MULTIPLE INTELLIGENCES THEORY IN ENGLISH LANGUAGE TEACHING
AN ANALYSIS OF CURRENT TEXTBOOKS, MATERIALS AND TEACHERS’ PERCEPTIONS

A thesis presented to
the faculty of
the College of Arts and Sciences of Ohio University

In partial fulfillment
of the requirements for the degree
Master of Arts

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November 2003
This thesis entitled
MULTIPLE INTELLIGENCES THEORY IN ENGLISH LANGUAGE TEACHING
AN ANALYSIS OF CURRENT TEXTBOOKS, MATERIALS AND TEACHERS’ PERCEPTIONS

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Abstract

This study analyzes the current application of Multiple Intelligences Theory in English language teaching in terms of textbooks and materials. Moreover, teachers’ perceptions of issues related to MI theory, selection of textbooks and extra materials are discussed. Six current English textbooks are analyzed in order to know how they respond to MI theory and to what extent the textbook activities help enhance language learners’ intelligences. Two groups of ELT teachers, Brazilian and International, answered a survey about their teaching contexts, teaching experience, selection of textbooks and materials, and MI theory. The study shows that MI is known and used by ELT teachers. In regards to textbooks, results show that the activities in the textbooks analyzed mainly cater to 4 intelligences: verbal/linguistic, intrapersonal, spatial/visual, and interpersonal. Suggestions on exploitation and supplementation of textbooks are made in order to include most intelligences in language teaching and to consider learners’ intelligence profiles.

Approved: David Michael Bell
Assistant Professor of Linguistics
Acknowledgments

I would like to thank my thesis committee, Dr. David Bell, Dr. Scott Jarvis and Dr. Christopher Thompson. Dr. Bell’s immense support, guidance, patience and trust in my thesis encouraged me throughout the process. His help was truly appreciated. Dr. Jarvis was very supportive with his comments and suggestions since the beginning of my thesis. Dr. Thompson’s support, comments and suggestions were also appreciated.

I would like to thank some of the people who have encouraged and trusted me in my professional life: Teresa Araújo, Karen Kuhel, Eduardo Carvalho, Karina Silva, Benedita Cazé, Lúcia Bodeman, Mônica Carvalho and some other friends. Their incentive has helped me on many important occasions in my career (and studies).

I would like to thank The Fulbright Commission and Ohio University for sponsoring my Master’s program. I would also like to thank all the participants in my data collection especially teachers from two language institutes in Brazil: Associação Brasil-América, and Centro Cultural Brasil-Estados Unidos. Many thanks to Eveline Cavalcante and Luciana Renda who helped me with my data collection.

Last but not least, I would like to thank my family for all encouragement, trust and care at all times. Special thanks to my brothers Fernando, Tadeu, Sérgio, my sisters-in-law Izabel and Edilene for being very supportive, and my son Lucas for helping mom accomplish this valuable goal.
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Chapter 1

Introduction

Multiple Intelligences (MI) Theory became known not only in the USA but also in the world in the 1980s, when Howard Gardner (an American psychologist) suggested that each individual has different aptitudes and abilities in several subjects, and that each person has several types of intelligences that are combined differently. Gardner (1983) says: “In its strong form, multiple intelligence theory posits a small set of human intellectual potentials, perhaps as few as seven in number, of which all individuals are capable by virtue of their membership in the human species” (p.278). According to Gardner (1983), each person is able to develop each intelligence and that some of the intelligences will be more developed than others. Each person can develop his/her intelligences through education especially when there is training at early ages.

Snider (2001) mentions that, “before Gardner, intelligence was thought to be a static, single construct” (p. 5). This view of intelligence as unitary and constant refers to the traditional view of intelligence, the Intelligence Quotient (IQ). Gardner critiques the IQ test because it only considers and measures language and logic. He believes that besides the verbal-linguistic and logical-mathematical intelligences, each individual has six more intelligences, which are: musical, bodily-kinesthetic, interpersonal, intrapersonal, spatial-visual, and naturalist. Originally there were only seven but the last
one was added in the past years (Gardner, 1999). Gardner also considers the possibility of adding other intelligences, which are existential\(^1\), spiritual and moral.

Due to the emergence of MI Theory, changes have been made in school curriculums in order to consider the new view of human capacities. Many public and private schools started to base their curriculum upon multiple intelligences theory after the publication of Gardner’s *Frames of Mind* in 1983 (Weiner, 2001).

More recently MI Theory has been considered in language teaching. Language teachers started to relate the MI model with learning styles and to consider the benefits of using MI to enhance learners’ abilities and individual needs. According to Snider (2001), “MI Theory-related materials have the strong potential to improve foreign language (FL) instruction because they engage learners’ innate abilities” (p. 6). By applying MI Theory EFL/ESL teachers can address the great diversity in learners, develop learners’ intelligences and “create an individualized learning environment” (Christison, 1996, p.10).

MI is just one indication of the larger changes that have taken place in English Language Teaching (ELT). These changes reflect the innovations proposed by new approaches, methodologies and theories that arose especially in the 70s and the 80s. The innovations are an attempt to recognize and accommodate learners’ different styles, potentials and intelligence profiles. One of the greatest changes was the shift in English language instruction, from a teacher-centered, to a learner-centered approach (Snider, 2001, p. 12). Total Physical Response (TPR), Suggestopedia, Cooperative Language

\(^1\) This study considers nine intelligences including existential because the study was based on Palmberg (2001); however, in Gardner (1999) the list was reconsidered and only eight intelligences were acknowledged.
Learning, and Communicative Language Teaching (CLT) are some of the ELT approaches, methods and techniques that became widely known. CLT is one of the most known approaches due to its emphasis on communicative competence. Many methods and approaches share some similarities with MI; for instance CLT considers learners’ needs, and unique styles just like MI theory considers learners’ intelligence profiles in language teaching. Some considerations related to the innovations in ELT and MI will be discussed in the Literature Review.

Since FL teaching has changed in order to accommodate learners’ needs and potentials, considerable modifications have also been observed in FL textbooks. Textbooks employ a variety of tasks that combine different methods and approaches in order to reflect the shifts in FL teaching. According to recent research (Snider, 2001, p.1), some textbooks present elements of the Audiolingual method (AL), TPR and CLT in a single book showing an eclectic combination of methods, approaches and techniques. In one study, Snider (2001) analyzed ten well-known textbooks for German first-year college learners in order to identify different types of activities that were included in textbooks and analyze how the activities in the textbooks engaged multiple intelligences in learners. In another recent study (Palmberg, 2001), a group of student teachers evaluated how current FL textbook activities are related to MI Theory and to what extent they engage MI in FL instruction. The study shows that not all of the nine intelligence types are included in the activities in textbooks, and some of the intelligences predominate in the textbooks such as the verbal-linguistic and intrapersonal intelligences.
The study suggests that teachers should consider the intelligence profile of the course books they choose in order to evaluate how they fit their learners.

Given that textbooks have responded to the changes in FL teaching by combining different methods and approaches, MI Theory should also be taken into consideration in language teaching. MI Theory can contribute greatly to language teaching both in EFL and ESL contexts due to the fact that it considers learners’ potentials, styles and differences in intelligence profiles. The combination of current methods and approaches such as CLT associated with the principles of MI Theory would benefit language learners because they can learn according to their strengths and preferences and they can also develop their less-developed areas while learning a language. What’s more, teachers can help learners build their confidence since they can count on their own strengths and understand their potentials.

