities so they may learn more effectively in different contexts.

In the Perceptual Learning Style survey, Joy Reid (1987) asked 1388 students to identify their preferred learning styles. The results indicated that learning style preferences of non-native speakers differed significantly from those of the native speakers. Reid (1998) notes that students from different linguistic and cultural backgrounds differed in their choices of preferred learning styles. In addition, students from specific major fields also demonstrated preference for certain learning styles. Therefore, students who learn ESP will have different learning preferences resulting from their profession or major. This is significant for teaching ESP because so far the needs of these students have been viewed in terms of different topics, vocabulary and grammatical structures; however, their cognitive differences have been neglected.

Reid's correlation between culture and perceptual learning styles indicated that ESL students from different cultural backgrounds, whose stay in the United States was prolonged, adapted their perceptual learning styles to the culture in which they were studying. This finding supports the view that students can extend their learning styles and can alter them to agree with the perceptual learning styles of the target educational culture. Finally, teachers need to be aware that there are individual as well as cultural differences among students' preferred learning styles. These styles should be acknowledged and students should be encouraged to extend them, especially if they are moving from one culture to another.

## Myers-Briggs Type Indicator

The Myer-Briggs Type Indicator is based on Jung's theory of psychological types. This indicator defines learner preferences for four dichotomies and each dichotomy comprises two opposite preferences. Therefore, a learner's type will consist of four characteristics of the eight preferences listed in the indicator. "Each type or combination of interests tends to be characterized by its own interests, values, and unique gifts" (MBTI, 1998). In brief, this indicator provides characteristics for sixteen different personality types.

The first dichotomy is based on whether the individual focuses on the outer world of people and things or inner world of ideas and impressions. This dichotomy distinguishes between introversion and extroversion. The distinction between sensing and intuition defines how people look at things. The first characterizes individuals who are oriented to the present and concrete information acquired through the senses while the latter defines people who focus on the future and can discern patterns and possibilities. The third dichotomy, thinking-feeling, explains how individuals arrive at decisions. The distinction here is between decisions based on logic and objective analysis as opposed to decisions based on subjective evaluations. The last dichotomy, judging – perceiving, contrasts how people deal with the outer world. People characterized by judging, usually prefer an organized approach to life and like having things organized, whereas people who fall into the perceiving category like a spontaneous approach to life with open options.

Again, the implications for teaching are that teachers should be aware of the differences among individual students. According to this division there are sixteen

different individual types which will be reflected in the learners approach to learning. Furthermore, the combination of characteristics in each learner will determine how they will function in class and relate to the teacher, subject matter and each other. Finally the teacher needs to acknowledge that there is no right or wrong way of functioning and nor are there good and bad types. There are only different types which may or may not be compatible with the teacher's but should be acknowledged.

### Kolb's Experiential Model

The theory of experiential learning defines the cognitive processes of learning based on Kolb's experiential model. It is based on personal learning experience as the foundation for learning and emphasis is placed on the significance of critical reflection in learning. By contrast, in education, teachers are concerned with presenting information and the student's need to reflect upon the information is often neglected, and experience as a critical part of learning is ignored. Therefore there is a need to integrate the learner's personal experience in the language classroom and to create opportunities for the learner to reflect on the learning experience.

Nunan and Lamb note that "each learner is an island, and each learner interprets a particular classroom in a slightly different way" (1996: 157). Therefore, each learner is unique and his or her personal experience will have an impact on the way reality is interpreted. Moreover, the learner's personal experience needs to be included in the classroom because personal experience provides "life, texture, and subjective personal meaning to abstract concepts..." (Kolb 1984: 21 cited in Nunan and Lamb 1996: 157). Therefore, it is important for the teacher to encourage learners rather than see them as

passive receivers of language teaching with a heavy investment in memorization. If this is to take place, teachers need to be educated in experiential learning and encouraged to view their classrooms as environments in which experiential learning can take place and where the learner makes his or her own sense of the language. Zeichner and Liston (1996) emphasize the need for the teacher to reflect on experience by framing a teaching experience and then reinterpreting and reframing it. Therefore, if the teacher is aware of the value of reflection and reflects on teaching and the classroom, he or she will undoubtedly also recognize and acknowledge the learner's need for reflection. Thus, reflection can benefit not only the teacher but also the learner by making learning a meaningful experience.

The experiential learning model is viewed as a four stage cycle. The first stage of the cycle is a concrete experience (CE) which is followed by the stage of reflective observation (RO). During this stage the learner reflects on the experience and tries to describe what happened. After that, in the following stage of abstract conceptualization (AC) the learner asks questions and tries to analyze the experience by comparing it with previous ones. In this stage logic and ideas are used to develop theories and enhance understanding of what happened. By hypothesizing, making generalizations, and drawing conclusions, the learner will try to decide on intelligent actions. As a result, the conceptualizing stage will be followed by an action phase of active experimentation (AE). Therefore, in the fourth stage, the hypothesis will be tried out which will lead to a new concrete experience (CE).

The four dimensions of Kolb's learning style describe the learning process. However, they also characterize different learning preferences. Therefore, the learner's

preference for one or more stages over others indicates a learner's preferred learning style. The first stage, concrete experience, represents a receptive experience based approach to learning that relies on feelings-based judgments. High CE learners are empathic and find theoretical approaches hindering and learn best from specific examples. On the other hand reflective observation characterizes an impartial and reflective approach to learning. These learners have a preference for learning situations like lectures where they can be impartial objective observers. These learners are rarely outgoing and tend to be inward-looking. Learners with a preference for abstract conceptualization are analytical and rely heavily on logical thinking and rational evaluation. They tend to learn best in situations where emphasis is placed on theory and systemic analysis. Unstructured learning that caters to learning from discovery hinders their development. In contrast, learners who enjoy doing and experimenting are prone to active experimentation. These learners are extroverts and enjoy engaging in group discussions and projects and dislike passive learning situations.

This learning style classification indicates the different learning preferences that can be found in the language classroom. For example, in a grammar lesson, learners will have different preferences for and approaches to the subject matter. Some learners will need more time to reflect on the subject matter than others. Some may prefer a firmly structured approach to the lesson with emphasis on rules. On the other hand, others may prefer to work with concrete examples playing with different forms of the language. The learning styles will also indicate a preference for certain forms of classroom dynamics and interaction.

Finally, Kolb's experiential learning model not only explains the learning process and emphasizes the significance of reflection for meaningful learning, but also attempts to classify learners as activists, reflectors, theorizers and pragmatists, depending on their preferred stage in the cycle.

### Awareness of Learning Styles

There is no doubt that in certain teaching contexts these differences are acknowledged. Nunan (1998) notes that in a transmission approach the teachers transmit the knowledge, the students absorb it and regurgitate it at examinations. Therefore, in traditional environments, where many teachers still believe that learning takes place when the subject matter is transmitted from the teacher to the learner and that the teacher's teaching style reaches all the students, there is a need for raising awareness. Moreover, it is not only the teachers who have to be aware of the differences but also the students who have been educated in such traditional contexts because introducing students to a different perspective on teaching will challenge their worldviews and the established practices. Challenging their beliefs may make them defensive or reticent and they may reject new forms of teaching with which they are unfamiliar. On the other hand, if they do accept the differences as valid they may become better learners because the realization that there are different styles will prompt them to try to understand themselves better as learners and possibly identify their learning style profile thus becoming better learners.

Finally, there is a need for teacher awareness of learners' learning styles. Exploring and reflecting on learner diversity and learning styles will encourage teachers

to examine their beliefs and assumptions as language teachers and use the information to guide their teaching practices. Learners on the other hand, will also benefit from this knowledge because through increased awareness they will not only achieve better results but will also become more responsible for their learning. Making learning more meaningful to the learners will encourage them to take action and reflect upon their optimal learning styles which will be beneficial not only in the classroom but also in life in general.

All these classifications of learning styles raise awareness of student differences and emphasize how essential it is for the language teacher to address different learning styles. Regardless of the classification, the diversity and complexity of the classroom are evident. The learning style which has not yet been covered is Gardner's theory of Multiple Intelligences. The classification of learning styles according to the Multiple Intelligences is the focus of this paper and it will be dealt with in depth in the following chapters.

CHAPTER 5  
**LEARNING STRATEGIES**

Introduction

Learning styles are characteristics that distinguish one learner from another; however, the sets of specific techniques that learners actually put to use deal with problems in language learning and use are labeled strategies. There is no doubt that whatever the teaching method, certain learners seem to be more successful at language learning than others. Brown (1994) notes that difference in success as language learners has led to the realization that individual variation in language learning is a significant factor. It seems that certain people are better language learners than others. This led to extensive research aiming at determining the factors which foster language learning and use. Chamot and O'Malley (1990) state that the literature on learning strategies in second language acquisition is the result of concern for identifying the strengths of successful language learners.

Learners have their own style repertoires and in accordance with these styles they develop tendencies and preferences for certain strategies. Therefore, it is important for the language teacher to be aware of learning strategies because awareness of the learners' tendencies can help to identify their weaknesses and aid them in developing successful

strategies. Oxford (2001) also states that teachers can help students extend their learning styles by trying strategies that are outside their style preferences. In short, EFL teachers' understanding of strategies is indispensable if they are to help students become better learners.

If styles are general characteristics that are present in the learners and which they bring to the language learning task, strategies are courses of actions that they take when facing foreign language learning. Pre-disposition for certain learning styles will inevitably activate certain strategies. Furthermore, the strategies learners use are also dependent on the language learning activities as well as the requirements of the EFL classroom. For example, learners with a highly developed interpersonal intelligence will have a natural tendency for social strategies. However, if learning activities which involve cooperative group learning or other suitable opportunities are not created in the classroom then this style and these strategies will not be needed in the classroom and nor will they be developed. In brief, learning strategies are closely related to learning styles and the context.

Research has shown that students learn a language more effectively if they employ a variety of learning strategies. Green & Oxford (1995) point out that language learning strategies enable learners to gain responsibility for their own progress. When learners use diverse strategies their learning becomes more self-directed and they become more autonomous which is important when the learners use the language outside the classroom without the assistance of the teacher. "When students take more responsibility, more learning occurs, and both teachers and learners feel more successful" (Oxford 1990: 11). In the traditional classroom, the learners are directed by the teacher who provides

most of the material and a strict framework of instruction. Often these learners are well aware what to do in order to get a good grade, which informs their learning. However, often the useful skills are neglected in the process. Moreover, the traditional classroom lacks real communication because all the communication is directed from the teacher to the learner. Such classrooms do not develop the learner's communicative competence and the learners have difficulty communicating in the real world without the guidance of the teacher. The less directive teacher will attempt to identify learners' strategies and encourage them not only to develop them but also to use them successfully because "learning is an active and dynamic process in which individuals make use of a variety of information and strategic modes of processing" (Chamot and O'Malley 1990: 217). These students will be more independent and will be able to learn without the strict guidance of the teacher and use the language in real life.

### Features of Language Learning Strategies

Strategies enhance foreign language learning and they can foster specific aspects of the learner's competence. Oxford (1990: 9) defines features of language learning strategies in terms of their effects as follows, thus giving teachers a deeper understanding of the term:

- 1. Contribute to the main goal, communicative competence.*
- 2. Allow learners to become more self directed.*
- 3. Expand the role of teachers.*
- 4. Are problem-oriented.*
- 5. Are specific actions taken by the learner.*

6. *Involve many aspects of the learner.*
7. *Support learning both directly and indirectly.*
8. *Are always observable.*
9. *Are often conscious.*
10. *Can be taught.*
11. *Are flexible.*
12. *Are influenced by a variety of factors.*

In her classification of these strategies Oxford (1990) distinguishes two different categories, strategies which are directly involved in the target language, and those that support language learning: direct and indirect strategies, respectively. However, these two groups do not function independently but support each other.

### Direct Strategies

Memory, compensation and cognitive strategies fall into the category of direct strategies because they help learners deal with the language. The role of memory is crucial in language learning and learners store and retrieve information with the help of memory strategies. This is achieved by a series of strategies which help the student store information and draw on this information when needed. Therefore, strategies like creating mental linkages through grouping and elaborating and using context will help categorize information and make it accessible. Furthermore, applying images and sounds to tasks are also memory strategies. These include strategies like mapping concepts which have semantic links, creating mental images of an expression, combining sounds with images or linking new aural input with familiar words or sounds. Memory strategies

also include revising strategies and practicing of material. However, it is important that the revision is meaningful and relevant. Action can also enhance memory. Therefore, physical response or a physical sensation and mechanical techniques can be used to remember material. Memory strategies help learners store and retrieve new information. There is no doubt that these operations are crucial in language learning. In fact, progress in foreign language learning is based on the ability to store new language and information, to incorporate this new knowledge with the existing knowledge and finally to use it for comprehension and production. In brief, memory strategies are indispensable if learners are to build up on previous knowledge, connect new knowledge to old and use the learned material. The ability to retrieve information will give learners a sense of progress, thus increasing their motivation to learn.

Cognitive strategies, the second set of direct strategies, also benefit foreign language learners because they facilitate the understanding of language and language production. The first of the cognitive strategies--practicing--contains five strategies: repeating, formally practicing with sounds and writing systems, recognizing and using formulas and patterns, recombining and practicing naturalistically. Repetition of the new material can be done in different ways and should involve understanding. Practicing with the sounds and systems of the target language involves both reception and production. Recognizing and using formulas and patterns will enhance both comprehension and production of the target language. Therefore, learners should also be encouraged to use certain set expressions, formulas and patterns in the target language which help build self-confidence and enhance fluency. Recombining as a learning strategy entails putting together known elements and stringing them together. Constructing new sentences in

writing or speaking will provide the learner with a sense of accomplishment.

Furthermore, learners should feel that they are learning a language they can use for actual communication and should practice the language naturalistically which will make language learning meaningful.

Another important cognitive strategy is receiving and sending messages which includes two strategies: getting the idea quickly and using the available resources which can facilitate understanding and production of messages.

The cognitive strategies of analyzing and reasoning include a set of five strategies which aid understanding and use of grammar and vocabulary in the target language. This implies the application of logical thinking to understanding the new material and involves deductive reasoning and using the general language rules to hypothesize about the meaning. Furthermore, it is also useful to analyze expressions in the target language and break them down to facilitate understanding. Analyzing contrastively and comparing with the mother tongue is also a useful strategy which is often used and facilitates understanding; however, this strategy has to be approached with caution because “false friends” can also mislead the students. Another analyzing and reasoning strategy which may be useful, but misleading is translation. Although it can enhance understanding at the beginner’s level, it can also lead to misunderstanding and slowing down of the learning process. The last of these strategies involves transferring or applying previous knowledge to facilitate the understanding of new linguistic knowledge of the target language. Like translation, this strategy has to be used cautiously because learners can overgeneralize concepts which can lead to inaccuracy.

The last of the cognitive strategies involves the learner creating structure for input

and output. This involves strategies like taking notes, summarizing and highlighting. Efficient use of these strategies helps learners not only to organize the target language but also to show tangible understanding of the language.

Language learners never acquire the whole language. Therefore, the last group of direct strategies, compensation strategies, which allow learners to use the language despite gaps in knowledge are indispensable for communication in the target language. Halleck & Moder (1995) note that compensation strategies may enable more proficient learners to make up for pronunciation or fluency difficulties; however, they will not be equally efficient for less proficient learners. Guessing intelligently and overcoming limitations in speaking and reading are two compensation strategies which are crucial to language learning and use. These strategies are particularly important for beginners and students at the intermediate language level. Guessing intelligently includes strategies like using linguistic and other clues coming from other sources to enhance the learner's receptive skills. Overcoming limitations in speaking and writing strategies allow learners to get sustained practice in the new language. This can be achieved through strategies like switching to the mother tongue, asking for help explicitly or implicitly and using a gesture to indicate the meaning. In addition strategies like partial or complete avoidance of communication can also be used and will benefit learners who may feel threatened and insecure in using the language. Furthermore, strategies like allowing the learner to select a topic will also help overcome limitations as will the learner's coining new words or using a circumlocution or synonym to convey the intended meaning.

In short, the direct strategies--memory, cognitive and compensation strategies--enhance language learning and performance in the target language. However, these

strategies if used effectively, cannot be used alone. Therefore, for effective language learning, direct strategies have to be supplemented and supported by indirect strategies.

### Indirect Strategies

The supportive strategies which underpin learning are indirect. Indirect strategies are also divided into three categories: metacognitive, affective and social strategies. Metacognitive strategies aid learners to coordinate the learning process through centering, planning, and evaluating strategies. Language learning involves working with new material, therefore centering strategies like paying attention, linking unfamiliar material to the familiar and delaying speech to focus on listening are important in helping the student cope with the novelty of the target language. Furthermore, arranging and planning for the learning by setting goals, organizing, seeking practice opportunities, recognizing the aim of and planning for language tasks will allow learners to take responsibility and manage their learning. Self-evaluation and self-monitoring are also significant metacognitive strategies because they help the learners gauge their progress beyond the academic grading system. However, although, metacognitive strategies are significant, research has shown that learners tend to use them irregularly.

Factors like emotion, motivation, anxiety and values, which have a major impact on language learning, act as affective strategies. Affective strategies aid the learner in lowering his or her anxiety, encouraging himself and taking his or her emotional temperature. There is no doubt that anxiety can be a debilitating factor in language learning and production. Therefore, strategies like laughter, music and relaxation techniques which can alleviate anxiety are invaluable in the classroom. Learners often do

not realize that they can use strategies like encouraging themselves and often look to the teacher for encouragement. Encouragement is often needed beyond the classroom, therefore learners need to build their self-esteem independently and to counter negative attitudes. Consequently, strategies which include making positive statements to boost confidence, taking risks in spite of errors and rewarding good performances will provide students with their own encouragement. In brief, affective factors exert a profound influence on the learner's attitude towards language learning and his or her language learning success or failure.

Language learning and interaction involves other people because language and communication are a form of social behavior. The strategies which regulate how students interact and work with others are social strategies. Therefore, the three social strategies: asking questions, cooperating with others and empathizing with others are important in the communication process. Asking questions implies asking for clarification, verification or correction which helps understanding and encourages the receiver to provide more information. Cooperating with others includes strategies like cooperating with peers and proficient users of the language. These strategies comprise team work and mutual support. Often learners do not typically have a preference for this type of learning. Therefore, training these strategies will raise learners' awareness of the benefits of cooperative development. The last of the social strategies, empathy, can be fostered through development of cultural understanding and becoming aware of the thoughts and feelings of other people. Empathy is necessary for successful communication and intercultural sensitivity.

In short, both direct and indirect strategies are crucial to language learning and

use. Language learning is a complex process and strategies can help overcome difficulties and make the learning process more interesting and meaningful. By using both direct and indirect strategies the learner will be involved in the learning process and will be able to make informed decisions to better his or her learning.

### The Learner the Teacher and Learning Strategies

The strategies employed by the learner will vary and are often linked with the learner's learning styles. There is no doubt that each learner is unique and has a preference for certain learning styles. Riding and Rayner (1998) claim that over time and with experience individuals will develop a range of strategies which contribute to their learning style. Likewise, the learner's style will influence his or her preference for certain learning strategies. Macaro (2001) suggests that some learners use more strategies and more effectively than others. Ur (1996) points out that the strategies employed by one student effectively may not benefit another student at all. Teachers cannot always teach a whole class and cater to every student's learning strategy. However, students can be encouraged to discover the strategies that work for them and to use them accordingly in the learning process.

Learners' preferences for learning, whether due to their learning style or to their belief about how languages are learned, will influence the kinds of strategies they choose in order to learn new material. Teachers can use this information to help learners expand their repertoire of learning strategies and thus develop greater flexibility in their ways of approaching learning. (Lightbown and Spada 1999: 59)

Research has clearly shown that more effective learners use different learning strategies.

Students who use strategic approaches to learning will comprehend spoken and written language more effectively, learn new information with greater facility, and be able to retain and use their second language better than students who do not use learning strategies. (Chamot and O'Malley 1994: 58)

Therefore, learners who use different strategies will be able to better understand the learning process and see the correlation between strategy use and effectiveness in language learning. This will foster the learners' reflection on their learning process and encourage them to become life-long learners.

In some contexts, learners are used to being spoon-fed and are highly exam oriented. Such attitudes will not foster learning because the learners will not assume responsibility for their learning. Furthermore, with such beliefs the students will not be able to learn without the direction of the teacher and the learning process will discontinue after formal schooling. Therefore, such students cannot just be taught new strategies. They will first have to be made aware of the benefits of a new perspective on learning and how taking responsibility for their learning will impact their learning after formal schooling. Strategy training is an ongoing process during which the learners will become more accustomed to the idea of their own responsibility and control in the learning process. With self-direction learners will gain more confidence and proficiency; however, the teacher has to help the learner become more comfortable with the concept: learner autonomy and independence. Furthermore, he or she has to help the student to identify his or her preferences, strengths and weaknesses and encourage strategy use accordingly.

With greater student responsibility there will be more learning and both the teacher and students will feel a sense of accomplishment. Therefore, since strategies can be taught, the teacher should raise awareness and encourage students to use different strategies.

Vann & Abraham (1990) point out that unsuccessful language learners do not necessarily lack a repertoire of strategies but may not apply the strategies appropriately to the task at hand. Therefore, it is not only necessary to introduce learners to different strategies but also to aid them in utilizing them appropriately.

There are many factors which will influence the choice of strategy. In order to use strategies, the student has to have some knowledge of strategies in general and has to be self-aware of how he or she learns best. LoCastro (1994) stresses the need for awareness of the connection between language learning strategies and different learning environments. Therefore, institution, teacher and task requirements in the classroom will also have a direct impact on the strategies used and developed. Consequently, in a class where emphasis is placed on grammar the strategies used will be different than in a class where emphasis is placed on communicative competence. Research has shown that nationality and culture will also have an impact on strategy use. Furthermore, factors like age, sex, motivation, and personality will all influence the choice of strategies. In addition, the learner's personality and preferred learning style will have an effect on the strategies language learners use. Learners will use the strategies which they feel comfortable using and which correspond with their learning; therefore, there is a direct connection between the learner's uniqueness and learning strategies.

## Multiple Intelligences and Learning Strategies

Gardner's Multiple Intelligence Theory looks at the learners' strengths and weaknesses in light of the eight intelligences. If we are to look at the eight intelligences as learning styles, then, the strategies used will show some relationship to the intelligences. Riding and Rayner (1998) claim that over time and with experience individuals will develop a range of strategies which contribute to their learning style. Likewise, learning style preferences will influence the strategies used.

Memory strategies which include applying images and sounds will probably be used efficiently by learners whose Musical and Spatial intelligences are highly developed, while learners with kinesthetic intelligence will employ action in their memory strategies. Cognitive strategies which include analyzing and reasoning which is especially useful in grammar instruction will be exploited by learners whose Logical-Mathematical intelligence is developed. Compensation strategies which help overcome limitations in speaking and writing are closely linked to the intrapersonal and interpersonal intelligences, whereas Metacognitive strategies which are responsible for the arranging and planning of learning, centering it and evaluating it will include intelligences like intrapersonal, kinesthetic, logical mathematical and linguistic. Affective strategies like lowering the level of anxiety and encouraging yourself are dependent on the intrapersonal intelligence. Therefore, the anxiety level of a learner who uses the language is linked with the interpersonal intelligence as well as the linguistic i.e. how comfortable the learner is communicating with others in the foreign language. In the same way, the social strategies, which involve cooperating with others and asking

questions, can also be analyzed. Therefore, the strategies learners employ for a given task will, among others, also depend on their personality traits and intelligences. There is no doubt that from the repertoire of strategies they will employ the ones they feel comfortable using and which correspond to their beliefs. Learners can use different strategies; however, the ones which are meaningful to them will be used readily and yield the best results. Teachers and learners should be aware of the strategies used so that they can both work on expanding the repertoire. It is necessary to be able to control strategy use and through repeated application to learn the strategies automatically which will allow the learner to shift focus from the strategy onto the subject matter.

Multiple intelligence learning styles and strategies interplay in the learning process and conscious awareness of both is fundamental. “There is no guarantee that without an awareness of style or the self-conscious elaboration of a learning style profile, individuals will fully realize their potential with a consistently effective or efficient approach to learning” (Riding and Rayner 1998: 95).

Awareness of the learner’s learning style will help him or her build a better repertoire of strategies. Consequently, the teachers’ and learners’ awareness of their strengths can help them develop strategies for dealing with areas that are less strong. Therefore, understanding the interdependence of styles and strategies will provide invaluable insights and implications for teaching and learning.

If there is harmony between (a) the student (in terms of style and strategy preference) and (b) the instructional methodology and materials, then the student is likely to perform well, feel confident and experience low anxiety. If clashes occur between (a) and (b), the student often performs poorly, lacks confidence,

and experiences significant anxiety. Sometimes such clashes lead to serious breakdowns in teacher-student interaction. (Oxford 2001: 359)

In conclusion, it is crucial for language teachers to become aware of their own, as well as their learners' styles and strategies if they are to develop a profound understanding of the complexities of teaching and learning and provide better and more efficient language learning opportunities.

## CHAPTER 6

# THE THEORY OF MULTIPLE INTELLIGENCES

### An Overview of Intelligence

It is clear that Western society places significant emphasis and value on intelligence and the intelligent person. Therefore, most people have a mental concept of what they believe intelligence to be and what an intelligent person looks like. However, if people were asked to define intelligence and explain what it characterizes, the responses would probably not only vary in different cultures but also among people in general. Nevertheless, in western culture intelligence is often correlated with success at schools and Lightbown and Spada (1999) state that intelligence traditionally refers to performance on some kind of tests.

Throughout history efforts have been made to define what exactly intelligence is and how it could be measured. Consequently, efforts have been made to measure intelligence since it is widely believed that it would be very useful to determine and predict one's intelligence. The first intelligence test was designed in the early 1900's by the French psychologist Alfred Binet. His tests have had long- term impacts on the concept of intelligence because since then intelligence tests have measured the individual's linguistic, mathematical and logical capacities. Therefore, it was widely

believed that an intelligent person was one who possessed these three capacities. These capacities were accurately measured by psychometric tests and the psychometric majority believed in a general intelligence perspective. In 1912, Willhelm Stern, added an additional tangible factor to intelligence tests, the intelligence quotient (IQ). He measured the ratio of one's mental age to one's chronological age and came up with the person's IQ. Therefore, the IQ was believed to be a tangible and concrete representation of an individual's intelligence. The IQ is believed to be distributed among people in a bell shaped curve with the majority having an average IQ and a smaller number of people with either a lower or higher IQ. This classical view of intelligence enabled classification and categorization of children. Furthermore, it suddenly became possible to determine how smart a person was and what his chances of succeeding at school were. Although these tests measured only linguistic and logical capacities, "...in this society we are nearly 'brain-washed' to restrict the notion of intelligence to the capacities used in solving logical and linguistic problems." (Gardner 1993:14). Hence, the ability to answer items on these tests is considered proof of intelligence and logic, math and language skills are of outstanding significance and evidence of intelligence. However, Lightbown and Spada (1999) note that intelligence is complex and that individuals have different abilities and strengths which cannot be exclusively measured by IQ tests.

These tests do measure skills that are valuable in completing tasks at school and can fairly accurately predict a person's academic potential and success. As a result, this seems to provide additional proof of the test reliability. However, the mental capacities evaluated by these tests do not account for all areas of human achievement. Lightbown and Spada (1999) claim that many students who have demonstrated weak academic

performances have had considerable success in second language learning. Furthermore, not all respected adult roles in society are based exclusively on linguistic and logical-mathematical capacities. On the contrary, every significant role requires a combination of various intelligences. All psychometric tests are based on problem solving and reasoning in novel situations, i.e. the ability to solve tasks which are not familiar. Although psychometric tests predict a person's scholastic potential, they cannot predict with precision, the individual's success outside school, in real life. Nevertheless, intelligence testing has had a profound influence on academic testing and evaluation and "many widely used scholastic measures are thinly disguised intelligence tests--almost clones thereof--that correlate highly with scores on standard psychometric instruments" (Gardner 1999: 18).

Researchers have become aware of the shortcomings of psychometric tests and have investigated a different view of the mind. Therefore, the mental processes and not only the end products were investigated. Consequently, instead of just looking at the answers of a test, the processes which occurred when somebody completed a test were examined. An analysis of the mental steps involved in problem solving determined that success at IQ tests was distinct from the individual's ability to adapt to different contexts and deal with new information. In brief, logical, mathematical and linguistic intelligence which is measured by psychometric tests has had an impact on education and has been able to predict academic aptitude and success; however, these results have no bearing on the individual's success outside of school. Another issue which has sparked off considerable debate is whether intelligence is a singular construct or whether as Gardner (1999) claims it consists of relatively independent intellectual faculties. Gardner believes

that intelligence is not a construct to be defined, nor a capacity to be measured. Consequently he disagrees with a specific group of scholars who view intelligence from the narrow psychometric perspective. As a result, Gardner's intelligences theory differs and challenges the established theories and beliefs.

### Gardner's View of Intelligence

Gardner doesn't view intelligence as a singular construct nor as something static. Instead he believes intelligence is a process which can be developed throughout life. As a result, he has developed the Theory of Multiple Intelligences, which offers a radically different explanation of intelligence. Gardner's view of intelligence differs because, unlike most theories, he does not focus only on problem solving. He doesn't believe that intelligence can be measured by a set of short answers to questions nor that "... intelligence is a single faculty and that one is either 'smart' or 'stupid' across the board" (Gardner 1999: 34). Therefore, he defines intelligence as "a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture" (Gardner 1999: 33-34). This definition is unique because intelligence is defined as a potential, which may or may not be set into motion depending on the culture, context, individual and many other factors. Thus, the term intelligence is extended to encompass many different capacities and not a single faculty or construct. In addition, intelligence can be developed and is not something unprogressive and permanent which someone is either endowed with or lacks.

## Criteria for Defining Intelligence

The Theory of Multiple Intelligences has so far singled out eight intelligences and is considering a ninth intelligence. These multiple intelligences have not been chosen at random and Gardner (1999) determined seven criteria for defining an intelligence.

Accordingly, prior to acknowledging an intelligence it was matched against the specified criteria. The criteria for determining an intelligence are as follows (Gardner 1999: 36-38):

1. *Isolation by brain damage.*

While brain injury causes impairment of certain faculties, other faculties are spared which points to the probability that one intelligence could be dissociated from others.

2. *An evolutionary history.*

Looking at the evolution of our species, it is possible to identify the roots of each intelligence.

3. *Identifiable core operations.*

Each intelligence has a distinct mental operation or operations which are central to the intelligence.

4. *Encoding in a symbol system.*

Symbols are intrinsic to all human cultures and there is a universal human tendency to use symbols. "Symbol systems may have been developed precisely because of their preexisting, ready fit with the relevant intelligence or intelligences" (Gardner 1999: 38).

*5. A distinct developmental history.*

Intelligences have their own developmental process and each intelligence develops in a similar way in all people. Therefore, the pattern of development for linguistic and musical intelligence will vary but their respective development will be very similar in all people.

*6. The existence of idiot savants, prodigies and outstanding people.*

While there are people who are exceptionally gifted in one field and at least average in others there are also people who are exceptional in one field but stunted in all other areas. This indicates independence of each competence.

*7. Experimental verification.*

The ability to perform two activities simultaneously with no interference, like walking and singing, indicates discrete intelligences. However, when two activities cannot be performed simultaneously without difficulty, like reading and speaking, it can be inferred that they are manifestations of the same intelligence.

*8. Support from psychometric findings.*

Although this criterion may seem contradictory, nevertheless these tests do evaluate spatial, logical-mathematical and linguistic intelligences and have indicated no correlation between these faculties.

## The Eight Intelligences

Gardner has developed a tentative model of eight intelligences. However, he believes that with time, other intelligences may meet the criteria and the list may be extended. Human beings possess eight or more intelligences and “thanks to evolution,

each of us is equipped with these intellectual potentials, which can mobilize and connect according to our own inclinations and culture's preferences" (Gardner 1999: 44).

Therefore, each person possesses all eight intelligences. However, to what extent each intelligence is developed will depend on personal, environmental and other factors.

Consequently, the combination of intelligences in each and every one of us is unique and mutable and we are all conditioned by our genetic heritage, culture, environment and period in which we live.

The intelligences are value-neutral however, i.e. if a person has the musical intelligence highly developed, that does not make him better or worse than someone who is highly developed in the logical-mathematical intelligence. However, Christison (1999) claims that linguistic and mathematical skills are considered by many teachers to be central to intelligence and musical and interpersonal intelligence may be seen as peripheral. This is probably the result of the value formal education places on mathematical and linguistic intelligences. Furthermore, there can be no doubt that it is better to exhibit strength in an intelligence than not to have it developed at all. In brief, although intelligences themselves have no value, society values some more than others and the more intelligences a person has developed the better.

The original seven intelligences established by Gardner are (1999: 41): linguistic, logical-mathematical, spatial, interpersonal, intrapersonal, kinesthetic and musical.

Recently, three new candidate intelligences have been considered by Gardner (1999: 47): the naturalist, spiritual and existential intelligences. Finally, Gardner's (1999) present classification which was matched against the eight criteria consists of eight intelligences.

“The Multiple Intelligences Theory is a cognitive model that seeks to describe how individuals use their intelligences to solve problems and fashion products” (Armstrong 2000: 12). Therefore, each intelligence is responsible for a segment of human functioning in the environment. Linguistic intelligence is the capacity to work with words orally or in writing. This intelligence enables people to manipulate the syntax, phonology, semantics and pragmatics of a language. Consequently, it is a crucial intelligence for language learners. Logical-mathematical intelligence includes sensitivity to logical relationships and numbers. This intelligence has been highly valued in schools and in many minds is a synonym for intelligence in general. Spatial intelligence includes the ability to perceive the visual-spatial world and capacity to visualize and orient oneself, while the ability to use the body to express oneself, use the hands to produce or perform, and physical skills are specific to bodily-kinesthetic intelligence. Musical intelligence incorporates sensitivity to music and the ability to create and express musical forms. Sensitivity to other people’s, moods feelings and interpersonal cues are fundamental to interpersonal intelligence whereas, awareness of oneself and self-knowledge are intrinsic to intrapersonal intelligence. The latest intelligence to be added is the naturalistic which includes the ability to distinguish and classify species and forms in the individual’s environment.

It is clear that all the intelligences are found in every individual; however, the way each is developed in an individual and the ways they operate together are unique. Therefore, there are no two people who function cognitively in the same way. Everyone, given the proper support and guidance, can develop all the intelligences to a reasonably high level. None of the intelligences work independently but they interplay in complex

ways. Furthermore, there are numerous diverse ways in which a person can demonstrate any given intelligence which demonstrates how the individual's mind functions in his or her world. Therefore, an intelligence will manifest itself in different ways in each person and the same intelligence can be demonstrated through different professions and abilities. Because the interplay of intelligences will vary from individual to individual, therefore, a person with highly developed bodily-kinesthetic intelligence may become an outstanding athlete, dancer or a distinguished surgeon. Consequently, all the intelligences come into play with the dominant intelligences to shape the individual and determine what he will be, do and how he will function in life. Finally, the Multiple Intelligences Theory acknowledges differences and individuality and values nurture in the development of intelligences.

## CHAPTER 7

# **MULTIPLE INTELLIGENCES IN THE EFL CLASSROOM**

### MI Theory and the Teacher

MI theory has raised awareness of the need to reexamine not only the teacher's but also the learner's styles and strategies. In fact, both learners and teachers should be aware whether the activities and experiences provided in the classroom foster learning. Richards (1990) stresses that the teacher's role today is more than an implementer of materials and presenter. Therefore, teachers need to adopt a research orientation to their classroom and teaching. However, prior to reflecting on their teaching strategies and learners' differences, each teacher should reexamine the nature of his or her own intelligence. A profound understanding of the self on the part of the teacher will contribute to a clearer understanding of the learners and classroom. There is no doubt that strengths and weaknesses in intelligences will determine the teacher's role, choices and beliefs. Therefore, an experiential understanding of MI theory is vital if the teachers are to fathom it and acknowledge it. Only then, will the teacher fully understand the theory, understand himself or herself in light of this theory and be able to use it as a framework for the analysis of teaching. Thus, the theory will bring real benefit for the teacher, and consequently for the learner.