Background to the study

Since language teaching has changed greatly in the last decades throughout the world, changes were also observed in Brazil. This study focuses on the Brazilian context due to my experience as a language teacher in Brazil. I have taught English at language institutes for about fifteen years. Language institutes are private schools where English is taught as a foreign language. Some of the language institutes are called Bi-National Centers\(^2\) (BNCs). They are American BNCs where English is taught in combination with

\(^2\) “Bi-National Centers, the American equivalent of the British Council” (Griffith, 1991, p. 292).
American culture. By the 1990s there were over sixty American Bi-National Centers in Brazil (Griffith, 1991, p. 292).

In the early eighties, many Brazilian language institutes applied the Audiolingual Method and the teacher had a controlling role in language teaching. The teacher was responsible for choosing materials, correcting learners’ mistakes and making decisions in the class. Due to a greater interest in learning English in Brazil, many private language institutes were established and there was a need for teachers to develop their teaching approaches in order to enhance learners and motivate them in the learning process.

Brazilian teachers have had more training in ELT, especially in the nineties, and they have become familiar with new approaches and methods in ELT. Total Physical Response, Silent Way, Cooperative Language Learning and CLT are well known methods and approaches and many language institutes apply them. Brazilian teachers learned about Bloom’s Learning Taxonomy\(^3\), learning strategies, learning styles, and multiple intelligences.

In 1999 several specialists in ELT visited Brazil: Mary Ann Christison, professor at the University of Utah and Patricia Prinz, Assistant Professor of Education at New England College. Dr. Christison gave workshops in several BNCs during her visit. At the BNC in Recife, Associação Brasil-América, she presented workshops on MI and learning styles, as she reported to the Bureau of Educational and Cultural Affairs, U.S. Department of State. She commented: “I was impressed with the quality of teachers and the support that the Centers [BNCs] give their teachers for professional development.”

\(^3\) Bloom’s Learning Taxonomy “categorizes levels of mental ability from attaining knowledge of facts, to the ‘higher order’ thinking involved in synthesizing and critically evaluating the thought process” (Snider, 2001, pp.57-58).
Dr. Prinz presented a course on Teaching and Learning Scaffolds for the EFL Class at the 55th Seminar of Teachers of English at Instituto Brasil- Estados Unidos, the BNC in Rio de Janeiro in July 1999. She mentioned that more than 100 teachers from all over Brazil participated in the seminar. She also presented workshops about Cooperative Learning in the BNC in Recife. Teachers in language institutes started to consider all the innovations in language teaching and they have changed their teaching styles as an attempt to accommodate learners’ styles and interests as well. In consequence, learners have been encouraged to be more active participants in the classroom and teachers use a more learner-centered approach.

Brazilian teachers usually participate in teacher development courses, seminars, workshops and conferences like the BRAZ-TESOL, the Brazilian chapter of TESOL. Furthermore, teachers take courses abroad, especially in the US or in Britain. In events like the BRAZ-TESOL, several international professors, well-known book writers, researchers and teachers make presentations. David Nunan (in an interview to the magazine New Routes, no. 3, 1998) comments about the BRAZ-TESOL conventions: “I’ve attended half of the BRAZ-TESOL conventions that have been held, and I thoroughly enjoy them because of the level of the professionalism that’s demonstrated, and also the fact that the Brazilian teachers are so responsive and so receptive” (p. 4). Similarly Griffith (1991) notes with regard to the Brazilian context for ELT that “the distinguishing feature of Brazilian EFL is the high proportion of well qualified Brazilian English teachers” (p.296).
Some language institutes hire American and/or British teachers in order to provide opportunities for Brazilian teachers (and learners) to be in contact with native speakers of English and to be in constant contact with the newest trends in language teaching. Griffith (1991, pp. 296-297) mentions that some language institutes hire teachers (and teacher-trainers) for temporary jobs. The qualifications for being hired in language institutes vary from being very fluent (or native speaker) to having a BA in TEFL. Some language institutes hire native English teachers for eight weeks but some require a two-year contract (Griffith, 1991, p. 292).

The current trend in ELT in Brazil is that many language institutes claim that they apply the principles of MI in their curriculum especially for teaching young learners. Many BNCs advertise that their curriculum is based on MI. In the late nineties, as mentioned before, there were workshops on Multiple Intelligences all over Brazil. This study’s survey of Brazilian EFL teachers suggests a sophisticated group of teachers who have had some exposure to MI Theory. The interest in MI has increased throughout the years; therefore more language institutes implement MI in their curriculum. However, it seems that not all Brazilian teachers use principles of MI Theory in their teaching and that they sometimes use MI but without being aware of it. This study seeks to find more information about the application of MI theory especially in the Brazilian context.

Statement of the problem

Despite the fact that many teachers consider learners’ individual profiles while planning their lessons, textbooks for the most part determine the curriculum in many
language institutes. Since most language institutes do not base their curriculum on benchmarks\textsuperscript{4}, textbooks play an important role in language teaching. Unfortunately, teachers choose (or use) textbooks without much guidance, so there is a need to provide some suggestions to teachers on how to choose and exploit textbooks and materials to meet the students’ needs and MI profiles wherever MI is applied. Although many teachers have interest in MI theory, some of them do not know how to apply it.

**Purpose of the study**

The purpose of this study is to analyze how ELT textbooks respond to MI theory and to what extent they include all the intelligences in the activities provided. Before embarking on this research project, I informally observed that not all of the intelligences are included in current textbooks and that there is a need to supplement the intelligences not included in ELT textbooks to best enhance all the intelligences and benefit all types of learners teachers will deal with in ELT instruction in Brazil and throughout the world. In this study I examine this phenomenon in more detail, and also seek to identify ways to help teachers choose textbooks that will best suit their learners when they apply MI Theory to their teaching.

This study differs from Snider (2001) since Snider focused on German language teaching (German textbooks) and this study focuses on ELT and it analyzes materials that are used especially in the EFL context. Furthermore, I collected data from Brazilian and

\textsuperscript{4} Benmarks are specific goals and objectives learners should achieve at certain levels of language learning.
international\textsuperscript{5} EFL and ESL teachers in order to have a broader analysis of ELT. This study expands the analysis that was done by a group of student teachers in Finland (Palmberg, 2001) since six textbooks are analyzed. In Palmberg, a single textbook was analyzed and the book analyzed was being used in Finland, so the analysis focused on the EFL context.

Research Questions

The primary aim of this study is to analyze the relationship between MI Theory and English Language Teaching, so the first question that guided this study was related to the knowledge and use of MI theory in language teaching. The secondary aim of this study is to investigate the criteria English teachers use to select textbooks and extra materials for their learners and how that impacts the use of MI in the classroom. Because this study focuses on the teaching of English in Brazil where many language institutes apply MI Theory, this researcher sought to investigate if the textbooks currently being used in Brazilian language institutes incorporate principles of MI. The third research question therefore is concerned with the degree to which current textbooks incorporate the principles of MI Theory, which intelligences are included in EFL / ESL textbooks and to what extent they engage MI in learners.

As mentioned before, language teachers attempt to consider learners’ individual needs when planning their lessons, so they supplement textbooks with activities in order to engage different types of learners in a single class. This study also sought to identify ways of offering some suggestions to language teachers on how to adapt the textbooks

\textsuperscript{5} For the purpose of this study international subjects refer to teachers from countries other than Brazil.
and materials they use. The last research question therefore is concerned with how teachers can exploit and supplement textbook activities in order to cater to different student intelligence profiles.

Limitations and Delimitations

This study focuses on the teaching of English in language institutes mainly in Brazil; therefore some of the results may not apply to other contexts such as the teaching of English in private and/or public schools where the Grammar–Translation Method is mainly used. At language institutes, CLT is widely used and classes are taught in the target language not in the native language as it is taught in public and many private schools in Brazil.

Definition of terms

Textbook – This study considers textbook as an integrated skills general English course book used for teaching either EFL or ESL.