Before applying any model of learning in a classroom environment, we should first apply it to ourselves as educators and adult learners, for unless we have an experiential understanding of the theory and have personalized its content, we are unlikely to be committed to using it with students. (Armstrong 2000: 2)

Studying MI theory incites personal reflection on the intelligences and the lack thereof. Although the questionnaires and checklists available cannot accurately determine a person's intelligence, they can be used as indicators of strengths and weaknesses. Besides, they can connect an individual's experience to his or her intelligences and incite further analysis and reflection on the issue. Oprandy (1999) claims that there is a connection between who we are as teachers and who we are as people. Therefore, realizations about personal multiple intelligences, and preferred teaching styles can shed light on some of the motives which govern teaching decisions. This can lead to a deeper understanding of teaching aspects that have been neglected and the realization that the intelligence profile has an impact on teaching approaches and decisions made in the classroom. Therefore, fluency or lack of fluency in an intelligence determines the preferred teaching style. Furthermore, fluency in an intelligence coupled with cultural implications will probably prompt the use of certain teaching strategies in class. As a result, the teacher's intelligence profile probably identifies and caters to learners' with similar profiles. In brief, it is vital for teachers to explore their own intelligences and gain experiential understanding of MI theory before analyzing how it affects their work and attempting to implement it in the classroom.

Given the fact that foreign language teachers have chosen to study and work with

languages, a logical assumption would be that their linguistic intelligence is highly developed. However, learning and teaching is more complex than linguistic competence and the transmission of a language. Furthermore, the way the linguistic strength of each language teacher is developed and implemented in the classroom will be influenced not only by the interplay of the other intelligences but also other internal and external factors. Therefore, in spite of commonalities among teachers, each teacher's personality and experience is unique.

After undergoing close self-examination and reflection, the teacher should attempt to understand the learners' intelligences. As with all styles, there is always the fear that learners may be incorrectly categorized. Consequently, their potential to develop the undeveloped intelligences may be neglected. Not only through reliable indicators, but also by observing learners and talking to them is it possible to determine where the learners' strengths lie. Armstrong (2000) also proposes talking with parents and other teachers, collecting data on learners and looking at school records as sources of information for better understanding a learner's intelligence.

Prior to analyzing the learners through the MI framework, it is beneficial to instruct them about MI theory. By learning about the theory learners could identify personal strengths and weaknesses. Moreover, they could be encouraged to reflect on their learning process, which would help them not only to better understand themselves but also to understand the teaching process. Consequently, this would incite them to take responsibility for their learning and encourage them to develop strategies that would foster learning. Mutual awareness on the part of both the learners and teachers will enhance the teaching learning process. "Learners need to learn how to learn, and teachers

need to learn how to facilitate the process” (Oxford 1990: 201). As a result, the language learning process will become more meaningful and there will be a fruitful collaboration between the teacher and learner. Furthermore the learner will be better prepared to learn in situations outside the structured classroom and to adapt to incompatible learning situations.

Teaching to the multiple intelligences entails abandoning a traditional approach to teaching and acknowledging learner uniqueness. “What all learners do need, universally, is an environment in which they can settle down to productive work, each in their various subtle ways” (Allwright and Bailey 1991: 150). Therefore, the learning environments must include methods beyond the linguistic and logical-mathematical intelligences which are commonly exploited in the classroom because all learners have more than just two intelligences. Furthermore, teachers have to create the proper environment by modifying teaching styles and adapt strategies to reach all learners. Without a conscious effort and perseverance, it is easy for the teacher to relapse into the usual teaching pattern with which he or she feels most comfortable. Larsen-Freeman (2000) proposes that teachers can categorize the activities used in the classroom and determine which intelligence they cater to. Furthermore, she suggests that teachers can also plan lessons which address all the intelligences. Although, it might be difficult to address all the intelligences during every class, giving them due consideration in the lesson plans will bring a welcome change from the ingrained traditional form of lecturing and will guarantee at least occasional implementation in the classroom.

## MI Theory and Culture

In some teaching contexts the validity of introducing the MI framework to language teaching methodology may pose a great challenge to the teacher and learners. This would especially be true for language teaching and learning at the academic level. Although it is acceptable to teach to different learner profiles using different activities with younger age groups, some may question its validity at the advanced or proficiency level, especially with adult learners at the university. These learners have been trained in the traditional method of presentation and the ones who have succeeded at enrolling and pursuing their studies at the university have thrived under this method of teaching. Furthermore, it is generally believed that studying at this level entails hard work, and introducing activities that involve musical intelligence and bodily-kinesthetic intelligence would be frowned upon by many and considered an unnecessary deviation from serious studies. Even group-work or pair-work which addresses the interpersonal intelligence may be considered inappropriate because the teacher is believed to be the source of knowledge and transmits this knowledge onto the learners. Moreover, some excellent EFL students do not believe that diversity in teaching methods would foster their learning. In addition, some stated that they did not believe they could learn from average learners and that working with such learners hindered their progress. Therefore, there are learners who believe that only the traditional form of instruction fosters their learning. This could be true; however, without trying different teaching approaches, it is hard to state for a fact. There is no doubt that many students have not been able to complete their studies successfully. If all learners can be successful learners, how is it possible that throughout their education so many learners have difficulty with their studies or never

manage to complete their course of studies? Could these learners also have thrived had they been offered different learning opportunities? Therefore, teachers must not only teach to the ones who learn best but must provide opportunities to all learners and try to reach the one who have been neglected in the educational system. The learners who are successful cannot be proof of validity of the educational system for they are the ones whose learning styles are compatible with the traditional teaching styles.

The MI theory framework, while acceptable in certain cultures where more value is placed on individuality, will be met with resistance in more traditional settings. This reluctance to accept the validity of the MI theory in practice will stem from the ingrained teaching traditions which are closely related to the teaching culture.

Once again, referring to Hofstede's (1986) cultural differences in teaching and learning, it is possible to explain what the cultural implications of an EFL teaching context are that will have an impact on how the MI theory is acknowledged.

First, learner-teacher and learner-learner interaction is governed by certain form of accepted behavior. Harmer (1991) states that the teacher's personality and the rapport he or she is able to establish with the learners is of vital importance. This rapport will inevitably be governed by the patterns established within a cultural context.

Consequently, decreasing the distance between the learner and teacher and implementing learner centered instruction may contradict the accepted form of behavior. Furthermore, Hofstede (1986) claims that in collectivist societies there is a positive attitude towards tradition as opposed to negative association with anything that is new. Therefore, learner and teacher resistance to new teaching techniques could stem from the novelty of the approach and disregard of tradition. Besides, in collectivist societies learners are

expected to learn how to do things as opposed how to learn how to learn. Therefore, learners expect instruction in grammar, vocabulary and other linguistic topics and teaching learners about MI theory and how to enhance their learning through it may seem irrelevant in an English classroom and contradictory to the belief that learners benefit only from linguistic instruction.

Second, in large power distance societies, the education is teacher-centered and the premium is on order as opposed to learner-centered societies where the premium is on initiative. If the teacher and order are significant then variations according to the MI theory may seem chaotic and counterproductive to learning. Furthermore, if in such societies the learners rely heavily on the teacher to outline the paths, the learner's initiative in the learning process and self-examination through the MI framework to determine one's strengths and course of action may seem irrelevant. Finally, if the teacher's excellence is directly related to the effectiveness in learning and not the result of a two way communication in class, then the focus is on the teacher's knowledge of the subject matter and not on the relationship within the classroom, dynamics, styles or methodology. This would mean that the making of a fine teacher is equated with a good knowledge of the English language. Consequently, only the linguistic intelligence will be acknowledged as significant for language learning.

Third, learners may feel uncomfortable in situations where the learning is not highly structured, and the assignments are not detailed. In low uncertainty avoidance cultures, learners' accuracy and not innovation in problem solving is valued. Such highly structured instruction and lack of encouragement for innovation does not cater for learner uniqueness and individuality but tends to view learners as belonging to a homogenous

group with equal needs. Consequently, there is no need to vary instruction in EFL teaching.

Lastly, in Masculine societies, teachers openly praise good learners and use the best learners as the norm and the learners admire the teacher's intelligence. If the teacher is highly admired and such a teacher praises the accomplished learners then the message the teacher is getting across to the learners is that the accomplished learners are the role models all should strive to achieve. Once again the diversity of the learners and the uniqueness every learner brings to the classroom is ignored. Consequently, why then would MI theory be considered relevant if the role model for academic success is obvious and has been proven in practice?

It is difficult to determine precisely why cultures are so diverse in their perspectives on teaching and learning. EFL teachers and learners may feel safe in familiar patterns because change is often threatening. Furthermore, it is easier to work in established routines with no risks where the outcome is familiar. Innovative change with novel ideas could disrupt the functioning of the system. Furthermore, if learning best takes place if the knowledge is transmitted from the knowledgeable teacher to the learners, little value is placed on innovation, learning how to learn and critical thinking, while more emphasis is placed on knowing and being able to reproduce the subject matter. Furthermore, if learning is memorization of the subject matter then it is easy to measure. The more exact the reproduction of the material studied or lectured, the better the proof that learning has taken place. Therefore, EFL learners and teachers studying and teaching in such an environment might feel overwhelmed by MI theory and it would certainly challenge their worldviews. Although English language teachers and learners

are probably more open to innovations and change due to contact with foreign cultures, foreign teachers, teacher trainers and books, it is still difficult for some to accept different forms of instructions as wholly valid and not a waste of valuable class time.

Implementing teaching beliefs and practices from one culture to another is a sensitive issue and attempts at change must be approached with the greatest care. Bennett (1993) states that in contact with aspects of another culture, people demonstrate different levels of either ethnocentric or ethnorelative intercultural sensitivity. At ethnocentric stages, elements of another culture are perceived as threatening and the differences may be negatively evaluated. Consequently, the introduction and acceptance of MI theory and its benefits to different cultural teaching contexts will depend on the extent to which it threatens the established teaching culture. Therefore, both EFL teachers and learners have to be aware that although MI theory may challenge the established instructional patterns and worldviews, it is worthy of understanding and respect. Only after both the teacher and learners have become aware of MI theory and experienced it, can they form an opinion that will not be an ethnocentric evaluation. Finally, it is important for the EFL teacher to realize that not all teachers are seeing the same reality and that a teacher's teaching practice does not constitute truth. In brief, it is vital to acknowledge the relativity of teaching practices and the cultural differences that relate to language learning and teaching. There is no doubt that this can be achieved through an ethnorelative non-threatening appreciation of cultural differences and not through the acknowledgement of only the similarities.

How change will be accepted in educational contexts also depends on who initiates the change. Most changes are initiated top down and usually deal with formal

aspects of education. Little importance is placed on working with teachers and the beliefs and values which govern their teaching. In foreign language classes, when change in instruction is initiated by a foreign teacher, learners will be more tolerant of the change because he or she is a representative of a different culture. On the other hand a non-native EFL teacher, as a bridge between two cultures, may be able to implement change more efficiently because he or she has a better understanding of the host culture and will be able to determine how changes can be applied to a specific cultural context to foster cross cultural understanding.

### MI Theory and Syllabus Design

If MI theory will have an impact on EFL instruction, it should be considered when designing the language course. Therefore, a conscious effort should be made to allow for each of the intelligences into the syllabus. Although it might prove difficult to incorporate every intelligence into each lesson, especially if the number of identified intelligences increases, still if no effort is made the intelligences will be neglected in the EFL classroom.

Designing language courses is a complex and challenging feat which involves careful consideration of the subject, learner and context. Graves (2000) indicates the teacher's need for being aware of the context and having all the information for defining it. Consequently, it is necessary to define the challenges MI theory would bring to a specific context and act on them. Furthermore, it is necessary for the teacher to understand and to be able to articulate his or her beliefs about MI theory because they reflect what the teacher feels is important in teaching and will influence the choices

made. There is no doubt that the teacher's beliefs underlie all decisions made in the classroom. Graves (2000) further stresses the need to conceptualize content and reflect on the needs and purpose of the course. Although teachers often design the syllabus before meeting the learners, it is advisable to gain a better understanding of the learners prior to designing the syllabus. In fact, an understanding of the learners will help identify their strengths and weaknesses in intelligences and determine more suitable methods. Moreover, since learners are dynamic entities who change and develop, conceptualizing content is a process which reflects the needs and purpose of the course, hence, it is never completed. Furthermore, in designing courses, it is also necessary to set goals and objectives. Therefore, it is important to determine the purpose of including the MI framework in the syllabus and how MI theory will relate to achieving these goals.

If learners are to be responsible for their learning, it is necessary to assess the learners' needs. By giving out questionnaires and checklists it is possible to gain insights into the learners' profiles and raise awareness about their learners' intelligences and their preferences. On the basis of the gathered information, it is possible to reconcile learners' needs, teachers' beliefs, the institutional requirements as well as the tradition and culture of the context. Therefore, the EFL teacher will have a holistic view about how to organize the course.

If all the intelligences cannot be incorporated in one class, a global view of how they are accommodated throughout the course will be an invaluable guide. Therefore, the teachers can determine whether all the intelligences are included equally in the syllabus and how the activities tap a particular intelligence. Furthermore, learners' feedback on the syllabus is a useful indicator to the teacher. Finally, after having reexamined all the

factors that contribute to the successful development of the course, the teacher can develop materials to achieve the goals of the course and incorporate MI theory in the EFL context.

In brief, course design is not so much a technical process as a thinking process and the teacher has to see the global picture and not focus exclusively on isolated activities that address different intelligences in isolation. The issue is complex and it is a continuous process of trying, analyzing, altering and questioning beliefs and values. Learner awareness of the multiple intelligences theory and their feedback on its effectiveness in EFL instruction will prompt the teacher to reflect and reevaluate the syllabus.

### Materials and Techniques

Planning the lessons to include the eight intelligences in the classroom requires an analysis of the techniques which are currently used in language teaching and the techniques which cater to the multiple intelligences. It is clear that the teacher will have to expand the repertoire of techniques and strategies used beyond the linguistic and logical-mathematical. Therefore, teaching language using music, introspection, group work and drama and other non-traditional techniques lend themselves to MI theory. However, the teacher must beware of becoming a virtuoso who demonstrates remarkable technical skills but along the way neglects the objectives and the learner. The techniques are not tools per se but ways to tap the learners' potentials and allow them to learn in a manner that suits them best. Therefore, these techniques could together be just one of the answers to the complex question:

“What constitutes a “linguistic environment” optimally rich for a variety of language learners, and how can such an environment be created in or out of the classroom?” (Blair 1982: 14).

Exposing learners to different teaching and learning styles and strategies will enable them to identify what helps them learn and they may unlock their learning potential. Learning styles can change and Larsen-Freeman and Long (1991) state that although a learner may have a preferred learning style he or she may adapt it if different cognitive demands are set. “Indeed, some would argue that rather than catering to the learner’s preferred learning style, learners should be challenged to develop a range of styles” (Larsen-Freeman and Long 1991: 211). Therefore, learners will not only be encouraged to develop their strengths but also to work on their weaknesses.

In the traditional classroom the teacher lectures and addresses his or her questions to learners who answer back. It is believed that knowledge can be transmitted from the teacher to the learners and that learning is linear and knowledge compiled onto knowledge will yield results. Hooks (1994) criticizes the banking system of education based on memorizing and regurgitating information. Nevertheless, it would be extreme to completely repudiate this form of teaching, especially in contexts where it has been the dominant and acknowledged form, because it would challenge established teaching practices and threaten the learner’s and teacher’s security. However, there is a need to stimulate the learners’ intelligences and to give a fair chance to the learners who have so far been neglected.

It has been said that one cannot teach a language – the best one can do is to make the conditions right for others to learn. Part of these right conditions involves how the teacher relates – or attends to – the learners. (Wajnryb 1992: 28)

Therefore, the teacher has to attempt to provide conditions to make learning meaningful to all the learners.

Certain EFL materials and techniques can stimulate the learner and facilitate learning, making it more relevant and self-directed. However, these materials and techniques must be considered within a cultural context. Furthermore, use of these materials and methods does not guarantee success at language learning because learning is far more complex than techniques. Each EFL activity directly addresses an intelligence, but it does not exclusively address only one intelligence. Often several intelligences come into play in one activity. A selection of activities which cater to the intelligences and can be used in EFL teaching will be examined next.

### Linguistic Intelligence

There is no doubt that the linguistic intelligence is the easiest to address in the EFL classroom and is the one most frequently exploited. Linguistics is after all, the study of language. Furthermore, most instruction in schools depends heavily on the learner's linguistic intelligence. It is also reasonable to assume that English teachers are highly developed in the linguistic intelligence; however, the learners may not be. Nevertheless, the teacher's strength in linguistic intelligence may lead him or her to assume that all the learners have equal strengths and influence his or her beliefs and

teaching practices. Consequently, although it may not seem so, emphasis on the linguistic intelligence can, for some learners, be a hindering factor.

There are numerous activities and techniques which tap this intelligence that can be used in the EFL classroom. Most of the activities catering to this intelligence could be used at all language levels, from elementary to proficiency and with all age groups. Some of the activities are as follows:

- Lectures
- Presentations
- Discussions
- Debates
- Speeches
- Word games
- Journal writing
- Word search puzzles
- Crossword puzzles
- Reporting
- Process writing
- Reading activities
- Publishing

### Logical-Mathematical Intelligence

The logical-mathematical intelligence is most exploited in science, math and logic classes. This intelligence coupled with the linguistic intelligence is the foundation of most educational systems. Consequently, it is widely believed that learners who are good at math and logic are “intelligent” and the development of this intelligence is perceived as proof of intelligence in general. Often language learners believe that their strength in the linguistic intelligence excludes a disposition for the logical-mathematic intelligence. Moreover, this belief is supported by the existence of three different distinct streams in Croatian Gymnasiums: general, linguistic and mathematical. This typically supports the

stereotype that learners who are talented in languages have difficulty with science courses and math. It seems there is a belief that the two intelligences are mutually exclusive. However, development of the logical-mathematical intelligence is indispensable to language learning. The logical-mathematical intelligence is necessary for understanding the way language works and, at a higher level, aids the understanding of grammar, syntax, morphology and phonetics. Furthermore, in the language classroom there are undoubtedly learners with strengths in the logical-mathematical intelligence, and instruction which caters to this intelligence will benefit such learners. In class, this intelligence can be fostered by including activities which include critical thinking and finding solutions to problems. Activities and techniques which cater to this intelligence are:

- Mystery solving
- Problem solving
- Classifying
- Placing in categories
- Conducting experiments
- Socratic questioning
- Heuristics
- Inquiry into grammar
- Analogies
- Logic puzzles

### Spatial Intelligence

Most visual presentations today consist of writing on the board which actually taps the linguistic intelligence. The significance of this intelligence has been recognized by publishers as an abundance of colorful material that has been integrated into language learning text books. There is no doubt that learners are attracted by colorful visual images which enhance learning. However, teachers may shy away from using graphic techniques

and drawings because they may feel their skills are inadequate. Furthermore, many teachers feel they have to complete the planned syllabus and may find visual presentations time-consuming and feel they will not be able to complete what they had planned because they wasted time with drawings. In addition, with adults at the university level the teacher and learners may feel that visual representations are inappropriate and not a serious form of instruction. However, visual representations include much more than mere drawings and there are activities which could be used at all levels.