EFL refers to the teaching and learning of English as a Foreign Language. For instance, English is a foreign language in Brazil since Brazilians speak mostly Portuguese outside the classroom. The use of English outside the classroom depends on students’ exposure to and interests in the target language. Students can have access to the target language through cable TV, movies, radio, electronic equipment and the Internet. In some cases, English can be spoken in business and/or tourist situations or through contact with exchange students.
ESL refers to the teaching and learning of English as a Second Language. Learners are exposed to an English-speaking environment so they can speak and use English outside the classroom.

Intelligence profile refers to each individual profile in terms of MI Theory. It considers that each individual has a different combination of the eight (or more) intelligences.

Textbook intelligence profile refers to the combination of intelligences identified in the textbook activities. This term was used by Palmberg (2001). It is worth mentioning that intelligences are in individuals and that the activities in textbooks help learners develop their intelligences.

Bi-National Centers are institutions where “English teaching is usually a major component of their cultural, educational, and information activities”. They also promote “mutual understanding between the host country and the United States”. Although the American Embassy cooperates with BNCs, they are independent institutions financially and administratively.

Organization of the study

This study consists of six chapters including this introduction. Chapter two is the theoretical background to this study. It describes the IQ test, Gardner’s MI Theory and its relations to ELT. The chapter also includes a discussion of the role of textbooks in ELT, textbook selection and the review of current research. Chapter three presents the analysis

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6 Information from the Bureau of Educational and Cultural Affairs retrieved on May 13, 2003.
of data collected from the survey and the methodology used in the study including the procedures for choosing subjects, the instrument and the way the data was collected. It also presents the survey’s results and discussion. Chapter four presents the data collected from the textbook and the methodology used to collect the data. It also includes the textbook results and discussion. Chapter five presents suggestions for applying MI in the curriculum, exploiting textbooks, supplementing textbooks with activities using MI Theory, planning lesson with MI, and assessing learners’ intelligence profiles. Chapter six, the conclusion, summarizes the study and offers suggestions for future research.
Chapter 2

Literature Review

Introduction

First I will discuss the concept of intelligence according to intelligence tests, IQ tests. Considerations about the use of IQ tests in Western societies will also be discussed. Then I will examine Gardner’s view of intelligence and describe his theory of multiple intelligences, MI. Considerations about the application of MI in education will be discussed and some studies, articles and books on MI will be reviewed. Next, the combination of MI and learning styles will be discussed. Then similarities among language teaching methods/approaches and MI will be described and discussed. After consideration of methods/approaches, the integration of MI in current practice will then be described especially in language teaching.

Following a review of MI theory and its application, textbook importance and selection will be discussed according to several researchers’ views. The role of textbooks and criteria for choosing them will be discussed. After discussing textbooks in general, two studies about textbooks and MI will be reviewed. These studies were considered as the theoretical base for this study.

Concepts of Intelligence (Intelligence Tests)

According to Gardner (1999), every society has its own ways of considering an ideal human being, such as the ancient Greeks who valued “physical ability, rational
judgment, and virtuous behavior” (p.1), while the Romans valued courage. In China, skills in music, drawing and archery were valued. In many Western societies, “the intelligent person” has been valued for centuries (p.1). The adjective intelligent has a strong impact on people, so those who are labeled “intelligent” are expected to be able to succeed not only in academic life but also in tasks or situations those people face in life. This is usually the general sense of intelligence. However, in Western societies the word “intelligent” can also refer to high score results in IQ tests.

Many psychologists have attempted to define and measure human intellectual capabilities. One of these psychologists was Francis Galton who believed that intelligence was inherited (Gardner, 1999, p.2) and he believed he could measure intelligence, so he developed formal IQ tests in the late nineteenth century. In 1906 the French psychologist Alfred Binet developed the most well known IQ test in the world. Binet wanted to test French children in order to predict their academic potential and identify children with learning disabilities. This way, those children could be helped in order to succeed in school.

The IQ test was modified to best suit American society in the 1920s and 1930s (Gardner, 1999, p.12) and it became known as the Stanford-Binet IQ test. The IQ test is administered especially in primary school to predict success in academic studies. Since the IQ tests were being largely used in the USA for several purposes, some restrictions were made to the use of IQ tests in schools. American school psychologists only administer the IQ tests when there is a need to identify either if a child has some disability in learning or if he/she is gifted (Gardner, 1999, p. 18). In a handout for parents
distributed by the (American) National Association of School Psychologists (1998), psychological tests such as intelligence tests are described as diagnostic tools used by psychologists to predict academic success. The tests are composed of “verbal” and “performance” tasks, some tasks are “puzzles and copying patterns”. Some of the tests are the Wechsler Intelligence Scale for Children, Kaufman Assessment Battery for Children, Stanford-Binet and Woodcock-Johnson Psycho-educational Battery (p.86).

Other tests were created in order to measure human capabilities. Tests such as Scholastic Assessment Test (SAT) are also similar to IQ tests. Even achievement tests resemble IQ tests (Gardner, 1999, p.3).

Many psychologists claim that IQ tests are valid for predicting academic achievement, as they were primarily created; however, they cannot predict success in life outside school and they cannot determine what intelligence is or how intelligent a person is. Gardner (1999) states:

So long as these tests continued to do what they were supposed to do—that is, yield reasonable predictions about people’s success in school- it did not seem necessary or prudent to probe too deeply into their meanings or to explore alternative views of what intelligence is or how it might be assessed. (p.13)

Since the IQ tests predict academic success, they have been used for several purposes. For instance, IQ tests have been used to make decisions about jobs and educational opportunities (Gardner, 1999, p. 3). They have also influenced teaching practices and the way learners are tested in traditional schools.

Although the IQ tests have been administered for about a century, many psychologists have questioned their validity. The concept of intelligence as a singular,
static and inherited characteristic is subject to criticism and the IQ test is being criticized. As Snider (2001) states “Gradually, the instrument that once seemed miraculous was beginning to be vulnerable to scrutiny” (p. 55). Gardner (1993) adds “dissatisfaction with the concept of IQ and with unitary views of intelligence is fairly widespread” (p. 7).

Gardner’s Theory of Multiple Intelligences

As mentioned before, Howard Gardner revolutionized the view of intelligence when his book *Frames of Mind* was published in 1983. He proposed a new theory called multiple intelligences. Gardner believes that intelligence cannot be measured by traditional tests such as IQ tests and his view of intelligence differs from the traditional view. Gardner argues that, “Multiple intelligences theory, on the other hand, pluralizes the traditional concept” (1993, p.15). His definition of intelligence is “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, pp. 33-34). Gardner claims that each individual has at least eight intelligences (which were mentioned before) and the intelligences are combined in different manners, so each individual has a different intelligence profile, which is a combination of all the intelligences. Each person has some strong intelligences (strengths) and some are not well developed (weaknesses). Gardner (1993) believes that the intelligence profile can be changed and improved through education. Gardner (1999) states that each person’s potentials can be activated and this activation depends on several aspects such as “the
values of a particular culture, the opportunities available in that culture, and the personal
decisions made by individuals and/or their families, schoolteachers, and others” (p. 34).

There are seven original intelligences: verbal/linguistic, logical/mathematical,
spatial/visual, bodily/kinesthetic, musical, intrapersonal, and interpersonal. In the late
nineties, Gardner considered one more intelligence, naturalist. Gardner considers the
possibility of adding other intelligences such as existential, spiritual and moral. However,
Gardner has recognized only eight intelligences so far.