In Desuggestopedia, fine art reproductions in the text are believed to stimulate positive suggestions and reach the subconscious. In addition, it is believed that we perceive immensely from our environment; therefore, by placing posters in the classroom we can acquire material without making a conscious effort. In the Silent way, colorful Cuisenaire rods and the color coded Fidel chart are used to enhance and facilitate learning. Children today receive an immense amount of input visually. TV and computers are excellent sources of colorful dynamic visual input. Considering the amount of time each child spends in front of the screens, it is likely that most children are used to and are comfortable with this kind of input. Some activities and techniques which help develop the spatial intelligence are:

- Color cues
- Graphs
- Charts
- Diagrams
- Maps
- Using drawings
- Using Symbols
- Comparing or describing pictures
- Visual imagery

- Posters
- Cuisenaire rods
- Videos
- Painting or sketching
- Computer use
- Graphic symbols
- Visualization

### Bodily-Kinesthetic Intelligence

Using the body as a means of accelerating language learning has been used extensively with young learners. In Desuggestopaedia, dramatization is used to activate the material and reach the subconscious. The learners assume new identities and perform in the target language. In fact, movement is believed to reinforce the language material. However, teachers often shy away from this intelligence because they fear the learners will become very active and will make a lot of noise and it will be difficult for the class to settle down again. Furthermore, in classes with over thirty learners, some kinesthetic activities might be difficult to implement and teachers often find them time-consuming. Although in some cultures older learners feel comfortable learning a foreign language using their body, in others, the feeling of inadequate knowledge of the language coupled with kinesthetic activities may pose a threat to the adult learner's self-esteem. However, explaining the objectives of such activities and introducing them gradually may reduce the resistance and feeling of insecurity. Besides, the teacher can select kinesthetic activities which are not perceived as threatening. Some kinesthetic activities and techniques are:

- Working with Cuisenaire rods
- Hands-on activities
- Role play
- Simulations

- Plays
- Manipulating objects
- Miming
- Using gestures
- Running dictation
- Charades

### Musical Intelligence

Music has been used for centuries as a medium for disseminating knowledge and sharing information. In addition, it has been used in different fields to improve retention. In some approaches to language learning like Desuggestopedia, music plays an important role and is believed to be central to learning. “Songs are useful for “freeing the speech muscles” and “evoking positive emotions” (Diane Larsen-Freeman 2000: 78). Therefore, the two concerts are significant components of the lesson and work on the subconscious level facilitating learning and making it pleasant.

Music can be used to advance the learning of a foreign language; however, music is also inherent to every language. Every language has its own rhythm, intonation and pronunciation. These aspects of a foreign language are quite likely to be distinct from the learner’s native language. Therefore, without the musical intelligence, learners would not be able to learn a significant aspect of the foreign language.

Learners today probably know more songs and advertising jingles than pieces related to language learning. It is amazing how many set phrases, words and expressions young non-native English speakers pick up by listening to songs. Music is a significant component of language learning with young beginners and children eagerly learn songs, nursery rhymes or jazz chants; with older learners, music is exploited less frequently. It is more likely that a high-school learner will chant an ad or commercial for a product which

appears on TV than language related music. Furthermore, background music is rarely used in the language classroom. Teachers are aware of the benefits of music; however, music has not been exploited sufficiently nor have the children who have a talent for music been encouraged to use this talent to enhance their language learning. Some uses of music in the language classroom are:

- Mood music
- Songs
- Singing
- Raps and chants
- Topic related recorded musical selections
- Background memory music
- Creating melodies

### Interpersonal Intelligence

Some learners, more than others, need to interact while learning and need to share ideas with others. Edge (1992) states that people learn by putting thoughts together and expressing themselves so somebody else can understand them. In fact, certain people can learn only after they have articulated and explained their ideas to others. Many teachers say that they learn a subject matter best after they have taught it to a class.

In the traditional classroom the dialogue usually takes place between the teacher and learner. The teacher asks the questions and most often the learner answers when called upon. Interaction between the learners is not encouraged; therefore, many learners still believe that they cannot learn from their peers, especially if the peer's foreign language skills are not as developed as theirs. In addition, this belief is also shared by some teachers. Besides, interaction among peers can also create noise which some teachers perceive as lack of discipline. Furthermore, group-work is often frowned upon

because it is time consuming, the workload is not shared equally by all group members and it requires the teacher's relinquishing control.

With the emergence of cooperative learning, this view is being abandoned by many teachers. In addition, foreign language text books often have activities which include group work and pair work which fosters the development of the interpersonal intelligence. Besides, working with peers will help insecure learners take risks and by talking with others, learners can clarify their ideas. Moreover, all the learners in a class are part of a group with which they identify and of which they are an equal member. Cooperative learning will encourage learners to work together and share their ideas and experiences, thus aiding them to connect to each other. Another advantage of learners working in groups is that they can be organized according to the intelligences. Depending on the objectives, learners with strengths in the same intelligence can either be placed in the same group, or groups can be structured to incorporate learners with strengths in different intelligences. Working with others is an invaluable experience for operating in real life because, in most professions, people have to cooperate with peers to ensure the proper functioning of a system or institution. Activities and techniques which tap the interpersonal intelligence are:

- Pair-work
- Group-work
- Peer teaching
- Cooperative groups
- Team games
- Board games
- Group brainstorming
- Active listening
- Simulation

### Intrapersonal Intelligence

In some contexts most of the instruction is directed towards the individual learner and the learner's independent work is highly valued. However, in classes with an emphasis on cooperative learning, individuals who have a highly developed intrapersonal intelligence will need some time to work alone. In addition, in most contexts during testing and evaluation learners are usually alone and rely heavily on their intrapersonal intelligence. Therefore, the teacher has to make allowances for learners who have a deep sense of individuality and feel they need to work independently. Similarly, in life there will be many situations where the development of this intelligence will prove invaluable because people often have to work on their own.

- Reflection moments
- Options for homework and assignments
- Opportunities for choices
- Setting goals
- Independent study
- Individual work

### Naturalist Intelligence

The naturalist intelligence is the latest intelligence to be added to the list of intelligences probably because in the modern world, man has alienated himself from nature and only recently have people become aware of the interdependence of man and the environment. In today's world of industrialization, concrete and high rises this is an intelligence which has been neglected but should most certainly be encouraged. Although it can be best developed through subjects like Earth Science, Biology and Ecology this intelligence can also be tapped in the foreign language class through topics and materials from this field. Exploiting the naturalist intelligence in the foreign language classroom is relevant to learners of all ages and at all language levels. Finally, tapping the naturalist

intelligence not only contributes to language learning, but also raises awareness of the environment in which we live. Some activities which could connect nature study and language learning are:

- Nature walks
- Field trips
- Ecology projects
- Nature videos
- Ecostudy

### Integrating the Intelligences

In life, none of the intelligences work in isolation. Likewise, none of the activities and techniques mentioned tap only one intelligence. There is no doubt that learners have certain intelligences more developed than others. Integrating multiple intelligences and learning styles into the EFL classroom enables teachers to accommodate learner diversity and respect each learner's uniqueness. Learners are allowed to work in their comfort zones; however, through exposure to diverse learning modes and techniques, they are also challenged to adapt and develop the intelligences which would otherwise be neglected. "MI theory is a model that values *nurture* as much as, and probably more than *nature* in accounting for the development of intelligences" (Armstrong 2000: 18). Hence, this developmental model allows for personal growth in neglected intelligences and it allows the teacher to work with the learner's strengths and help develop the weaknesses. Working with the learner's intelligences will heighten motivation and reduce anxiety and foster learning. Oxford (1999: 67) suggests that teachers can reduce learners' language anxiety by providing "activities that address varied learning styles and strategies in the classroom". In brief, by implementing a holistic program all learners will be given equal

opportunities to learn and to decide whether and how to develop their potential, thus rising to the challenges of the modern world.

CHAPTER 8  
**RESEARCH**  
The Inquiry

“Inquiry in its most basic sense simply means the act or process of seeking the answer to a question” (Wallace 1998: 10). Freeman defines inquiry as “speculating about why something is as it is, why it happens or works (or doesn’t happen or work) the way it does” (1998: 34). This research is motivated by speculation about the validity of MI theory and its impact on the EFL context, and attempts to address the following questions:

1. Are teachers and students aware of MI theory?
2. Are learners and teachers aware of their own respective intelligences?
3. Is there a correlation between EFL activities which appeal to the learners and MI profiles?
4. Do teachers’ intelligences have an impact on their preferences for EFL activities?
5. Are activities which cater for the multiple intelligences admitted in EFL classrooms?
6. Would determining the learners’ and students’ strengths and weaknesses in the intelligences help them become more aware of their personalities and uniqueness?

7. Could realizations of teachers' and learners' strengths and weaknesses have an impact on the teaching and learning process?
8. Do students and teachers have the same view of what goes on in the classroom?
9. Could awareness of the activities which cater to different intelligences help the students better understand the teaching and learning processes and determine what would work for them?
10. Would an understanding of the learning process and MI learning styles encourage learners to take more interest and responsibility for their learning?
11. Would insights into their intelligences and the theory prompt teachers to reexamine their teaching practices and acknowledge learner differences?
12. Could research into MI Theory help make learning more meaningful and self-directed and encourage the teachers as well as the learners to explore alternative approaches and become more successful language learners?

### The Rationale

The study is based on the reasonable assumption that students have strengths and weaknesses in various intelligences which are reflected in their different learning styles and strategies. Thus, based on their differing intelligence profiles, learners and teachers have different learning preferences. Due to the novelty of MI theory, as well as the historical and cultural implications of the teaching context, it is probable that teachers and learners are not aware of the implications of the theory for EFL teaching and learning. Therefore, it is likely that activities which cater to the various intelligences are

not consciously addressed in the EFL classroom. As a result, some intelligences are probably more frequently exploited, while others are neglected. The study, based on a sample of Croatian EFL students and their respective teachers, attempts to prove this hypothesis.

### The Subjects

The subjects in this study are 115 high school senior students attending the general streams at two gymnasiums in Rijeka, Croatia. The students are 18 or 19 years old and have been studying English as a foreign language at public schools since age 10. They are at the upper-intermediate to advanced level. Many students take additional English classes at private language schools for two hours a week. Some started studying English at these schools as early as age 5.

The second group of subjects consists of 5 female teachers who teach EFL in their respective classes. The average age of the teachers is 40.4 years and their average teaching experience is 17 years. They teach 21 contact hours a week. Four of them also teach another subject. Three teach Italian as a foreign language and one teaches musicology. The teachers have fulfilled all the requirements for teaching at public schools and have passed the teacher licensing exam.

Teacher development is organized by the Department of Education and through the Croatian Association of Teachers of English. There are two mandatory seminars organized by the Department of Education annually. Other seminars are optional and not supported equally at all schools.

## The Institutions

The subjects in the study either work or study at two of the four Gymnasiums in Rijeka. They are: The Prva Riječka Hrvatska Gimnazija (PRHG) and The Prva Sušačka Hrvatska Gimnazija (PSHG).

The students enrolled in the Gymnasiums on the basis of the grades obtained in the seventh and eighth grades of elementary schools. The majority were A students at elementary schools. Students attending the gymnasiums usually aspire towards university education. As a result, many students are grade-centered since admission to the university is based on the grades obtained at secondary school as well as on an entrance exam.

There are altogether three curriculum streams at the two gymnasiums. In brief, Gymnasiums throughout the country are strikingly similar and follow the same national curriculum prescribed by the Department of Education which is aimed at providing a well-rounded academic education. Minor differences in the streams allow for some student choice, albeit insufficient. Since students acquire extensive knowledge and few practical skills, the majority extend their education at colleges.

After completing the senior year, students have school leaving exams. In the general stream, the exams consist of: 1. a written graduation thesis on any subject which is defended before a committee, 2. a written and oral exam on Croatian language and literature, 3. a written and oral exam in either English or Math, 4. an oral exam in the subject of their choice. These school-leaving exams have a significant impact on EFL teaching, especially in the senior year.

The most popular general stream at the gymnasium offers a comprehensive education in sixteen subjects. English or German is the first foreign language and students choose between Italian, German and English as the second foreign language. French and Spanish are also offered in PRHG and PSHR, respectively. All students are required to study Latin for two years. In the general stream, English is studied as the first foreign language for three hours a week. The course book used is: Headway intermediate, upper-intermediate and advanced by John and Liz Soars.

### The Methodology

In March 2003, a piece of quantitative research was carried out on a group of 115 students and 5 EFL teachers at the two gymnasiums. The enquiry consisted of two questionnaires which were administered to both the students and their respective teachers. The surveys were conducted using the following instruments:

1. *The Multiple Intelligences Indicator* developed by Harvey F. Silver, Richard W. Strong and Mathew J. Perini. (See Appendix A, p. 151)

Permission to reproduce and administer *The Multiple Intelligences Indicator* was granted by the Thoughtful Education Press, LLC on February 13, 2003.

2. An EFL Activities Questionnaire. (See Appendix B, p. 152)

By courtesy of the teachers, who gave up their class time, the questionnaires were administered during EFL classes. The students were informed in advance that they would be completing a survey. The EFL supervisory board for the county was also informed.

Teachers and students were first briefly informed about the Multiple Intelligence Theory and its implications for learning. Instructions were then given on how to complete the survey and the subjects were encouraged to ask questions.

After all the subjects had completed the MI Indicator, they were asked to complete the EFL Activities Questionnaire. The questionnaire comprised two sections:

1. the first section examined how appealing the subjects found forty EFL activities, which address the various intelligences;
2. the second investigated how frequently the activities were used in the respective EFL classrooms.

## CHAPTER 9

### THE SURVEY

#### The Multiple Intelligences Indicator

As mentioned above, the MI indicator was administered during English periods.

The procedure for administering the MI Indicator was as follows:

1. The subjects were orally introduced to MI theory and learning styles.
2. The subjects read brief descriptions of each intelligence, the corresponding activities, occupations and hobbies, and ranked them according to their comfort level. The aim was to obtain a subjective ranking of their personal profile.
3. The subjects were asked to rate how each behavior listed applied to them, in order to build up their personal MI profile.
4. The results were analyzed and an MI profile was determined for each subject.
5. The results obtained were matched against the subjective intelligence ranking.

The MI Indicator was administered with the aim of obtaining the MI profiles of both the teachers and learners and determining their strengths and weaknesses in intelligences.

## Reaction of Subjects

The subjects reacted very differently when asked to complete the indicator. The first class at PRHG was somewhat resistant. Some students stated that they had been asked to fill in various questionnaires on different topics but were never informed of the results. They felt that filling in questionnaires required effort, was time consuming and without a clear purpose, at least not for them. The opinion was widespread that research results were usually not disseminated and no changes stemmed from the research. Therefore, the students were interested in knowing how they could benefit from this research. Paradoxically, the students' initial opposition proved highly beneficial because it prompted a discussion about MI Theory and realization how identification of their personal profiles could help them. Students then completed the inventory.

Another class at PSHG was uncomfortable about writing their names on the survey. They feared that they would be judged or their results might prove somehow inadequate. It is likely that this idea was initiated by a few students and then probably taken up by others. By way of gaining their confidence, it was reiterated that this survey was not a psychometric test which measured a person's intelligence. Moreover, it was explained that the indicator was non-judgmental and that there were no right or wrong answers and students were informed how they would benefit from understanding their personal MI profile. In the end, the majority of students wrote their names and surnames with just a few writing only their given names. In all the other classes, all the students wrote their names and surnames.

Students at the two gymnasiums generally showed interest in the survey, some more than others. It is interesting that students did not ask any additional questions about

MI theory. Some students asked a few questions related to unknown vocabulary and comprehension. All questions were answered bearing in mind the cultural specificity.

The teachers, like the students, were not familiar with Gardner's work and stated that they had found the new information interesting. It was difficult to determine whether the teachers were participating in the study out of genuine interest or as a personal favor. The implications of MI theory for EFL teaching was pointed out to the teachers. However, due to the teachers' tight schedules and back to back classes the theory was not discussed at great length.

Looking at the indicator, it is possible that the ranking obtained for learners' intelligences was influenced by the previous subjective ranking. In fact, one learner stated that he felt that his subjective ranking had had an impact on how he had ranked the statements in the personal profile section. It would be interesting to see whether the ranking would have been different had the learners worked out their personal profile prior to reading the descriptions on the MI profiles and completing the subjective ranking. Furthermore, the statements in each of the twelve sections were listed in the same order as the intelligences in the previous subjective ranking. Therefore, it is possible that the learners were aware of the correspondence between the intelligence and the order of the sentences. As a result, they might have ranked them under the influence of their subjective belief in their strengths, and not according to how each statement applied to them. In brief, it is possible that the learners and teachers profiles would have been different had the tasks been completed in a different order and had the sentences referring to the intelligences been listed in random order.

## Questionnaire of EFL Activities

After all the subjects had completed the MI Indicator, they were asked to complete the Questionnaire of EFL Activities. The questionnaire was explained to the subjects and instructions were given on how to complete it. The questionnaire consisted of a selection of different EFL teaching activities or techniques which address the eight intelligences. A total of 40 activities were listed, five activities for each intelligence. Each of the activities was followed by a brief description to enhance understanding of what was implied by the term. However, additional information was provided when necessary. The questionnaire consisted of two sections.

In the first section, the teachers and learners were asked to rate how each activity appealed to them. In the second section, they rated how frequently each activity was used in their respective EFL classrooms. The learners and teachers rated both sections by putting the numbers 0-4 next to each activity.

Before filling in the questionnaire, both the learners and teachers were encouraged to ask for clarification. Occasionally, learners would ask for additional information about an activity but the teachers didn't. This indicator was less threatening to the learners because it didn't measure their strengths and weaknesses. One teacher expressed concern that she did not use many of the activities listed. A learner stated that these activities existed in an ideal classroom which didn't exist in the real world. At the bottom of the questionnaire, teachers and learners were invited to list any other activities which appealed to them or which were frequently used in class. There were three reasons for this section. First, not to limit the scope of activities only to the ones listed in the questionnaire, but to allow the subjects to state other personal preferences. Second, to get

a clearer overall picture of the activities used in the EFL teaching contexts and not to base the results exclusively on the 40 activities listed. Third, to reduce the teachers feeling of insecurity or inefficiency, if they did not use some of the activities listed. Therefore the aim was not only to determine which activities were not used in class, but also to allow the teachers and learners to state what they actually did use class. In brief, this section would make for a clearer picture of learners' and teachers' preferences and activities used in the EFL context.

The EFL Activities Questionnaire was introduced for the following reasons:

1. To determine the learners' preferences for EFL activities.
2. To determine whether there was a relation between the learners' MI profiles and their preferences for certain activities.
3. To see whether there was a relation between the teachers' MI profiles and their preferences for activities.
4. To determine whether there was a relation between the teachers' preferences for certain activities and how frequently these activities were used in class.
5. To determine whether there was a relation between how frequently an activity was used in class and the learners' preferences for the activity.
6. To determine any difference in teachers' and learners' views of which activities were used in class.

### Feedback on the MI Indicator and EFL Activities Questionnaire

When the MI Indicator and EFL Activities checklists were being administered, some students protested that results of surveys were never shared with them. For this

reason, after the results of the MI Indicator and EFL Activities Questionnaire had been obtained, in May 2003, all the subjects in the study were provided with feedback.

The teachers' and students' focus of interest and reactions differed substantially.

The students were primarily interested in their personal MI profile results. Classes ended in May and the seniors were facing tough decisions about their future. Many were uncertain about what they wanted to study at university and were hoping that their personal MI profile would help them make informed choices. Others, who had already decided what they wanted to study, were looking to their personal MI profile as if for confirmation that they had made the right decision. Since they would soon be starting a new educational direction, the students were not interested in the class MI profile and particularly not in the EFL Activities Questionnaire Results. The business of teaching was the EFL teacher's responsibility anyway.

On the other hand, the teachers were mainly interested in results of the EFL Activities Questionnaire. They were less interested in the MI profiles. There could be several reasons for this. First, the MI profiles were believed to be the personal issue of the student. Second, these students would be graduating in a month so their profile might not seem to have direct relevance to the other classes. Third, the teachers were used to a technical mode of thinking and, as Zeichner and Liston (1996) claim, operated from a number of fixed assumptions and did not question the context of the classroom or how the students' backgrounds might interact with the context. Fourth, at numerous English language workshops, EFL teachers are presented fun activities or games. Most teachers feel that these activities will help them become good teachers. Many are not aware that these activities are only quick fixes and work on the superficial level. Once the activity is

carried out in class, the teachers are back at the same stage they were before. The activities do not prompt reflection on classroom practice, beliefs and assumptions. However, if teacher trainers place such emphasis on activities, teachers may feel that the activities per se will help them become more skilled and capable teachers.

It is apparent that the teachers need to be encouraged to examine their assumptions, beliefs, context and goals. Teachers will need to see the global picture and better understand the complexities of teaching and learning and not focus largely on trivial technical aspects of teaching.

In brief, teachers and learners have different foci of interest in EFL learning and teaching. Only by working together and sharing mutual interests will they be able to understand the context, make informed choices and enhance the teaching and learning processes.

## CHAPTER 10

### RESULTS

#### The Multiple Intelligences Indicator

“We all possess the same ensemble of intelligences--in one sense, they represent our species’ intellectual heritage--but do not exhibit equal strengths or similar profiles” (Gardner 1999: 166). The MI indicator submitted to 115 seniors showed that the subjects possessed all eight intelligences; however, each showed different proclivities in the various intelligences. The results of the whole group, as well as each particular class, indicated at least a moderately comfortable level with all the intelligences.

#### The Learners’ Intelligences

The learners were asked to rate from 0-4 how strongly the behaviors, listed in the MI Indicator activity, applied to them. By adding up the numbers allocated for each statement, the comfort level for each intelligence was calculated. The comfort level scale for an intelligence is as follows:

40-48	Very comfortable
30-39	Comfortable
20-29	Moderately comfortable
10-19	Little comfort
0- 9	Uncomfortable

The MI Indicator activity results shown in Figure 1 indicated that the seniors

were not *very comfortable* with any of the eight intelligences. Likewise, they also did not show *little comfort* and were not *uncomfortable* with any of the intelligences. The results indicated that the subjects were *comfortable* with 6 intelligences: intrapersonal, interpersonal, linguistic, bodily-kinesthetic, spatial and logical-mathematical. *Moderate comfort* was assigned to the musical and naturalist intelligences. The difference between the intelligences the subjects were most and least comfortable with, the intrapersonal and naturalist, was 9.4 points or 23.5%. This suggests that there is no marked or slight preference for any intelligence.

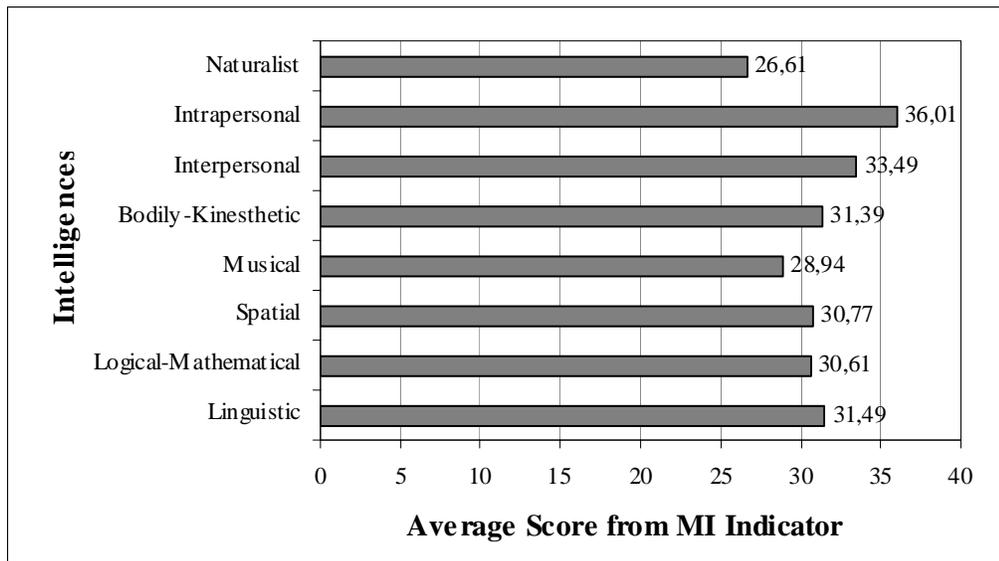


Figure 1: Multiple Intelligence Profile of the Learners

There was little variation in each of the five classes from the results obtained for the group as a whole, as shown in Table 1. The highest level of comfort was indicated in class 4c, which was comfortable with all the eight intelligences. The lowest level was indicated in 4d, which was comfortable only with the intrapersonal and interpersonal intelligences, but moderately comfortable with all the others. In brief, in each class the

students were either comfortable or moderately comfortable with the eight intelligences.

This again suggests that in each of the five classes students have strengths in all the intelligences.

<b>Class</b>	<b>Linguis</b>	<b>LogiMat</b>	<b>Spatial</b>	<b>Musical</b>	<b>BodKin</b>	<b>Interper</b>	<b>Intraper</b>	<b>Natural</b>
<b>4a Su</b>	32,63	34,92	31,67	27,71	31,54	32,92	36,92	27,46
<b>4a Ri</b>	31,91	29,65	32,22	30,70	31,61	34,09	35,87	30,09
<b>4b Ri</b>	33,72	33,10	33,38	34,28	36,28	36,41	38,97	31,55
<b>4b Su</b>	28,52	27,71	28,62	26,57	29,48	32,38	33,86	22,67
<b>4c Ri</b>	30,67	27,67	27,94	25,44	28,06	31,67	34,44	21,28
<b>Aver.</b>	<b>31,49</b>	<b>30,61</b>	<b>30,77</b>	<b>28,94</b>	<b>31,39</b>	<b>33,49</b>	<b>36,01</b>	<b>26,61</b>
<b>Rank</b>	<b>3</b>	<b>6</b>	<b>5</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>8</b>

Table 1. Multiple Intelligence Profiles of the Five Classes

The seniors showed strong personal awareness of their intelligences. In the subjective ranking, the learners were asked to identify their personal profile by ranking how the intelligences appealed to them. The results obtained in the subjective ranking, shown in Table 2, coincided closely with the results obtained in the MI Indicator activity. Of the eight intelligences, the following stood out: interpersonal, intrapersonal, and linguistic (the ones the learners believed themselves to be most comfortable with) and musical and naturalist (the ones they believed themselves to be least comfortable with). The results suggest a correlation between the learners' perception of their strengths and weaknesses in intelligences and the intelligence scores obtained by the MI Indicator activity. It is interesting to speculate that this may well be due to the learners' strengths in intrapersonal intelligence, as shown in Figure 1. Strengths in this intelligence include self-understanding and the ability to form realistic conceptions of oneself. These qualities might have contributed to the seniors' realistic subjective ranking of their intelligences.

On the other hand, as previously suggested, it may be that the seniors were influenced by their subjective ranking while completing the MI Indicator activity.

Intelligences	Indicator	Subjective
<b>Intrapersonal</b>	<b>1</b>	<b>2</b>
<b>Interpersonal</b>	<b>2</b>	<b>1</b>
<b>Linguistic</b>	<b>3</b>	<b>3</b>
Bodily-Kinesthetic	4	6
Spatial	5	4
Logical-Mathematical	6	5
Musical	7	7
Naturalist	8	8

Table 2. The Learners' Subjective Ranking and MI Indicator Activity Results

In formal education, as in psychometric tests, the linguistic and logical mathematical intelligences are most frequently exploited. Therefore it would be reasonable to assume that the MI Indicator results would show high levels of comfort with these intelligences because the learners had ample opportunities to develop these intelligences throughout their education. Furthermore, if education is built on these intelligences, it must have been based on the assumption that everyone's strengths lie in these intelligences. Results in this research showed that the linguistic intelligence was ranked only third in the subjective ranking as well as in the MI Indicator activity results, as shown in Figure 1. Therefore, learners showed greater preference for and comfort with both the interpersonal and intrapersonal intelligences than with the linguistic.

The bodily-kinesthetic intelligence ranked fourth, as shown in Figure 1, probably because many of the learners practice different sports and enjoy dancing and physical activities. Most are probably well coordinated youths and aware of their strengths.

The spatial intelligence ranked fifth, after the bodily kinesthetic, as shown in Figure 1. With the massive input from TV and computers, learners probably have a fairly well developed ability to recreate images and pictures and perceive visual detail. Thus, it is likely that in the era of technology, this intelligence is substantially developed in many learners.

The logical-mathematical intelligence, the backbone of formal education, was rated lower than expected in both subjective ranking as well as in the MI Indicator activity, fifth and sixth place, respectively, as shown in Table 2. It was allocated 30.61 points, just on the cut off for the comfortable level. The low placement of the logical-mathematical intelligence could be explained by the traditional teaching methods used to teach math and the sciences as well as the difficult syllabus in the Croatian context. Therefore, many learners have difficulties with Math and the sciences, which result in low grades. The learners often need additional tutoring in these subjects, which has a negative impact on their self-esteem and perception of competence in these fields. In brief, since learners encounter considerable difficulties in mastering Math and the sciences, their comfort level with activities in these fields will be low and they will think that they lack strengths in this intelligence.

The seventh ranking--musical intelligence--as shown in Figure 1, is probably not exploited as frequently as the others. It is generally believed that one either has or doesn't have a talent for music. Therefore, unless a learner has been singled out as a musical talent, or attends music school, he or she may have a misconception of personal weakness in this field.

The naturalist intelligence was the lowest ranking in both sections of the indicator, as shown in Table 2. This can probably be accounted for by the fact that these learners live in the city and their way of life has alienated them from nature. In addition, ecological issues are not adequately addressed in society and learners lack awareness of and sensitivity for this field.

Although some intelligences ranked higher than others, the results showed that learners have a wide spectrum of strengths in different intelligences. Since they were not uncomfortable with any of the intelligences, there is a vast learning potential accessible through different modes. Furthermore, this also shows that, contrary to popular belief, all learners are not most comfortable with the linguistic and logical mathematical intelligences. Therefore, teaching should include activities and techniques which tap all the intelligences.

In brief, it is clear that, as a group, the subjects have strengths across the whole range of intelligences which supports the claim that teaching to the intelligences will reach all learners. “Fostering multiple representations is one component of effective teaching...” (Gardner 1999: 178). Oxford (2001) also emphasizes the need to employ a broad instructional approach because a single methodology will not address the needs of an entire class. The more teachers know about their learners’ style preferences, the more effectively they can orient their instructions.

### The Teachers’ Intelligences

To a certain extent, the teachers’ intelligences were similar to the learners’ i.e. the same intelligences took the first three places, as shown in figure 2, but, the order was

different. The apparent similarity overlays substantial differences. The MI Indicator activity results showed that the teachers were *very comfortable* with the linguistic intelligence and *comfortable* with the intrapersonal and interpersonal. Like the learners, the teachers were least comfortable with the naturalist intelligence.

Therefore the teacher and learners strengths (first three intelligences) and weaknesses (the naturalist) lie in the same intelligences. However, there is a significant difference in the teachers' and learners' linguistic strengths. In addition, the teachers showed greater strength in the musical intelligence. Strength in the musical intelligence could be explained because one of the five teachers has a degree in musicology and also teaches the subject. Since only five teachers were included, one teacher's rating significantly affected the overall results.

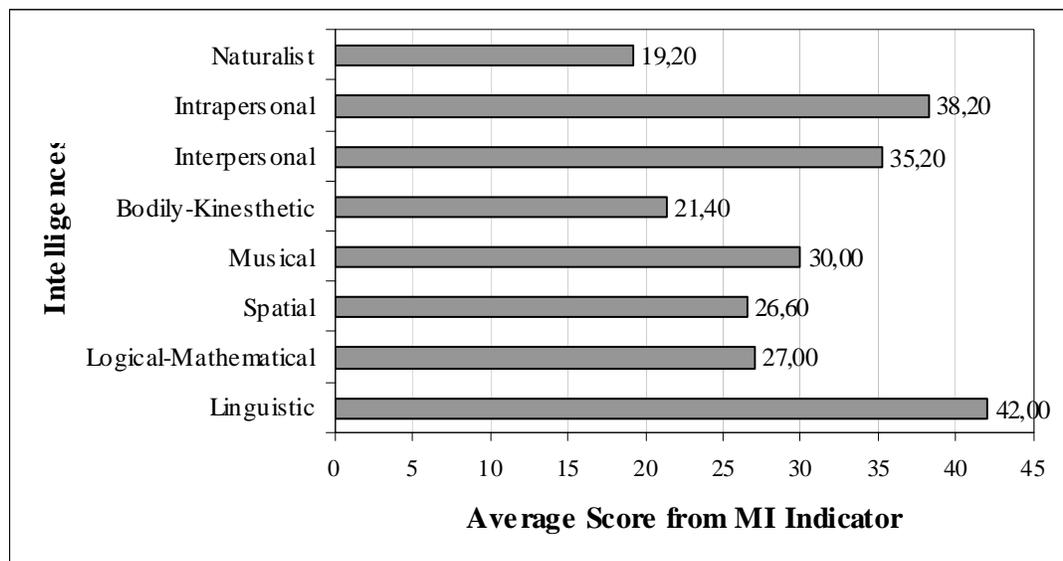


Figure 2. Multiple Intelligences Profile of Teachers

The teachers' high level of comfort with the linguistic intelligence was expected and was not surprising given their profession. The linguistic intelligence is the basis for language teaching and learning. The teachers' comfort levels with the interpersonal and intrapersonal intelligences are equally significant for teaching. The low ranking naturalist intelligence might again be the outcome of widespread disregard for nature, and their urban way of life. Although each of the teachers has a unique personal profile, they do have some strengths in common, which might have influenced their choice of profession and probably influences their teaching.

Since only five teachers were assessed in this research, it would be inappropriate to make a generalization. However, the results obtained are relevant for these particular teachers. Oxford (2001) stresses the usefulness of assessing teachers' styles and strategies to raise awareness of their preferences and biases. The teachers' profiles are relevant for understanding this particular context and will help the teachers to understand their strengths and weaknesses. In addition, the results will enhance understanding of the interrelationship between teachers' intelligences, learners' intelligences, teaching styles and learning styles.

### The EFL Activities Questionnaire

#### The Learners' Preference for EFL Activities

The EFL Activities Questionnaire consisted of two sections. In the first section, the learners were asked to rate how each activity appealed to them by writing the following numbers:

0	Not at all
---	------------

1	A little
2	Fairly
3	Considerably
4	Enormously

All the activities listed in the questionnaire primarily addressed one of the eight intelligences. The following activities were included:

<b>Linguistic</b>	<b>Logical-Mathematical</b>	<b>Spatial</b>	<b>Interpersonal</b>
Journal writing Debates Discussions Presentation Student lectures	Inquiry into grammar Socratic questioning Classifying Problem solving Heuristics	Videos Color cues Cuisenaire rods Maps and graphs Drawings	Pair-work Peer teaching Team games Brainstorming Cooperative groups
<b>Musical</b>	<b>Intrapersonal</b>	<b>Naturalist</b>	<b>Kinesthetic</b>
Chants and raps Background music Songs Singing Mood music	Reflection moments Opportunities for choices Independent study Options for assignments Individual work	Windows on the world Eco study Nature topics Nature videos Ecology projects	Hands-on thinking Kinesthetic activities Using gestures Plays Role play

The results showed that, of all the activities listed, the four most preferred activities address the intrapersonal and linguistic intelligences, as shown in Figure 3. Learners stated that *opportunities for choices* appealed to them *enormously* and that conducting an *independent study* appealed to them *considerably*. The learners' desire to be able to choose in the language classroom and work on assignments which were not prescribed by the syllabus, or were in some way personalized, might not stem from their strengths in the intrapersonal intelligence but might be a reaction to years of uniformity of education.