Gardner, unlike other psychologists, did not rely heavily on the instruments used
by psychometric tests when he researched human intelligences. In the words of Gardner
(1999): “I laid out a set of eight separate criteria. I combed the relevant scientific
literature for evidence on the existence of many candidate faculties” (p.35). The eight
criteria considered were based on: biological sciences, developmental psychology,
logical analysis and traditional psychological research. The criteria\(^7\) are: 1) “the potential
of isolation by brain damage”, 2) “evolutionary history and evolutionary plausibility”, 3)
“identifiable core operation or set of operations”, 4) “susceptibility to encoding in a
symbol system”, 5) “a distinct developmental history, along with a definable set of expert
‘end-state’ performances”, 6) “the existence of idiot savants, prodigies, and other
exceptional people”, 7) “support from experimental psychological tasks”, and 8) “support
from the psychometric findings” (Gardner, 1999, pp. 35-41).

In *Frames of Mind* (1983), Gardner describes each intelligence in detail. He
explains each intelligence and gives examples of professionals who are strong in each
intelligence. For instance, a scientist like Albert Einstein is strong in logical-

\(^7\) For detailed descriptions and explanations of the eight criteria see Gardner, 1999.
mathematical intelligence, while Michael Jordan is strong in bodily-kinesthetic intelligence. Both Einstein and Jordan have other strengths besides the ones mentioned and their intelligence profiles are different because each person develops their intelligences in distinct manners.

The descriptions of each intelligence are given below. These descriptions are a combination of several sources (Christison, 1996; Christison & Kennedy, 1999; Gardner, 1999; Lazear, 1993; Snider, 2001; and Stefanakis, 2002).

Verbal/Linguistic (VL) represents the capacity to use language in an effective manner in speech and writing. It also includes being able to use language for convincing others, understanding patterns of a language (in terms of grammar use or appropriateness of language). This intelligence is involved in using the language to remember information, tell stories, jokes, write letters or poetry. Lazear (1993) adds, “this intelligence is involved in any use of metaphors, similes, and analogies, and, of course, in learning proper grammar and syntax in speaking and writing” (p.15).

This intelligence is traditionally tested in many standardized tests such as Test of English as a Foreign Language (TOEFL), SAT, Graduate Record Examination (GRE) among others (Snider, 2001, p.70) as well as psychological tests like the Stanford-Binet, the IQ test (Snider, 2001, p.53). The verbal linguistic intelligence is evident in poets, writers, lawyers, teachers, politicians, and storytellers.

Logical/Mathematical (LM) represents the skill to use numbers effectively and reason well. This intelligence is involved in recognizing abstract patterns, making predictions, sequencing, problem solving and scientific investigation. “This intelligence
is often associated with what we call ‘scientific thinking’ ” (Lazear, 1993, p. 15). People who are strong in this intelligence are mathematicians, engineers, accountants, logicians, computer programmers and scientists. As well as verbal linguistic, this intelligence is mainly used in standardized tests (Snider, 2001, p. 74). And as Gardner (1999) states:

Having a blend of linguistic and logical-mathematical intelligence is no doubt a blessing for students and for anyone else who must take tests regularly. Indeed, the fact that most psychologists and most other academics exhibit a reasonable amalgam of linguistic and logical intelligence made it almost inevitable that those faculties would dominate tests of intelligence (p. 42).

Spatial/Visual (SV) involves “the sensitivity to form, space, color, line and shape” (Christison, 1996, p.11). It also involves visualizing things either mentally or graphically. The ability to solve problems related to the notion of space such as using a map to locate a place in a city or drawing a floor plan are examples of SV intelligence. Some people who are strong in spatial/visual intelligence are architects, navigators, painters, sculptors, and graphic artists.

Bodily/Kinesthetic (BK) involves the ability to solve problems using the body and being able to express thoughts, ideas, and emotions through movements and gestures. “Sample skills are coordination, flexibility, speed, and balance” (Christison, 1996, p. 11). Activities such as riding a bike, typing, cooking, building things, driving a car, miming, dancing and playing sports are examples of using this intelligence. Some professionals who are strong in BK are athletes, dancers, acrobats, and actors.

Musical (M) involves the ability to express emotions and feelings through music showing “sensitivity to rhythm, pitch, and melody” (Christison, 1996, p. 11). It also
entails the ability to hum, whistle or sing a tune. Composing songs, playing musical instruments and even creating music from objects that are not intended to be a musical instrument are some examples of using musical intelligence. Musicians, composers, conductors, and singers are professionals whose musical intelligence is strong. However, this intelligence is not limited to professions related to music, common people also have strength on musical intelligence, for instance, those who usually enjoy singing in the shower, singing along with a song, listening to music or creating new songs based on a familiar tune.

Interpersonal (IR) is the ability to interact with people effectively, for instance, while working on a team, playing on a sports team, or being part of a community. It involves the ability to understand others, be sensitive to other people’s feelings, moods, motivations, and behavior. (Christison, 1996, p. 11). Lazear (1993) adds, “this intelligence utilizes our ability to engage in verbal and nonverbal communication and our capacity to notice distinctions among ourselves” (p.18). It entails the ability to have empathy with others and care for other people. This intelligence has been valued more in job requirements since it is really important to jobs that require leaders who are able to motivate others in a respectful and successful manner. “One who possesses strength in this domain can often motivate others to certain actions based on an innate understanding of others” (Snider, 2001, p.79). Professions such as religious leaders, teachers, salespeople, politicians, counselors, and all kinds of team leaders (coaches, coordinators, supervisors, directors) “need acute interpersonal intelligence” (Gardner, 1999, p. 43).
Intrapersonal (IA) “involves the capacity to understand oneself, to have an effective working model of oneself – including one’s own desires, fears, and capacities – and to use such information effectively in regulating one’s own life” (Gardner, 1999, p.43). This intelligence involves self-reflection, self-awareness, self-consciousness, and introspection. Lazear (1993) adds, “intrapersonal intelligence allows us to be self-reflective, that is, to step back from ourselves and watch ourselves, almost like an outside observer” (p.19).

Gardner (1999) considers the interpersonal and intrapersonal intelligences as “the personal intelligences” and he states these intelligences are the most controversial ones (p.43).

Naturalist (N) entails the ability to “understand the natural world” (Stefanakis, 2002, p.2) by recognizing, classifying and categorizing species found in nature such as plants, animals, and minerals (Christison & Kennedy, 1999, p. 1). Gardner states that the naturalist intelligence is valued in many cultures, both in cultures with “scientific orientation” and without it. The ability to distinguish species that are harmful or beneficial to humans is one of the skills of a naturalist\(^8\) person. “A naturalist demonstrates expertise in the recognition and classification of the numerous species – the flora and fauna – of his or her environment” (Gardner, 1999, p. 48). People such as biologists, environmentalists, ornithologists, and geologists are strong in the naturalist intelligence. One example of naturalist is the French Jacques Cousteau, who traveled the world in expeditions to explore oceans.

\(^8\) The term “naturalist” in this context refers to strength in naturalist intelligence.
Existential (E)

Even though Gardner does not confirm existential intelligence as the ninth intelligence, he has discussed it in his book *Intelligence Reframed* (1999, pp.60-66). Gardner (1999) states that “existential intelligence scores reasonably well on the eight criteria” and he adds “however, I conclude that the narrowly defined variety of spiritual intelligence here termed “existential” may well be admissible, while the more broadly defined “spiritual intelligence” is not” (p.64). Existential intelligence is described in the words of Gardner:

The capacity to locate oneself with respect to the furthest reaches of the cosmos – the infinite and the infinitesimal – and the related capacity to locate oneself with respect to such existential features of the human condition as the significance of life, the meaning of death, the ultimate fate of the physical and the psychological worlds, and such profound experiences as love of another person or total immersion in a work of art” (p.60).

Gardner (1999) states that each culture values this capacity and that “cultures devise religious, mystical, or metaphysical systems for dealing with existential issues” (p. 61). Gardner mentions the religious leader Gandhi and the physicist Albert Einstein when he explains some features of existential intelligence (p.62).

According to Gardner (1999) existential capacity is “a distinctive trait of humans, a domain that separates us from other species” just like language. It is possible that a sense of “finite space and irreversible time” and the attempt to fight against them have contributed to this capacity (p.62). Gardner (1999) concludes his discussion about existential by saying:
Despite the attractiveness of a ninth intelligence, however, I am not adding existential intelligence to the list. I find the phenomenon perplexing enough and the distance from the other intelligences vast enough to dictate prudence – at least for now. At most, I am willing, Fellini-style, to joke about ‘8 1/2 intelligences’” (p.66).

Although many psychologists do not support the theory of multiple intelligences (since they agree with the psychometric\(^9\) view of intelligence), many educators agree with Gardner’s view of intelligence and use MI in their teaching. Several examples confirm the consideration of MI in education and some researchers have analyzed the application of MI in the US. Weiner (2001) analyzed the implementation of MI in elementary schools and identified a set of commonalities among the schools. She developed a set of guidelines for effective implementation of the theory in schools. Jones (1996) described the implementation of MI in inclusive elementary classrooms (special education). The results showed that teachers were certain that inclusion with MI benefits students in inclusive classrooms. Campbell (2000) analyzed how knowledge about MI theory influenced teachers’ beliefs about intelligence and instruction. The results showed that “10 of the 11 teachers said their beliefs about intelligence changed. Changes included shifting from fixed to modifiable notions of IQ and from tacit to explicit beliefs about intelligence” (pp. ii-iii).

Many schools in the US have changed their curriculum (Gardner, 1993; Richards & Rodgers, 2001; Snider, 2001; Weiner, 2001) in order to apply the theory and teachers on a local level have had training in MI. For instance, East Elementary teachers in

\(^9\) “The view of intelligence that is most well known to nonprofessionals is the psychometric view, often associated with the intelligence quotient (IQ) test” (Snider, 2001, p.50).
Athens, Ohio, had some training with David Lazear about seven years ago. Lazear presented a two-day workshop about the theory and its application in teaching. Some teachers started to use MI in their teaching including the special educator. In 2003, East Elementary teachers and educational aids all had another training in MI in order to extend the application of MI in the school.

As described before, the application of MI in education is expanding more not only in the USA but also in other countries like Brazil. MI is part of many school curriculums like “The Key School, an elementary school in Indianapolis” (Hatch & Gardner in Torff, 1997, p.16), Cambridgeport School in MA (Stefanakis, 2002, p.xxv) and East Elementary School in Athens, OH. The application of MI is perhaps more common in elementary schools; however, teachers in some middle schools and universities also apply MI to their teaching. “Many university education schools teach MI in courses in human development and general methods” (Torff in Stefanakis, 2002, p.xvii) “Clearly, MI ranks among the most significant developments on the educational scene in the last half century” (Torff in Stefanakis, 2002, p. xvii).

Stefanakis (2002) claims that applying MI with portfolios is an excellent way to address diversity in the classroom as well as to empower students to achieve success in learning. In the words of Stefanakis: “all children have multiple intelligences and it is our job as educators to use their capabilities, not disabilities, to become more effective teachers” (p. xxvii).

Teachers, who have applied MI in their teaching, state the benefits that the theory brings to their learners such as having several ways to learn and to demonstrate their
learning, through using their strong intelligences and/or by developing their weak ones (as well as by using their learning styles). Variety is also mentioned as a way of motivating students to learn and giving choices for students demonstrate their learning. MI also allows variety in teaching and challenges teachers. A more detailed discussion about teachers’ view on MI theory will be presented in chapter three.

Besides the studies on MI, there are many books and articles. Some articles\textsuperscript{10} are about MI and learning styles (Christison, 1998b; Silver, Strong & Perini, 1997). Some of the books are about using portfolios with MI, assessment in a MI environment, and resource books for K-12 with many lesson plans and with ideas to teach parents and students about MI (Lazear, 1993; O’Connor & Callahan-Young, 1994).

Many educators agree that MI Theory certainly contributes to general education and that is the reason why so many teachers have started to learn more about MI and apply it in their teaching.

There are also some studies that have focused on the application of MI in language learning and teaching such as Palmberg (2001) and Snider (2001). These studies will be discussed later in this chapter. There are resource books on ELT as well (Berman, 1998; Christison, 2001\textsuperscript{11}).

Perhaps the first book to apply MI to ELT was Michael Berman’s book “A Multiple Intelligences Road To An ELT Classroom” (1998). Berman’s book is full of activities ready to be used by ELT teachers. There are separate chapters for each intelligence. Some activities are created to practice some tricky grammar points such as

\textsuperscript{10} These articles will be reviewed in the discussion about learning styles and MI.

\textsuperscript{11} This book (Multiple Intelligences and Language Learning: A Guidebook of Theory, Activities, Inventories, and Resources) was exhibited during the TESOL conference in Baltimore in March 2003.
articles, prepositions, and gerunds while enhancing the intelligences in learners; other activities are created to practice vocabulary or pronunciation. The book also offers tips for teachers and provides some interesting information about language teaching and learning. Berman (1998) reinforces the benefits that MI can offer to ELT because teachers can view learners as individuals who have unique ways of learning and perceiving things. Teachers can consider learners’ profiles when using MI in their teaching. Berman wrote:

Gardner’s work on intelligence can profoundly affect the way we view our pupils. People are people and they have the same basic needs and potential talent regardless of their race, ethnic background or economic circumstances. The concept of Multiple Intelligences gives us the possibility of identifying and adapting both the classroom environment and the activities we make use of to cater for these needs and talents. The end result can be that people fall in love with learning instead of regarding the time they spent at school as nothing more than a black cloud that hung over their heads until they came to the end of their prison sentence! (p. 195).

Learning Styles and Multiple Intelligences

MI has been closely linked with learning styles. In the words of Christison (1998b), “the terminology and labels used for identifying learning styles vary greatly” (p.34). Based on Reid (1995), Christison states that there are three major categories of learning styles: cognitive, sensory and personality (1998b). The first one, cognitive, is composed of: field independent/field dependent; analytic/global; reflective/impulsive and
Kolb Experiential Learning Model\textsuperscript{12}. The second one, sensory, is composed of: perceptual (auditory, visual, tactile and kinesthetic) and environmental, which is composed of physical and sociological\textsuperscript{13} learners. The third one, personality, is composed of: tolerance of ambiguity, right and left hemisphere dominance, and the Myers-Briggs Type Indicator\textsuperscript{14}.

Christison (1998b) describes each type of learning styles in detail in her article and she states that the perceptual learning styles are best known among all the types of learning styles. Terms such as auditory, visual, tactile and kinesthetic are well known by many educators (p. 35). Christison (1998b) suggests that each lesson should integrate a variety of styles (p.40).

Silver et al. (1997) explain that there are two similarities in all the learning style models even though theorists’ interpretations differ from one another. The common things are: “a focus on process” and “an emphasis on personality”. Their model consists of four styles: 1) the Mastery style; 2) the Understanding style; 3) the Self-Expressive style; and 4) the Interpersonal style. According to Silver et al. (1997), “learning styles are not fixed throughout life, but develop as a person learns and grows” (p.23). This is similar to MI since intelligence is not static and it can be improved throughout the years.