*Debates* and *discussions* were also among the activities that appealed *considerably*. These activities help build communicative competence and allow the learners to express their opinion, which is insufficiently acknowledged in the teaching context. It is difficult to determine precisely how often learners are given speaking opportunities in the EFL classroom. The need for more oral practice might have fostered the learners' wish to communicate in the target language classroom.

*Problem solving*, which addresses the logical-mathematical intelligence, was ranked fifth, as shown in Figure 3. This activity also appealed *considerably* to the learners. However, this activity was ranked twelfth on the classroom use of EFL activities list and is not frequently used in teaching because learners are not encouraged to seek solutions for themselves, but are offered solutions to problems.

Learners indicated least preference for activities which address the musical intelligence, as shown in Figure 3. This intelligence was ranked seventh in the MI Indicator activity. It could be that EFL activities which cater for the musical intelligence were ranked so low because learners have less proclivity in this intelligence, as shown by the indicator results. Also, musical activities are rarely used in the classroom and learners have little experience with learning through music and songs. Furthermore, the 18 and 19-year-olds, who have been educated in a traditional setting, may feel uncomfortable singing, chanting, or producing songs and may find this form of learning incongruous in the classroom.

*Cuisenaire rods* ranked the lowest, as shown in Figure 3. They only appealed to the learners a *little* because the learners had no experience of learning with rods. It is worth noting that this lowest ranking activity was given 1.85 points, which means that all the activities listed appealed to the learners at least *a little* and the learners did not dislike any of the activities.

In short, it is possible that certain activities appealed *a little* to the learners not because of their intelligence profiles but because they were rarely or never used in the classroom. Only by using an activity, can learners decide with certainty whether an

activity appeals them. Furthermore, how learners feel about an activity can change over time and in different situations. The results showed that learners would be willing to use

the different EFL activities because all of the activities appealed to them. (See Appendix C, p. 153)

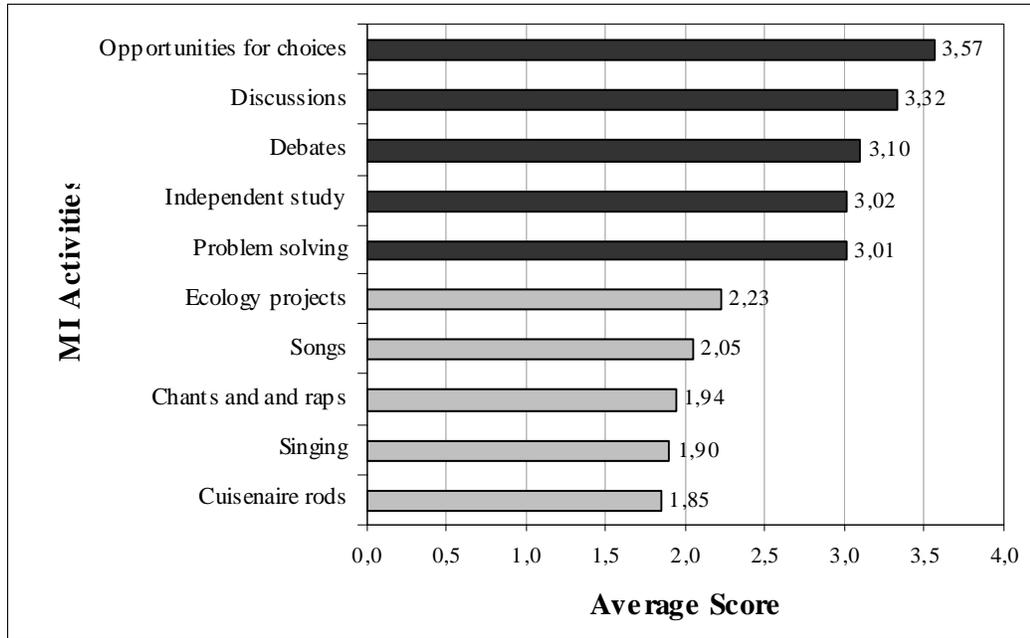


Figure 3. The Learners' Most and Least Preferred Activities

### The Learners Rate the Frequency of Use of EFL Activities

In this section, the learners once again rated the EFL activities, but this time they were asked to rate how often each activity was used in the EFL classroom. The following scale was used:

0	Never
1	Rarely
2	Sometimes
3	Often
4	Frequently

Figure 4 shows that activities which cater for the linguistic, logical-mathematical and interpersonal intelligences were used the most in the language classrooms. As stated, linguistic and logical mathematical intelligences are the basis of formal education. *Presentations* by the teacher were rated the most frequent and were, according to the scale, used *sometimes* to *often* in the classroom. *Presentations* are, by far, the most frequent form of instruction and dominant not only in EFL teaching, but also in other subjects. However, learners ranked this activity tenth on the preference list. *Pair-work* and *cooperative groups* were used *sometimes* and *rarely*, respectively. These activities are encouraged by the EFL course book, and were the first “modern” techniques introduced in predominantly teacher fronted classrooms. However, they were ranked by the learners only twenty-ninth and twenty-first, on the preference list, respectively. The significance of grammar in the EFL context, and the frequency of teacher questioning prompted the learners to state that *inquiry into grammar* and *Socratic questioning* were used in the EFL classrooms. However, *inquiry into grammar* must not be equated with deductive rule learning, nor *Socratic questioning* with the teachers’ oral examining. It is disputable whether or not all the learners were aware of the differences. When the learners indicated how these activities appealed to them, they ranked inquiry into grammar twenty-seventh and Socratic questioning twelfth.

It is interesting that once again *Cuisenaire rods*, which were *never* used in the classrooms, were ranked the lowest. Activities which address the musical intelligence were also not used in the classroom and were ranked like the rods.

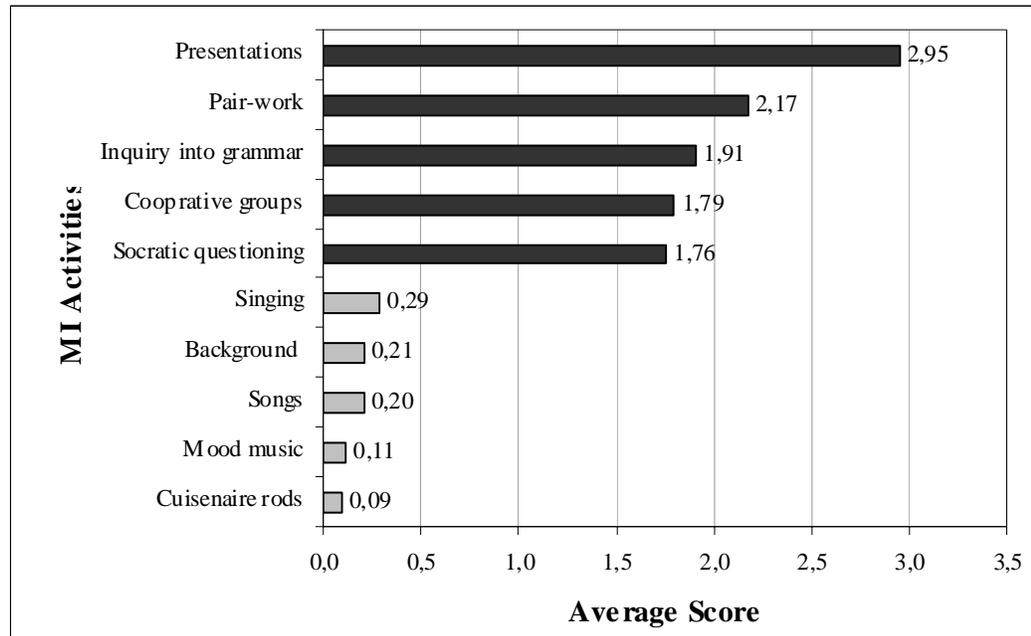


Figure 4. The Learners' Rating of the Most and Least Frequently Used Activities in the Classrooms

Results showed that certain activities were used only *sometimes* whereas, others were *never* used. The activities which were used in class were ranked low on the learners' preference list and did not appeal greatly to the learners. As many as 17 activities were *never* used in EFL teaching; most of these address the musical, kinesthetic and naturalist intelligences. Therefore, learners with strengths in these intelligences lacked learning opportunities. In brief, all the activities listed were infrequently used in the classrooms. (See Appendix C, p.153)

### The Teachers' Preferences for EFL Activities

Of all the activities listed, the teachers indicated that *debates* and *discussions* appealed to them *considerably*, as shown in Figure 5. *Socratic questioning*, *inquiry into grammar* and *student lectures*, were rated as *fairly* appealing and *presentations*,

*opportunities for choice* and *individual work* as *a little* appealing, as shown in Figure 5. Most of these activities address the intelligences prominent in formal education, linguistic and logical-mathematical intelligences. The MI indicator results showed that the teachers had strengths in the linguistic intelligence. *Debates, discussions* and *presentations* all cater for the linguistic intelligence. Therefore, teachers showed a preference for activities which utilized their strengths and which were commonly used in language teaching. Although *inquiry into grammar* and *Socratic questioning* address the logical-mathematical intelligence, with which the teachers were *moderately comfortable*, they probably indicated preference for these activities because of the significance of grammar and teacher questioning in the context. *Opportunities for choices* and *individual work* address the intrapersonal intelligence, which the teachers were *comfortable* with.

Except for Cuisenaire rods and kinesthetic activities, which did not appeal to the teachers, as shown in Figure 5, all the other activities appealed to them at least *a little*. Among the least appealing activities were those which address the musical, kinesthetic and naturalist intelligences. (See Appendix D, p. 154)

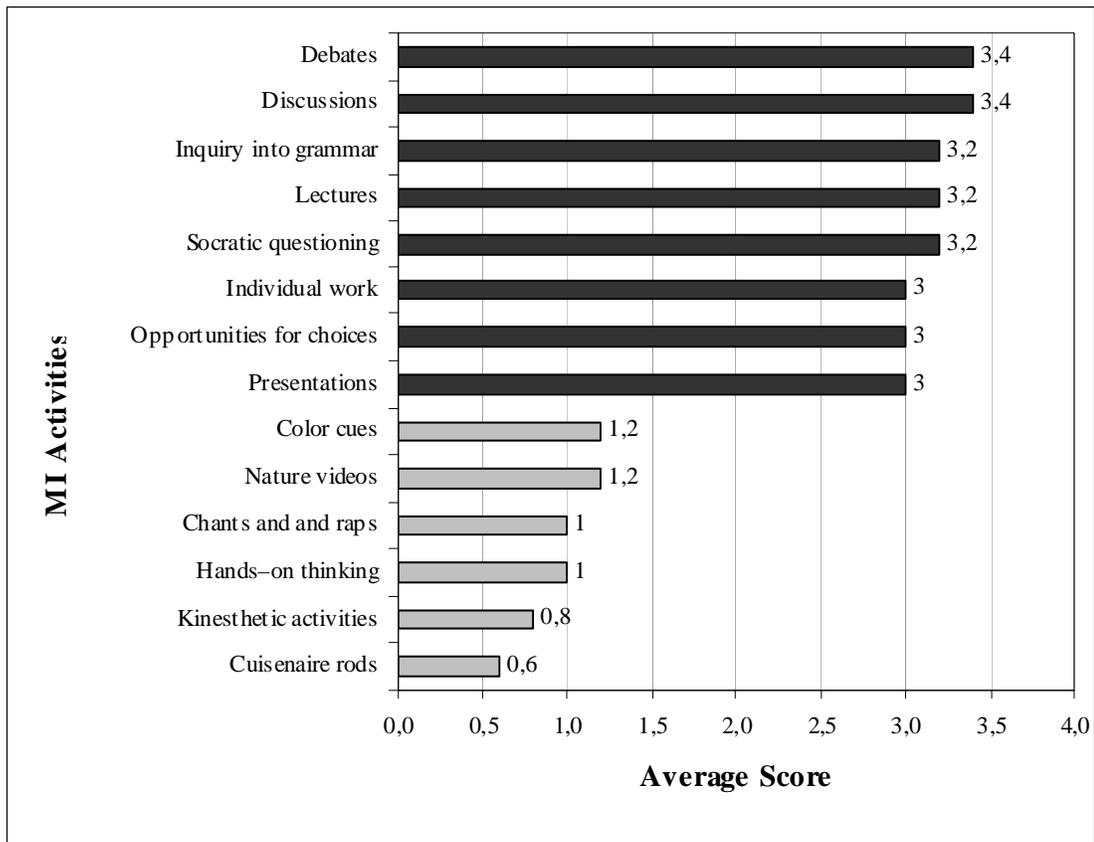


Figure 5. Teachers' Most and Least Preferred Activities

### The Teachers Rate the Frequency of Use of EFL Activities

The teachers indicated that they *often* used *presentations*, *discussions* and *Socratic questioning*, as shown in Figure 6. *Inquiry into grammar* and *brainstorming* were also used *often*. It is worth noting that activities which appealed to the teacher, i.e. *discussions*, *presentations*, *Socratic questioning* and *inquiry into grammar* were the activities which the teachers used most often. (See Appendix D, p. 154) Teachers indicated a preference for *presentations*, and both the learners and teachers listed it

among the activities used in the EFL classrooms. In this context, teachers are expected to present the material and explain the subject.

Once again, *Cuisenaire rods* were the last on the list. The other activities which were never used in the classrooms address the naturalist, kinesthetic and musical intelligences. Activities addressing the kinesthetic and musical intelligences might seem inappropriate for teaching adult learners.

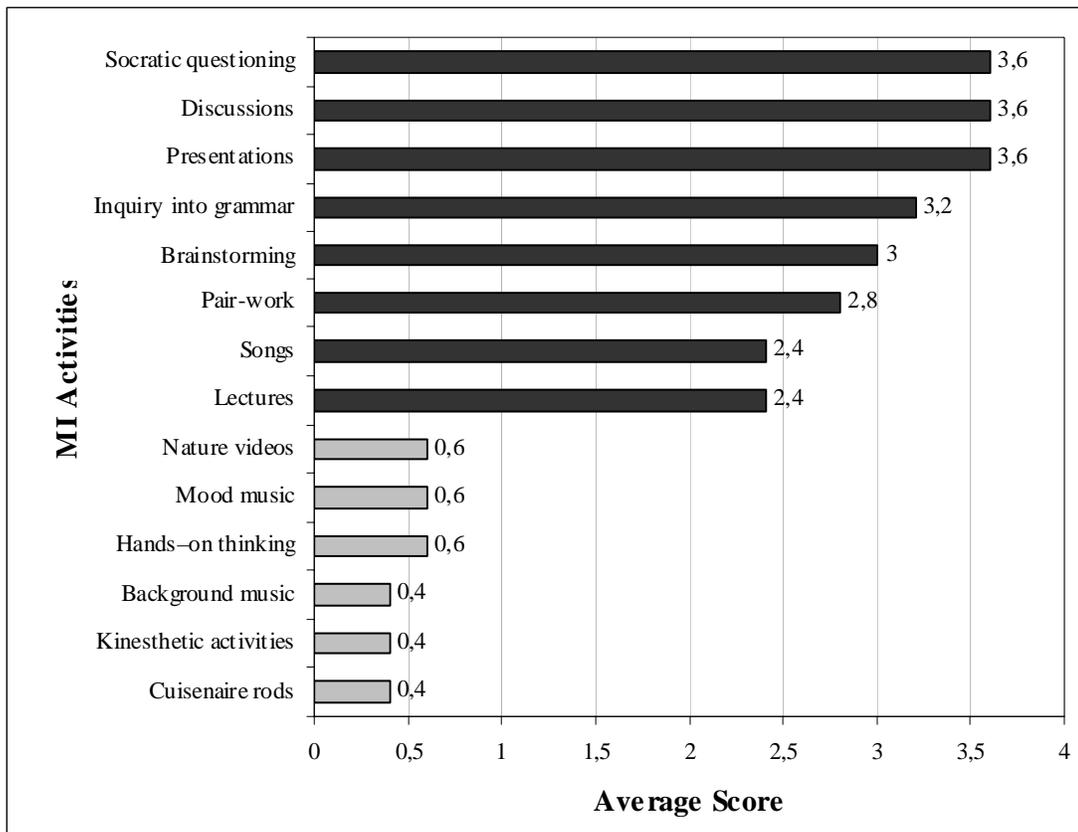


Figure 6. Teachers' Rating of Activities Most and Least Frequently Used in the Classrooms

In order to avoid generalizations on the basis of only the forty activities listed, and not to focus on what was not used in the classroom, both teachers and learners were invited to list any other activities which appealed to them or which were used in class.

The teachers listed the following activities:

1. listening for gist,
2. summarizing,
3. retelling,
4. talking,
5. project work,
6. using literature.

Of the 115 learners examined, only 6 learners expressed their opinion in this section.

Four learners listed the following as appealing activities:

1. visualizing things,
2. talking in English,
3. writing a diary,
4. acting.

The other two learners did not list any preferences but instead expressed their dissatisfaction with the teaching philosophy and stated the following:

1. “The teacher lectures his thing, the bell rings, everybody goes home just waiting for another day to go by. No student actually realizes that he or she is learning for themselves.”
2. “All my duties in school come down to listening. Our opinion is not important. We should use our brain only to learn what they teach us.”

Although these two learners did not list any other activities which appealed to them or which were used, there is no doubt that they provided invaluable insight into the learners’ perception of learning and teaching. It is highly likely that their opinions are shared by others. Therefore, the subjects’ preferences for activities can be examined in light of these two comments. The wide discrepancy between how much certain activities

appealed to the learners and how frequently these activities were used, could be one of the reasons the two learners expressed their dissatisfaction with their role in the classroom.

### The Teachers' and Learners' Perspectives of Activities Used in Class

There is some discrepancy between the learners' and teachers' views of which activities are used in the classroom, as shown in Table 3. Both indicated that *Cuisenaire rods*, *background music* and *mood music* were not used. However, the learners' and teachers' opinion about which other activities were not used differed. The other activities which were not used in the classroom address the kinesthetic, musical and naturalist intelligences.

Although teachers and learners also indicated some disagreement on which activities were used in the classrooms, both agreed that *presentations*, *discussions*, *inquiry into grammar* and *pair work* were used. It was the other activities listed by the teachers and learners which differed. This shows that both learners and teachers look at classrooms through their own lenses and it is possible that neither are fully aware of what goes on in the classroom. Given that 115 learners were questioned and only 5 teachers, it is likely that the learners provided a more accurate picture. Generalizations from the teachers' results would be more unreliable and open to doubt.

<b>Teachers' Use of</b>	<b>Aver. Score</b>	<b>Learners Ranking of Use</b>	<b>Aver. Score</b>
Socratic questioning	3,6	<b>Presentations</b>	2,95
<b>Discussions</b>	3,6	<b>Pair-work</b>	2,17
<b>Presentations</b>	3,6	<b>Inquiry into gram.</b>	1,91
<b>Inquiry into gram.</b>	3,2	Cooperative groups	1,79
Brainstorming	3,0	Socratic questioning	1,76
<b>Pair-work</b>	2,8	<b>Discussions</b>	1,72
Songs	2,4	Reflection moments	1,66
Lectures	2,4	Classifying.	1,54
Nature videos	0,6	Ecology projects	0,34
<b>Mood music</b>	0,6	Singing	0,29
Hands-on thinking	0,6	<b>Background music</b>	0,21
<b>Background music</b>	0,4	Songs	0,20
Kinesthetic Activities	0,4	<b>Mood music</b>	0,11
<b>Cuisenaire rods</b>	0,4	<b>Cuisenaire rods</b>	0,09

Table 3. The Teachers' and Learners' Rating of the Activities Most and Least Frequently Used in the Classrooms

## CHAPTER 11

### **DISCUSSION**

#### The Relation between Activities, MI Profiles, Teachers, Learners and Context

The main objective of this study was to analyze the learners' learning styles and the EFL context in light of the Multiple Intelligence Theory and to gain a better understanding of what goes on in the classrooms. There can be no doubt that learners, teachers and methods of instruction are all closely connected and analysis of all three has presented a clearer picture of the EFL context in these schools.

After looking at how each specific EFL activity, which addresses a particular intelligence, was rated by the learners and teachers, a broader MI perspective will be gained in this chapter. All the activities have been grouped according to the intelligences they address and will be considered as learning modes for the eight intelligences. The objective is to gain a broad picture of the learners' and teachers' preferences and determine which intelligences are the preferred learning modes and which are most frequently addressed.

## The Learners' MI Profile and Preferences for Activities

Does the learners' MI profile influence their preferences for activities? As shown by the MI Indicator, learners have strengths in different intelligences. The first three were the interpersonal, intrapersonal and linguistic. Learners' indicated preferences for activities which address the linguistic and intrapersonal intelligences, as shown in Table 3. Learners expressed least preference for activities which address the musical and naturalist intelligences which were rated lowest in the MI Indicator. It is interesting that the learners relegated activities which address the interpersonal intelligence to fourth place although the MI indicator showed strengths in this intelligence. Activities addressing the interpersonal intelligence were used in the class, as shown in Table 3, and results could be the outcome of negative learner experiences or cultural implications.

In brief, categorizing the activities in relation to the eight intelligences has shown some relation between preferences for activities and the learners' MI profiles. Activities addressing the linguistic, interpersonal, logical mathematical and intrapersonal intelligences took the first four places, shown in Table 3. Activities which address the musical and naturalist intelligences took the last two places just like in the MI Indicator.

MI Activities	Preference	Use
<b>Intrapersonal</b>	<b>1</b>	4
<b>Linguistic</b>	<b>2</b>	<b>1</b>
<b>Logical-Mathematical</b>	<b>3</b>	<b>3</b>
<b>Interpersonal</b>	4	<b>2</b>
Spatial	5	5
Bodily-Kinesthetic	6	7
Naturalist	7	6
Musical	8	8

Table 3. Learners' Ranking of Activity Use and Preferences

## The Learners' Preferences for Activities and the Frequency of Use

Do the learners prefer activities which are used more frequently? There seems to be no correlation between how frequently activities were used and the learners' preference for the activities. As shown in Figure 7. The activities which tap the spatial, naturalist, bodily-kinesthetic and musical intelligences were not used in class yet the learners indicated that the activities appealed to them *fairly* or *considerably* albeit, except for the naturalist activities, less than the others. Although the naturalist intelligence was not addressed in class, the learners indicated a fairly high preference for activities catering for this intelligence. The learners expressed a comparatively slight difference in preference for all the activities listed, that it can hardly be attributed to classroom use.

The most preferred activities were those which address the intrapersonal, linguistic and logical-mathematical intelligences, as shown in Figure 7. The learners stated that all the activities appealed to them at least *fairly*. Since the learners favor a variety of activities, it is likely that they would like to learn through different modes. However, the activities which address the intelligences were, at best, *rarely* used in class. If the activities were used, they were used discriminatively, favoring some intelligences over others.

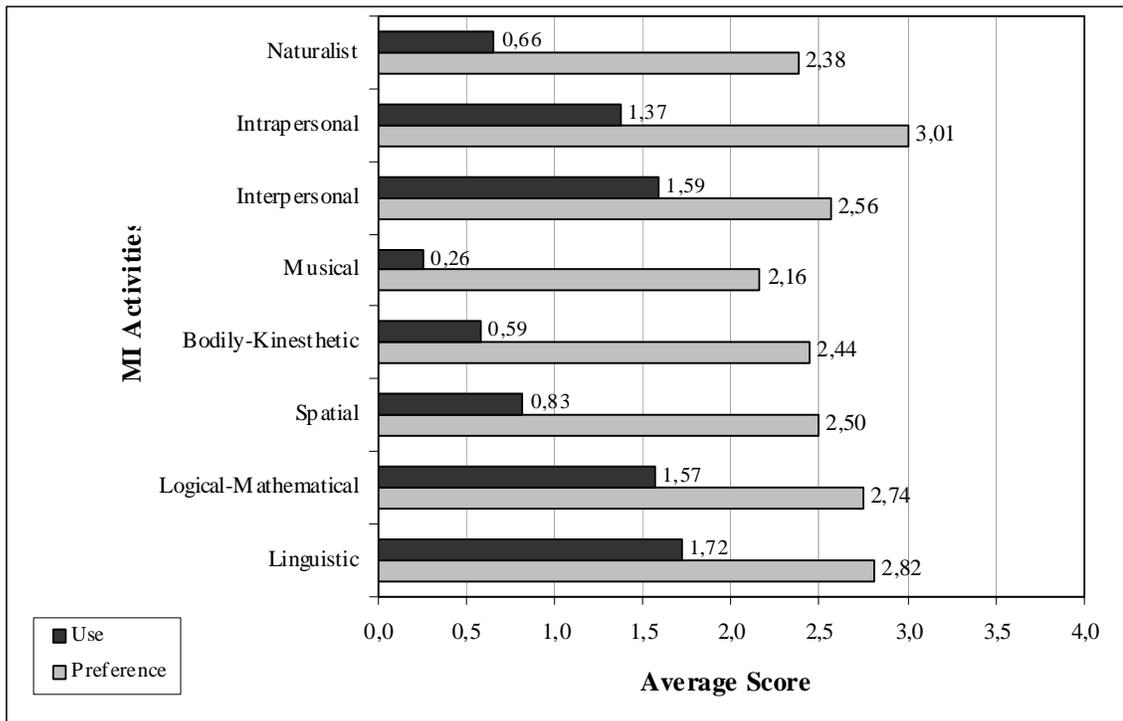


Figure 7. Comparison of Learners' Preferences for and Use of Activities

### The Teachers' MI Profiles and Preferences for Activities

Does the teachers' MI profile influence the teachers' preferences for activities?

The MI Indicator results showed that the teachers' strengths lie in the linguistic, intrapersonal, interpersonal, musical and logical-mathematical intelligences. The teachers indicated a preference for activities which address the linguistic, logical mathematical, interpersonal and intrapersonal intelligences, as shown in Table 4. The naturalist was rated lowest both in the MI Indicator and EFL Questionnaire. The teachers' strength in the musical intelligence was not reflected in their preferences for activities. One teacher indicated that although she knew she had strengths in the musical intelligence she felt

uncomfortable using activities which cater to this intelligence because of contextual expectations. Furthermore, she stated that she thought music might distract some learners. The other intelligences and preferences for activities were rated somewhere in the middle of the scale.

In brief, apart from the musical intelligence, which could have been rated so high because of one teacher, it seems that the teachers' preferences correspond to their intelligence profiles.

Intelligences	Preference	Use
<b>Linguistic</b>	<b>1</b>	<b>1</b>
<b>Logical-Mathematical</b>	<b>2</b>	<b>2</b>
<b>Interpersonal</b>	<b>3</b>	<b>2</b>
<b>Intrapersonal</b>	<b>3</b>	<b>4</b>
Bodily-Kinesthetic	5	8
Spatial	5	5
Musical	7	6
Naturalist	8	7

Table 4. Teachers' Ranking of Preferences for Activities and Use of Activities

### The Teachers' Preferences for Activities and the Frequency of Use

Do the teachers actually tend to use more the activities which they prefer? The teachers prefer activities which address the linguistic, logical-mathematical, interpersonal, and intrapersonal intelligences, as shown in Figure 8. Teachers indicated that they used the most activities which address these intelligences, as shown in Figure 8. Therefore, there is a relation between the teachers' preferences for activities and the activities used in the EFL classrooms. In brief, teachers tend to use activities which appeal to them and address their strengths in intelligences. However, these activities may not necessarily appeal to the learners and address all the learners' strengths.

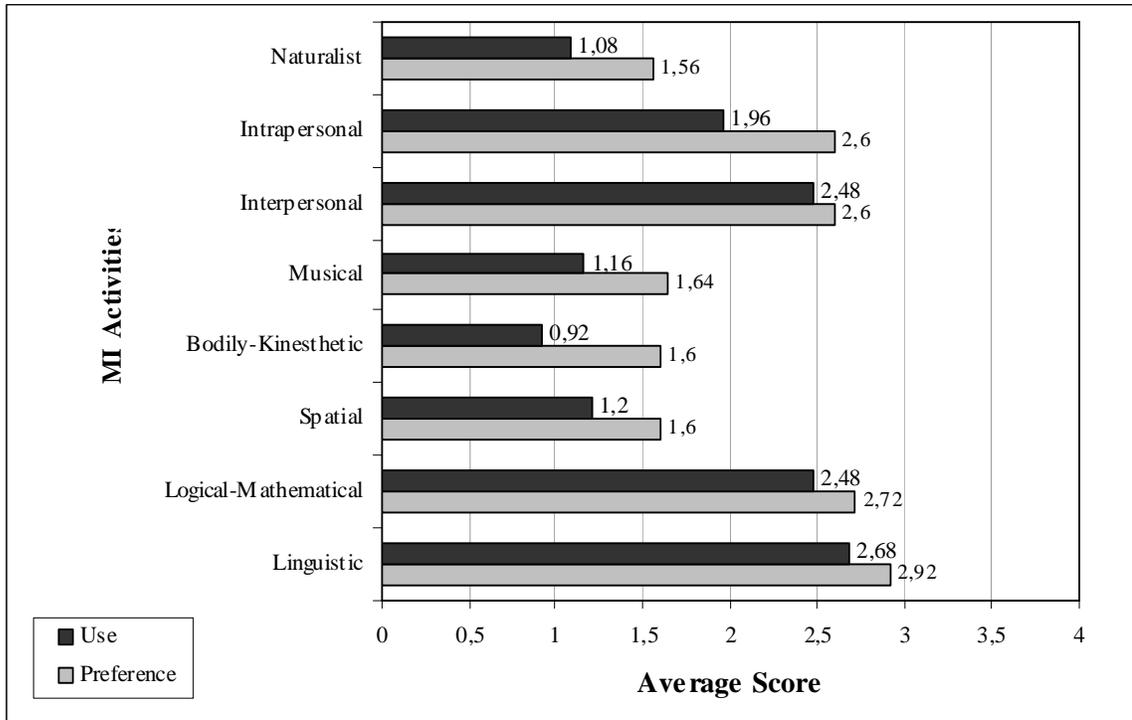


Figure 8. Comparison of Teachers' Preferences for and Use of Activities

### The Teachers' and the Learners' Perspectives

Given the small number of teachers sampled, the teachers' and learners' views of how frequently activities are used in class have to be interpreted with caution. The results suggested how relative perspectives are because the teachers' and learners' views of what goes on in the classrooms agree only to a certain extent. The learners revealed that the teachers used far fewer activities than the teachers indicated that they used.

There could be several reasons why there is a mismatch between the teachers' and learners' perceptions of the frequency of use of activities:

1. The learners were unsure what the activities exactly were.

2. Since learners are seldom asked for their opinion on teaching, they did not give the questionnaire careful thought, and answered without due consideration.
3. The learners' dissatisfaction with teaching in the wider context was reflected in the questionnaire, which referred only to the EFL context.
4. Some activities are not exploited and the learners indicated what really goes on in class.
5. The teachers use some of the techniques, but the learners are not aware of them.
6. The teachers do not use the activities but feel that they should, and therefore, indicated that they used them.
7. The teachers believe that they use the activities in their teaching.

### In the Classroom

The collective strengths of all the learners together in any classroom will show a great deal of variation reflecting how different learners are and how each learner's potential is different.

The learners indicated that a wide spectrum of activities, which address the various intelligences, appealed to them. However, classroom practice showed that activities which address the various intelligences were rarely used. If different activities were used in class, then they were used indiscriminately and tapped only some intelligences. The reason for this could be that teachers prefer activities which appeal to their own strengths in intelligences or are less threatening in their situation.

Consequently, some activities are more frequently used than others.

There is no doubt that learning takes place in these classrooms and that the students have an enviable command of the English language. However, the question is not whether the learners learn or don't. The question is whether the inclusion of different techniques would benefit the learners more and whether less successful learners would achieve better results.

Ellis (1989) claims that learner factors influence the way in which an L2 is acquired and intelligence, personality and cognitive style are among these factors. Therefore, variety in instruction catering for learner differences would influence the way these learners learn a language. Would the less proficient students do better if instructional modes were changed to cater for their differences? The learners indicated that different modes of instruction would certainly appeal to them. Consequently, this would have an impact on how learners feel in the classroom, their motivation and affective filter. There is no doubt that this would exert an impact on their perception of self and their self-esteem. It is also likely that in such a classroom learners would be more engaged and willing to take risks and interact freely.

Acknowledgment of different intelligence profiles would directly fulfill the learners' need for choice, which was distinctly shown in the research. Parrot (1993) states that professional competence implies teachers investigating the ways their students are disposed to learn. Thus, teachers need to help learners identify their preferred multiple intelligence learning styles and strategies and include a variety of activities which address these preferences. Gebhard (1996) states that teachers should ask themselves how learning opportunities are provided in the language classroom.

Teachers should examine their teaching and see how many different learning modes they offer their students.

In the Croatian public school context, the course content is prescribed by the Department of Education; however, there is no doubt that teachers can reexamine the course learning processes. Learners can be made aware of the learning processes and thus assume more responsibility for their own learning. “Teachers should ensure the topic and focus of learning activities appropriate for learners and should explicitly identify and explain what the goals are” (Eyring 2001: 336). If the teacher sets the framework by putting MI theory into practice and explains the objectives to the learners there is no doubt that they would experience the benefits. The results obtained in this research showed that the learners would be open to and welcome different modes of instruction.

## CHAPTER 12

### TEACHING IMPLICATIONS

#### Constraints

Nunan (1999) argues that learner roles, contributions and choices in the language learning process are significant in the learning process even in contexts where decision making is not carried out by the teachers or learners, and in contexts where it is deemed inappropriate for learners to make decisions about learning. Therefore, the learners' choices and contributions in this study could be used to help teachers make decisions about teaching and thus enhance the learning process.

There is no doubt that raising awareness of MI theory in the context would help create the foundation for further action in this field. This could be achieved through workshops, personal contacts with teachers, articles in journals as well as the methodology course at the Faculty of Philosophy. However, there are several factors within the context which should be considered when introducing MI theory into practice.

First, teachers have to be aware of and open to examining the validity of Gardner's theory as well as the benefits of catering for different intelligence styles in the classroom. In addition, with their high number of contact hours and workload, they have to be willing to put in an extra effort to implement change and include different modes of instruction.

Second, the institutions' administrative policies can be limiting. English as a foreign language at public gymnasiums does have prescribed course guidelines. Furthermore, the teachers are subject to inspections from the county EFL supervisor, national curriculum inspectors and principals who may or may not acknowledge all modes of instruction, especially the less conventional ones. Traditional exams throughout the year and school leaving exams at the end of the senior year inevitably have a backwash effect. There is no doubt that it would be unfair to introduce different modes of instruction in the classroom and carry out only traditional modes of assessment.

Third, the collegial factor also has an impact on implementation. How different is a teacher allowed to be in a context where other course instructors support traditional forms of teaching? What are the beliefs of all the other EFL teachers in the institution and how do their beliefs influence teaching practices? What is the leverage of each individual teacher? What influence has one teacher's educational philosophy on the other EFL teachers? To what degree do EFL teachers collaborate and share ideas?

Fourth, learners have expressed the desire for different modes of instruction; however, how they would really feel about these modes is difficult to say. Experience and theory are distinct. Unfortunately, learners are used to passive roles and some may feel threatened and insecure. Furthermore they are accustomed to explicit instruction and may find the different approaches ambiguous and think that the teacher is not performing his or her duties. In addition, how would a learner feel if all the courses were conducted in a traditional manner and the EFL course differed fundamentally?

Fifth, the parents, who are used to traditional teaching contexts, may feel that different teaching styles will not provide their children with the knowledge needed to

enroll in college. How important is the learning process to the parents? What are their expectations? Are grades or knowledge more significant?