Silver et al. (1997) claim that learning styles and multiple intelligences share some similarities. They claim that learning styles and MI should be applied in

\textsuperscript{12} “The Kolb Experiential Model focuses on how students perceive new information and then how they process it” (Christison, 1998b, p. 37) Learners can perceive information abstractly or concretely and process it actively or reflectively.
\textsuperscript{13} Sociological learners “are very sensitive to how individuals are grouped in the environment. They notice if they work individually, in pairs, small groups or teams” (Christison, 1998b, p.36).
\textsuperscript{14} The Myers-Briggs Personality Type Indicator (MBTI) – “There are four scales involved in the MBTI – Extroversion/Introversion, Sensing and Intuition, Thinking and Feeling, and Judging and Perceiving” (Christison, 1998b, p. 39).
combination since they believe that each theory has some limitations. If both theories are integrated, their limitations will be minimized and their strengths will be enhanced. According to Silver et al. (1997), “learning styles emphasize the different ways people think and feel as they solve problems, create products, and interact” (p. 22). On the other hand, MI focuses on the way human potential is shaped by different disciplines and cultures (p.22). “Learning styles are concerned with differences in the process of learning, whereas multiple intelligences center on the content and products of learning”, declare Silver et al (1997). Silver et al. (1997) combine each intelligence with the four styles mentioned above in order to explain how the integration of MI and learning styles provides better results. They suggest:

> In conjunction, both multiple intelligences and learning styles can work together to form a powerful and integrated model of human intelligence and learning – a model that respects and celebrates diversity and provides us with the tools to meet high standards (p.27).

As with MI and learning styles, similar work has been done in the field of brain-based research. Lawson (2001) states that “brain-based learning is derived from the physiological studies of how the brain best learns”. The brain needs to be challenged in order for learning to take place. The instruction needs to be meaningful, relevant, and connected to mental, affective and physical experiences, otherwise learners may not remember what was taught. Another factor that should be considered in teaching/learning is that learners need “a safe and supportive environment in which to learn” (Violand-Sanchez, 1998). Emotions play an important role in learning especially because they
activate the part of the brain responsible for long-term memory (Lawson, 2001; Violand-Sanchez, 1998). Lawson (2001) argues that “each brain is unique. Genetic and environmental factors influence learning and the connections between cells are created by an individual’s unique experiences”.

According to Guild (1997), “multiple intelligences, learning styles, and brain-based education are distinct fields of study but share similar outcomes in the practical environment of the classroom” (p.30). Guild (1997) describes three schools and mentions that although teachers in each school apply one of theories mentioned above (multiple intelligences, learning styles, and brain-based education), the learning environments in all three schools are somehow similar:

In each school, we find students actively involved in their learning, teachers talking with learners and with one another to make decisions and solve problems, students learning in a variety of ways, multiple resources available, displays of students’ artwork, curriculum related to interests of students, parent volunteers working with learners, and regular assessment of the students’ work as an integral part of the learning (p.30).

Guild (1997) suggests that there are six areas in which the theories overlap: 1) they are learner-centered; 2) teachers need to know the theories well and apply them to their own contexts; 3) the students reflect about their process of learning; 4) personalization of education is promoted by the theories because they connect learning with student’s lives; 5) curriculum and methodologies are not uniform; and 6) learners are viewed and treated as individuals with unique profiles.

According to Guild (1997), educators should not interpret the theories in a simple manner and they should not apply them as if they were “cooking recipes”. Using their
terminology does not mean applying them. The theories have been explored and
developed by their researchers and they, the researchers, advise that “trivial quick-fix
practices” do not mean applying the theories in practice (Guild, 1997, p.31). There is no
magic formula to apply these theories. Teachers should combine their past experience
with research integrating practices when applying the theories (Guild, 1997, p.31).

Christison (1998b) states that second and foreign language teachers have been
paying attention to learning styles for a decade (p.34). It is challenging for teachers to
know how students learn better and make L2 students aware of the advantages of using
their styles to learn better (p.34).

As Silver et al. (1997) have noted while learning styles focus on “the process of
learning”, MI theory focuses on “the content and products of learning”, as mentioned
before. Textbooks are products for learning and since they (in many cases) are the main
sources of the content ELT learners are exposed to, it is necessary to examine them in
order to see the manifestations of intelligences in them. That is the reason why in this
study I have sought to identify the intelligences included in current ELT textbooks.
Furthermore, a survey was used to provide information about textbooks and other sources
of content used by ELT teachers. The survey and textbooks will be discussed in detail in
chapters 3 and 4, respectively.

Language Teaching and MI Theory

As mentioned before, language teaching has changed immensely in order to
facilitate language learning. Many changes have been made in language teaching and MI
theory has also contributed to changes in ELT. Considerations about learners’ styles, and intelligence profiles contribute to shifts in English language instruction. Snider (2001) states that many methods and approaches contribute to changes in foreign language teaching due to their contribution to “shifting the focus in the FL classroom from a teacher-centered to a learner-centered construct” (p. 26). Silent Way, TPR, Suggestopedia (among other methods and approaches), all contribute to the shifts in language teaching and they “help to improve instruction for language competence in FL learners” (Snider, 2001, p. 46). Snider (2001) also claims that, “Now more than ever, procedures and texts are open to the use of new theoretical models, such as that offered by MI theory” (p.33).

Since some well-known methods and approaches emphasize certain intelligences\textsuperscript{15}, they will be described and the changes in language teaching will be discussed in relation to MI theory.

Grammar Translation (GT) is perhaps the oldest method in language teaching. GT emphasizes the teaching of grammar associated with translation into the native language or the target language (TL). Reading and writing is mainly taught and the vocabulary is restricted to the words in the reading passages. GT is still used at college levels as pointed out by Richards and Rogers (2001, p.7). GT enhances basically the verbal/linguistic (VL) intelligence since learners work with reading and writing most of the time as well as memorization of grammar rules and vocabulary.

\textsuperscript{15} For more information see Lin, Po-Ying (n. d.) Multiple Intelligences Theory and English Language Teaching. Retrieved from the World Wide Web on February 13, 2003.
During the 1950s, the Audiolingual Method (AL) was developed. The method is based on behaviorism, so habit formation with memorization of dialogues and drilling are practiced. Exposure to spoken form of the target language is prior to written form. The teacher’s role in AL is “central and active” while “learners play a reactive role by responding to stimuli, and thus have little control over the content, pace, or style of learning” (Richards & Rogers, 2001, pp. 53-62). Like GT, VL is the intelligence mainly enhanced in AL through the emphasis on memorization of dialogues, and practice of skills like listening, speaking, reading and writing.

In the words of Richards and Rogers (2001), “the period from the 1970s through the 1980s witnessed a major paradigm shift in language teaching” (p.71). Grammar was no longer the core of language learning/teaching. Communication was the aim of teachers and learners. Methods such as TPR, the Silent Way (SW), Community Language Learning, and Suggestopedia were developed. These methods were “developed around particular theories of learners and learning” (p.71) not from a theory of language and some of them were developed by a single person.

James Asher developed the TPR method and he believes that learners are able to produce language orally after being able to respond physically to commands just like children do when they learn their native languages. TPR promotes a non-stressful environment to facilitate learning. Although the teacher is responsible for making most decisions in the classroom, his/her role is mainly to provide opportunities for learning (Richards & Rogers, 2001, p.76). Being active listeners and performers are some of the roles of learners as well as monitoring their own learning. Two intelligences are enhanced
in TPR, the bodily/kinesthetic associated with verbal/linguistic because learners respond to language input by moving and using their body (Berman, 1998, p. 189).

Silent Way, which was developed by Gattegno, pays attention “to accuracy of production of both the sounds and structures of the target language from the very initial stage of instruction” (Celce-Murcia, Brinton, & Goodwin, 1996, p.5). Learners are required to be responsible for their learning and to be as independent and autonomous as possible. Teachers usually use the TL once and learners should develop their knowledge of the TL by paying close attention to the material presented and drawing conclusions (Richards & Rogers, 2001, p.85). Several intelligences can be enhanced in Silent Way. Verbal/linguistic is present when the listening and speaking skills are practiced. Self-correctness, self-awareness, and the “inner-criteria” help enhancing the intrapersonal intelligence. Spatial/visual is practiced with the color cards and Cuisenaire rods while the bodily/kinesthetic intelligence is enhanced by manipulating physical objects and using gestures/pantomime. Problem solving and inductive learning enhance the LM intelligence. The IR intelligence is enhanced through working cooperatively.

Community Language Learning (CLL) is a method developed for teaching second and foreign languages by Charles A. Curran (1976). It is based on Carl Rogers’ (1957) “humanistic client-centered learning” (Celce-Murcia et al., 1996, p.7). The teacher is “the counselor”, the student is “the client”, and the interaction between them is through the learner’s native language at first, which is translated to the TL by the teacher and repeated by the student. When the student is able to say the sentence fluently, the sentence is recorded for further practice such as achieving a satisfactory level of
pronunciation (according to the student’s wish). The teacher stands behind the learner and this technique is called ‘human computer’ since the computer (teacher) can be turned on or off. (Celce-Murcia et al., 1996, p.7). CLL supporters stress its benefits to learners since the learning process is learner-centered and humanistic (Richards & Rogers, 2001, p.98). Some intelligences are enhanced in CLL: the VL through speaking and listening activities; the IR through interaction among teacher/student, student/student and groups; and the IA through encouraging reflection and self-esteem.

Suggestopedia claims that music contributes to language learning. Music and musical rhythm are important components of Suggestopedia (Richards & Rogers, 2001, p. 100). According to Berman (1998), Suggestopedia creates an excellent “learning state” which promotes successful learning (p. 181). Suggestopedia appeals to those learners whose musical intelligence is strong. The use of music promotes better learning according to Lozanov. The intrapersonal intelligence is also enhanced in learners since there is an attempt to establish personal relations, develop self-esteem and self-satisfaction (Richards & Rogers, 2001, p.100). Since the decoration and classroom arrangement is considered in Suggestopedia, the spatial/visual intelligence is present as well. Furthermore, VL is enhanced when memorization, reading and listening activities are done.

Communicative Language Teaching is an approach that considers that a language is learned not for simply mastering structures but for achieving communicative proficiency (Richards & Rogers, 2001, p.153). CLT does not prescribe specific procedures, or materials to be used; however, CLT teachers have used some materials
such as realia, authentic materials (maps, ads, newspapers, pictures, charts) and textbooks, which were designed for a CLT class. Variety in materials is encouraged in CLT and “materials thus have the primary role of promoting communicative language use” (Richards & Rogers, 2001, p.168). CLT enhances the verbal/linguistic intelligence when the four skills are used in communication among learners. It also enhances the interpersonal intelligence since learners use the TL to interact and solve problems together. Problem solving appeals to learners whose logical/mathematical intelligence is strong and it helps other learners develop their LM intelligence as well. CLT can enhance all the intelligences depending on the materials and techniques teachers choose for their learners.

Besides the methods and approaches described above some others can be considered in promoting changes in language teaching: the Natural Approach, Cooperative Language Learning, Content-Based Instruction, and Task-Based Language Teaching. Each of them contributed in different manners.

Integration of MI into Current Teaching Practice

Christison (1998a) explains that although MI theory was not created as a curriculum or model for schools, many educators base their teaching on the theory (pp.10-11). Interest in MI theory can be easily identified in EFL/ESL context since there are more papers being written and workshops being presented at conferences such as TESOL ’97, TESOL Argentina 1997, and American Language Centers ’97 (Christison, 1998a, p.11) as well as in 1998 at the BRAZ-TESOL, the Brazilian chapter of TESOL.
Richards and Rodgers (2001) describe Multiple Intelligence Theory as an approach that has been considered not only in general education but also in language teaching. “Application of MI in language teaching have been more recent, so it is not surprising that MI theory lacks some of the basic elements that might link it more directly to language education” (Richards & Rodgers, 2001, p. 117). Richards and Rodgers (2001) mention that Christison attempted to establish links between language teaching and MI theory. Christison has written several articles\textsuperscript{16} about MI in EFL/ESL contexts. Moreover she has trained teachers in MI, for instance, in several cities all over Brazil as stated before. During last TESOL conference (March 2003), she exhibited her new book called “Multiple Intelligences and Language Learning: A Guidebook of Theory, Activities, Inventories, and Resources”. Many people attended the session, so it seems that there is great interest in MI. In her article, Christison (1998c) suggests that teachers identify their own intelligence profiles before applying the theory. Plus, teachers can identify all the activities they do in the classrooms and classify them according to the intelligences. These suggestions will be discussed more in depth in chapter five.

There are no established goals or syllabus for using MI theory; however, some people have proposed ways of using it. In the words of Richards and Rodgers (2001): “where MI is richest is in proposals for lesson organization, multisensory activity planning, and in using realia” (p.120). There are several suggestions for activities and materials that help enhancing each intelligence such as the one by Christison (1998c, pp. 7-8). She listed activities that address each intelligence. A similar list will be presented in chapter five.

\textsuperscript{16} The articles were used in this study.
Textbook Importance and Selection

Since one of the aims of this study is to analyze textbooks used in ELT in order to know how the activities in the textbooks can help language learners enhance their intelligences, there is a need to evaluate the role of textbooks in ELT. Criteria for textbook selection and ways of evaluating a course book are important to consider as well. I will first discuss the roles of textbooks in general and then I will link them specifically to MI use.

Many researchers have emphasized the importance and the use of textbooks in language teaching (Brown, 1998; Palmberg, 2001; Richards, 2001; Sheldon, 1988). However, researchers have also indicated that teachers tend to use textbooks heavily (Sheldon, 1988) and that sometimes they use the texts from cover to cover. Palmberg (2001) states that, “many teachers prefer to select one course book as the basis for a language course and systematically take their students through the book from the beginning to end” (p. 1). The textbooks, in many cases, determine the curriculum of some language courses, which do not base their curriculum on benchmarks, as mentioned before. Researchers state that, due to the important role of textbooks in language teaching, teachers must be better prepared to choose texts carefully and more efficiently in order to consider learners’ differences, styles and needs. Garinger (2001) states “due to the growth of the ESL publishing market, teachers need to be increasingly knowledgeable and sophisticated concerning textbooks in order to sort through the masses of books available” (p.2). Richards (2001) adds, “learning how to use and adapt textbooks is hence
an important part of a teacher’s professional knowledge” (p.1). Considerations about ways of using/adapting textbooks will be discussed in chapter five.

Some researchers attempt to explain why textbooks have been major tools in language teaching and try to determine the factors that contribute to the use of textbooks in most language classrooms throughout the world. Sheldon (1988) identified some reasons that contribute to the constant use of texts: 1) It is hard for teachers to develop their own materials. 2) Due to the nature of their profession, teachers do not have much time to create new materials. 3) There are external pressures that restrict teachers. Textbooks reduce preparation time because they provide activities that are ready to use. Garinger (2001) adds some more factors: 1) to facilitate the organization of lessons; 2) to assure some stability to students; and 3) to assure comparable instruction.

Richards (2001) presents both advantages and disadvantages of using textbooks. Besides the aspects mentioned before, some of the good aspects, he mentions are that “they maintain quality”, “provide effective language models and input”, and “they can train teachers” (pp.1-2). Some negative aspects are related to non-authentic materials, content distortion (to avoid controversial topics), and expensive prices. He also mentions that they can limit teachers’ potential if they follow books strictly. In this case, teachers become a “technician whose primarily [sic] function is to present materials prepared by others” (p.2). Furthermore, Richards (2001) states, textbooks need to be adapted since they “may not reflect students’ needs” (p.2).