The factors listed were not intended to prove that things are better left unchanged. On the contrary, the aim was to raise awareness of the complexity of decision making in the classroom and the possible difficulties teachers may encounter when implementing change. Implementing MI Theory will pose a risk for many teachers because it challenges the established teaching beliefs; however, Lange (1990) encourages teachers to take risks because success can only be measured if a challenge is met.

### Implementation

The fact that every student has a unique profile does not mean that teachers are expected to plan individual lessons for everyone in the class. Berman (1998) suggests that teachers include material designed to appeal to each of the eight intelligences. Lazear (2000) states that integrating the MI curriculum is not a matter of changing the content but incorporating the capacities of the intelligences into the teaching and learning experience. Thus, learners can use all their intelligences to master the new information and skills. Therefore, teachers can work within their curriculum not focusing only on the “what” but also on the “how”.

The literature has proposed various ways of allowing for the intelligences in the classroom:

1. To plan the annual curriculum in such a way that it provides multiple opportunities throughout the year for students to use their intelligences.

2. To screen a course unit for activities which address the intelligences and to incorporate activities for the weaker intelligences.
3. To set up MI centers in class so that learners may work on the same concept through different modes.
4. To analyze teaching practices in terms of the intelligences and work from there on.
5. To include different activities in existing curriculums.
6. To allow learners to cover a topic engaging the intelligence they are most comfortable with.
7. To occasionally include an MI lesson, which spans all the intelligences.

These are only several suggestions for implementing MI theory into the EFL context. There are no prescriptions that work in all contexts and there is little experience of teaching through the intelligences in EFL contexts. Therefore, there is no doubt that each teacher knows best what would or wouldn't work in a context and why. "Teachers select and modify theoretical ideas in ways that are consistent with their beliefs about teaching and learning and their knowledge of the ESL instructional context" (Smith 1996: 214).

Teachers need to make a genuine effort, if they are to change their ingrained habits. Rider and Rayner (1998) point out that too much teaching and learning remains intuitive. Therefore, teachers should consider methodological innovations in EFL teaching to enhance the learning processes and encourage learners to use the full spectrum of their intelligences.

## CHAPTER 13

### CONCLUSION

“All cultures have their concepts of teaching and learning” (Nunan 1999: 4).

Teachers who are non-native speakers of the language they teach have different concepts of education from the teachers who are from the culture where the foreign language is spoken. Thus, the same foreign language will be taught and learned differently throughout the world. In addition to cultural differences there are contextual differences as well as the individual differences of the learners and teachers. In brief, teaching and learning is multifaceted and complex, influenced by personal, social, cultural and political factors.

Specific cultural and sociopolitical factors have shaped the educational system and educational philosophy in Croatia. One of the greatest strengths of the system is free education at the elementary, secondary and tertiary level which provides equal opportunities for people from all social classes. Furthermore, students study at least one foreign language and obtain a wide general culture which is crucial for gaining a better understanding of the world.

On the other hand, the educational system has its weaknesses. First, that it is burdened by an old-fashioned and inflexible curriculum. Second, there is an overemphasis on book knowledge and rote learning. Third, traditional styles of learning,

teaching and assessment disregard learner differences. In general, there is an under emphasis on learner-centered classrooms and the importance of teaching.

Today, there is a growing concern for the quality of teaching and increased awareness of the need for change. Teacher education, dissemination of knowledge gained at seminars, support from international foundations and EU educational requirements have had far-reaching effects on teaching.

Complaints about the gulf between the world of learning and real life are common among students globally. However research has shown that they may be more acute in formerly socialist countries than elsewhere. In Croatia, at present, there seems to be a widespread feeling of dissatisfaction with education in the country. As a result, teachers, parents and students are pinning the blame on each other. Secondary school teachers blame elementary school teachers for encouraging rote learning and accuracy, but not fostering student initiative. Teachers at universities blame secondary school teachers for spoon-feeding the students, insisting on book knowledge and not developing students' critical thinking skills. University teachers blame students for being passive, not completing assignments or attending classes. Prospective employers claim that most students have broad, superficial book knowledge of irrelevant sometimes even outdated facts but lack proper skills and practical training. Parents blame teachers for the extensive old-fashioned syllabi, poor relations with students, and outdated teaching methods and forms of assessment. Teachers blame students for skipping classes and general disinterest in class. Students at all levels are dissatisfied with the educational system, teaching methods, teacher-student relationship, the courses and course content. In short, there is growing awareness of the need to introduce substantial change.

Social pressure on teaching and education, and aspiration towards the European Union have caused growing concern about the education provided. This concern is, among other factors, reflected in the need for changing teaching and learning styles. There is growing awareness that traditional teaching and learning styles disregard differences and no longer cater for the demands of the modern world. The banking system of education is outdated and learning is not the result of a mere transmission of facts. Professional competence implies investigating teaching and learning styles. However, for many, professional competence is not related to investigating learner differences but working on their knowledge of the subject they teach. For example, many EFL teachers are insecure about their knowledge of the language and often express the need to improve their English. Not many are aware of the perpetual need to reexamine teaching practices, focus on the learner and extend teaching styles. Workshops focusing on activities and games convey the misleading impression that teacher excellence will be achieved solely through implementation of such activities. As a result teachers are unaware that “an understanding of the intricacies of the social and psychological processes of the classroom are central to effective teacher development...” (Wright 1990: 84). Teachers need to be aware that teacher effectiveness will result from reflecting on teaching practices. However, reflection implies an understanding deeper than the concern with knowledge of the foreign language and providing fun activities. A constructivist view points out that it is impossible to define a static notion of good teaching or a good teacher because constructs about the learners, learning and teaching are continually reshaped. Thus, awareness of MI theory and learning styles will form new constructs of

teaching and learning and MI theory will provide an analytical and conceptual framework for better understanding the teacher, teaching practices and learners.

The results showed that learners have different learning styles and strengths in various intelligences. Each learner is unique and each class has a vast learning potential. Furthermore, students indicated that learning through different modes which tapped the various intelligences appealed to them. However, the various intelligences were not addresses sufficiently in the context which was burdened by traditional instructional values and practices.

Each teacher in the research also has a unique personal MI profile with different strengths and weakness. Evidence suggested that teachers preferred and used activities which appealed to their personal strengths in intelligences, but not necessarily to the strengths and intelligences of the learners. Therefore, learner individuality or uniqueness was not acknowledged. The implications for teaching are that teachers need to shift focus from the verbal transmission of knowledge in teacher fronted classrooms. Furthermore the need to acknowledge that what goes on between the learner and the teacher, between the learners themselves, and within each learner, is enormously important for learning.

There is no doubt that many teachers are unaware of the fact that their teaching styles do not address different learning styles. It may well be that increased teacher awareness and knowledge of MI theory and learning styles may help to change teachers' attitudes to and beliefs about teaching and learning and the learner. Indeed, in the Croatian context, students often claim that EFL classes are different from others and that EFL teachers are more innovative, flexible and interesting. Foreign language teachers seem most open to changes in teaching practices because they are influenced by the

teaching culture of the target language. In EFL teaching and learning the native culture and the target cultures intertwine. Because many EFL teachers have adopted non-traditional views of teaching, insights from MI theory and learning styles may lead to fuller changes in the ways they go about the business of language teaching. Teaching is never an end product but a work in progress.

Risk-taking is important. The EFL teacher can overcome lethargy, tradition, bureaucracy, and fear of change by reexamining beliefs and practices and taking risks. In traditional settings, the role of the foreign language teacher is crucial because he or she sets examples for teachers of other subjects who do not have contact with other cultures and have fewer opportunities to share ideas and experiences with teachers from other cultures, resulting in a static teaching methodology. In brief, taking up the challenge of MI theory and different learning styles in the classroom is one way in which EFL teachers will not only enhance the teaching and learning processes, but also have a far-reaching impact on teachers of other subjects in their context. Substantial benefits for teachers will accrue from MI theory.

Research has shown that learning styles and strategies have a substantial impact on success in language learning. The Multiple Intelligence Theory is only one view of the learner which shows that the human mind does not work in the same way in different people and that human beings do not have the same strengths and weaknesses. This knowledge should strongly influence the way teachers teach. Developing multiple intelligences is not in itself the goal of the EFL classroom but rather providing different approaches so that more learners could be reached in more effective ways.

It is clear that unless we teach multi-modally and cater for all the intelligence types in each of our lessons, we will fail to reach all the learners in the group, whichever approach to teaching we adopt. It is also apparent that if we impose learning styles on our students, they will prove to be ineffective.

(Berman 1998: 3)

Knowledge of the students' own style preferences is essential for teachers who wish to offer the students instructional variety, and without knowledge of their own personal style preferences teachers will not be aware of their teaching style biases. Therefore both teachers and learners need to extend their knowledge of learning styles and strategies and work towards more successful and meaningful language learning.

Generally speaking, psychological insight about individual differences can help create more efficient instructional approaches. However, there is no formulaic approach because each context is unique and no approach works for every context of foreign language learning. Different contexts have different language learning goals and favor different teaching strategies. Consequently, contexts will differ to the extent in which it will be possible to address the language needs and learning styles of every learner. Nevertheless, understanding individual differences and preferences will inevitably lead to acknowledging learner uniqueness, which will directly contribute towards more meaningful and more accomplished teaching and learning experiences.

In closing, I should like to add, that MI theory and this research in particular had a profound personal impact on me. First, it confirmed my own intuitions that people were not to be classified as either intelligent or stupid, but had a whole variety of intellectual potentials which they connected according to their personal preferences and cultural

inclinations. Second, it raised personal awareness of strengths and weaknesses in the different intelligences and a realization of how the strengths might influence ingrained teaching practice. Third, it demonstrated the need to reflect on current teaching practice using the MI theory framework of reference. Fourth, it prompted the need to be more sensitive to the learners' behavior and preferences, and fostered a better understanding of the learners and their needs. Fifth, it served as a source of input to help individualize instruction and appeal to a variety of learning styles in the classroom. However, if MI theory is to have a far-reaching influence on the Croatian context, it is necessary to disseminate MI Theory and extend its impact beyond the personal level. Therefore, both prospective and serving EFL teachers in the region will be introduced to MI theory with the aim of encouraging the teachers to analyze and rethink their teaching practices. The essence of MI theory in the EFL classroom is that teachers will involve students more integrally in the learning process and will facilitate language learning by respecting the many differences among learners thus making EFL learning a more authentic and meaningful process for all the diverse learners in class.

APPENDIX A

**THE MULTIPLE INTELLIGENCES INDICATOR**

APPENDIX B

**QUESTIONNAIRE OF EFL ACTIVITIES**

## Questionnaire of EFL Activities

Name: _____	Sex: M F
School: _____ Class: _____	Date: _____

Activity / Technique	Please rate how each activity appeals to you:	Please rate how frequently each activity is used in class
	0 - not at all 1 - a little 2 - fairly 3 - considerably 4 - enormously	0 - never 1 - rarely 2 - sometimes 3 - often 4 - frequently
<b>Pair-work</b> Studying or completing assignments with a partner		
<b>Videos</b> Using video material in the classroom		
<b>Reflection moments</b> Students have one minute periods to think about what was presented, digest the information and connect it to previous knowledge or experiences		
<b>Windows on the outside world</b> Studying changes (weather, seasons, plants, pollution...) in the environment and integrating them in the language classroom.		
<b>Journal writing-</b> Keeping ongoing written records about the subject, feelings, experiences, topics or any other domain.		
<b>Inquiry into grammar</b> Investigating and understanding the grammar of a language and not learning prescriptive rules. Discovery into the patterns of a language and linking this knowledge to the grammar of other languages.		
<b>Eco study</b> Ecology is not treated as a separate topic. The importance of having respect for the natural world is emphasized throughout the curriculum and, when possible, is integrated into every part of the lesson.		
<b>Peer teaching</b> One student coaches or teaches specific material to another		
<b>Hands-on thinking</b> Learning through activities that require manipulating objects or creating things		
<b>Opportunities for choices</b> Allowing students to choose topic, activities or exercises.		
<b>Socratic questioning</b> The teacher participates in dialogue with students and questions their point of views and the students reach conclusions through a series of questions and answers		
<b>Chants and raps</b> Using rhythm to learn concepts or encouraging students to create raps or chants		
<b>Kinesthetic Activities</b> Using games which include a lot of movement or which require bodily-kinesthetic responses. E.g. charades		



Activity / Technique	Please rate how each activity appeals to you 0 - not at all 1 - a little 2 - fairly 3 - considerably 4 - enormously	Please rate how frequently each activity is used in class 0 - never 1 - rarely 2 - sometimes 3 - often 4 - frequently
<b>Color cues</b> Color coding materials by using different colors of chalk or markers to emphasize rules, patterns or classifications.		
<b>Nature topics</b> Learning language through topics that are related to nature or learning about the environment		
<b>Presentations</b> Teachers present and explain the new material and topic		
<b>Maps – graphs</b> Maps and graphs		
<b>Background music</b> Using musical background (baroque and classical music) during instruction to enhance learning.		
<b>Using gestures</b> Explaining the meaning and enhancing understanding by using expressive movements of the body or hands.		
<b>Songs</b> Producing songs and music or using them as learning material to illustrate the content that is learned.		
<b>Team games</b> Games which involve team work and competition among groups		
<b>Drawings</b> Teaching is supported by drawings and graphic symbols		
<b>Singing</b> Engaging in singing activities		
<b>Classifying</b> Classifying and categorizing information, ideas, concepts or objects into groups to allow easier discussion or retention		
<b>Debates</b> Discussion of a question where two or more opposing sides argue a case which is then put to vote		
<b>Brainstorming</b> Students are asked to suggest words or ideas relating to a topic or problem		
<b>Nature videos</b> Using video material about nature and the environment		
<b>Discussions</b> Talking about and expressing opinions on certain topics		
<b>Cooperative groups - group projects</b> Using small groups to work on assignments or class projects		
<b>Plays</b> Class learns and performs a play		
<b>Cuisenaire rods</b> Small wooden blocks of different lengths and color which could be		

used to show stress, sentence structure and elements as well as other visual possibilities		
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## APPENDIX C

### LEARNERS' RATING OF EFL ACTIVITIES

<b>Learners' Preferences</b>	<b>Aver. Score</b>	<b>Learners' Use</b>	<b>Aver. Score</b>
Opportunities for choices	3,57	Presentations	2,95
Discussions	3,32	Pair-work	2,17
Debates	3,10	Inquiry into grammar	1,91
Independent study	3,02	Cooperative groups	1,79
Problem solving	3,01	Socratic questioning	1,76
Individual work	2,97	Discussions	1,72
Videos	2,95	Reflection moments	1,66
Options for homework	2,92	Classifying.	1,54
Brainstorming	2,86	Individual work	1,53
Presentations	2,80	Maps – graphs	1,48
Team games	2,80	Brainstorming	1,48
Socratic questioning	2,77	Problem solving	1,43
Classifying.	2,75	Lectures	1,41
Heuristics	2,75	Videos	1,37
Kinesthetic Activities	2,64	Peer teaching	1,36
Color cues	2,63	Debates	1,34
Maps – graphs	2,57	Independent study	1,34
Reflection moments	2,57	Options for homework	1,23
Lectures	2,52	Heuristics	1,22
Nature videos	2,52	Journal writing-	1,20
Cooperative groups	2,51	Team games	1,16
Drawings	2,50	Opportunities for choices	1,09
Eco study	2,50	Using gestures	1,01
Mood music	2,50	Nature topics	0,97
Plays	2,49	Eco study	0,78
Hands–on thinking	2,46	Windows on the outside	0,78
Inquiry into grammar	2,43	Drawings	0,77
Background music	2,41	Hands–on thinking	0,56
Pair-work	2,39	Role-plays	0,56
Nature topics	2,37	Chants and raps	0,50
Using gestures	2,35	Kinesthetic Activities	0,45
Journal writing-	2,33	Color cues	0,43
Windows on the outside	2,27	Nature videos	0,43
Peer teaching	2,25	Plays	0,36
Role-plays	2,25	Ecology projects	0,34
Ecology projects	2,23	Singing	0,29
Songs	2,05	Background music	0,21
Chants and raps	1,94	Songs	0,20
Singing	1,90	Mood music	0,11

Cuisenaire rods	1,85	Cuisenaire rods	0,09
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## APPENDIX D

### TEACHERS' RATING OF EFL ACTIVITIES

Teachers' Preferences	Aver. Score	Teachers' Use	Aver. Score
Discussions	3,4	Presentations	3,6
Debates	3,4	Discussions	3,6
Socratic questioning	3,2	Socratic questioning	3,6
Lectures	3,2	Inquiry into grammar	3,2
Inquiry into grammar	3,2	Brainstorming	3
Presentations	3	Pair-work	2,8
Opportunities for choices	3	Lectures	2,4
Individual work	3	Songs	2,4
Videos	2,8	Peer teaching	2,4
Team games	2,8	Reflection moments	2,4
Peer teaching	2,8	Problem solving	2,2
Heuristics	2,8	Cooperative groups	2,2
Cooperative groups	2,8	Independent study	2,2
Reflection moments	2,6	Debates	2
Independent study	2,6	Team games	2
Classifying.	2,4	Journal writing-	1,8
Brainstorming	2,4	Heuristics	1,8
Role-plays	2,2	Maps – graphs	1,8
Plays	2,2	Individual work	1,8
Pair-work	2,2	Options for homework	1,8
Songs	2	Eco study	1,8
Problem solving	2	Classifying.	1,6
Nature topics	2	Videos	1,6
Mood music	2	Opportunities for choices	1,6
Windows on the world	1,8	Role-plays	1,4
Using gestures	1,8	Singing	1,4
Options for homework	1,8	Drawings	1,2
Drawings	1,8	Using gestures	1,2
Singing	1,6	Windows on the outside	1,2
Maps – graphs	1,6	Color cues	1
Journal writing-	1,6	Plays	1
Background music	1,6	Chants and raps	1
Eco study	1,4	Nature topics	1
Ecology projects	1,4	Ecology projects	0,8
Nature videos	1,2	Hands–on thinking	0,6
Color cues	1,2	Mood music	0,6

Hands-on thinking	1	Nature videos	0,6
Chants and raps	1	Cuisenaire rods	0,4
Kinesthetic Activities	0,8	Kinesthetic Activities	0,4
Cuisenaire rods	0,6	Background music	0,4

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