Garinger (2001) summarizes that using solely textbooks is not an ideal method for language teaching since it does not consider students’ needs. However, she states the
importance of textbooks as a framework for teachers and students. Since course books will always be used in most classrooms, they “must provide students with language and tasks that are authentic and effective in enhancing communicative competence” (p.4). Teachers should balance the use of course books to provide good language instruction.

Researchers suggest the use of checklists or evaluation system (or form) when choosing textbooks. Sheldon (1988) suggests using checklists to evaluate many aspects of content such as physical features, graphics, cultural bias and authenticity. Brown (1998) suggests an evaluation form with a score sheet and instructions on how to evaluate books. Some of the items he considers in evaluating a textbook include: teacher’s manual, testing suggestions, flexibility to adapt and/or skip exercises, appropriate proficiency level, and usefulness of activities (pp.3-7).

In sum, when analyzing textbooks, individuals should examine them carefully because only through a careful examination of texts, one can make a good choice. Checklists are very helpful when analyzing texts due to the fact that they consider important features and details that should be considered in a good text. As stated by Garinger (2001) “it is necessary for teachers to be well-equipped with the skills to evaluate materials to ensure that students are using the highest quality texts possible and that their language learning experience is enhanced, not hindered, by the books used in their classrooms” (p.5).
Textbooks and MI

Recently some researchers have analyzed textbooks in the light of MI Theory. Palmberg (2001) reports a study conducted at Abo Akademi University in Finland by a group of student teachers, participants in an EFL methodology course (p. 2). The student teachers wanted to determine the intelligence profile of a current course book (Bricks 1) used at the lower level in Finland. The analysis of the course book showed the proportional distribution of exercises that catered to each of the nine intelligences. The results showed that 97% of the 300 exercises were categorized as verbal/linguistic, 76% intrapersonal, 25% interpersonal, 8% logical/mathematical, 5% bodily/kinesthetic, 5% [spatial/visual], 3% naturalist, 2% musical, and 0% existentialist.

Two main problems were identified in the analysis of the course book: identifying the predominant intelligence catered in some exercises and interpreting what the exercises required from the students and what decisions the teacher could make (Palmberg, 2001, p. 2). In Palmberg’s study, the focus was on the most obvious intelligences in each exercise. It was expected that a language course book focuses on the verbal linguistic intelligence but the percentage in the intrapersonal (76%) was a surprising result for the researchers. Palmberg (2001) states: “the high proportion on intrapersonal exercises can be explained at least partially by the categorization procedure adopted for the analysis”. Pair or group work exercises were categorized as catering to interpersonal intelligence; however, if an exercise required some individual task before the pair or group work, it was categorized as catering to both intrapersonal and
interpersonal. And “the remaining exercises were all categorized as catering for intrapersonal intelligence by default” (p.3).

Palmberg (2001) concludes that the textbook intelligence profile, which is the combination of intelligences in a textbook, reflects the writer’s personal profile and that teachers tend to teach according to their learning styles as well as to their own preferences. He adds that in case teachers choose a course book to base their courses, “they must be able to assess how well the intelligence profile of the selected course book coincides with the majority of intelligence profiles found for that learner group” (Palmberg, 2001, p. 3). He also adds that teachers should recognize that learners are different and learn differently in order to encourage students and make the learning environment better for everyone.

Snider (2001), on the other hand, analyzed ten first-year college German textbooks in order to determine the types of activities that were presented and how the activities engaged multiple intelligences in learners. “The study shows that the texts typically use a limited range of activity types in presenting material to students” (p.7). Snider identified forty-one types of activities; however, he mentions that, “only eleven engage intelligences other than verbal/linguistic” (p.133).

The study presents suggestions to modify activities in order to enhance all the intelligences in learners. Snider (2001) selected the predominant activity types, which primarily enhance the VL intelligence, to demonstrate how changes can be made to enhance more intelligences. He explained how the activity was in the textbooks and offered three suggestions for each activity type to provide alternatives to enhance more
intelligences other than VL. For each activity, he suggested about three different intelligences.

Conclusion

In this chapter, several issues were discussed: the traditional concept of intelligence, Gardner’s multiple intelligences theory, MI and other theories, similarities of ELT methods and approaches with MI, MI in current practice in language teaching, the role of textbooks in language teaching and studies on the analysis of MI in textbooks.

The discussion of the concept of intelligence according to traditional views and Gardner’s view was important in order to analyze the implications in education. Intelligence tests (IQ tests) make predictions about academic success (according to some psychologists) and they have influenced not only teaching practices but also the ways in which a person’s knowledge is assessed. Intelligence is considered a singular faculty that can be measured by IQ tests. On the other hand, MI theory considers that each individual has several intelligences and that the intelligences should be considered (and developed) in education. Educators have shown interest in MI theory and MI has been applied in several educational contexts. Many examples of the application (consideration) of MI in education were described.

Due to the consideration of MI in education, the theory was compared to two other theories: learning styles and brain-based education. The similarities among all the theories were described. MI was also discussed along with methods and approaches in ELT. The discussion of methods and approaches has illustrated how MI and ELT are
related. Changes in language teaching were described and the current practice of MI in language teaching was also discussed. These issues are important because this study has sought to analyze the relationship between MI and ELT.

Textbooks were discussed in order to evaluate their use in language teaching, the reasons for textbooks use and the criteria for choosing them. Two studies, which focused on the manifestations of MI in language textbooks, were also described in order to analyze how the activities in textbooks enhance different intelligences in learners. Snider (2001) focused on the types of activities in 10 German textbooks and offered suggestions on how to adapt some activities to enhance intelligences other than verbal/linguistic, which was mainly presented in the books. Palmberg (2001) analyzed the manifestations of each intelligence in one English textbook and identified the intelligences that were predominant or less common in the textbook analyzed. In the next chapter I examine the results of the survey of teacher perceptions of MI.
Chapter 3

Survey

Procedure

This study has sought to investigate the relationship between MI and ELT. Therefore a survey was administered in order to gather information about ELT teachers and their teaching contexts. The survey also provided information about how much teachers know about MI, if they apply the theory in their lessons and if they do it consciously. The survey was answered by two groups of teachers: Brazilian EFL/ESL teachers and international\(^\text{17}\) (non-Brazilian) ESL/EFL teachers.

Survey Data Collection

The survey (see Appendix A) was used as the instrument to collect data from subjects. The survey included questions about teachers’ educational background, teaching experience, teaching context, training in ELT, teachers’ knowledge about MI and interests in MI theory. Additionally, teachers provided information about criteria for selecting textbooks in their institutions as well as the way they supplement textbooks with extra material. Teachers also indicated the criteria they use to choose supplementary material.

I looked for the following information in the data:

\(^{17}\) As stated before, for the purpose of this study international subjects refer to teachers from countries other than Brazil.
1) how much English teachers know about MI Theory.

2) if English teachers need (or want) some training on MI.

3) how English teachers choose the textbooks for their institutions.

4) how English teachers choose materials to supplement the textbooks they use in their institutions and the reasons why textbooks need to be supplemented.

Participants

At first, the survey was sent to 127 teachers (Brazilians and non-Brazilians). Sixty-one subjects responded to the survey for this research. There were two groups of subjects: 1) Thirty-four Brazilian EFL/ESL teachers and 2) Twenty-seven non-Brazilian EFL/ESL teachers (most of them were enrolled in the master’s program in Applied Linguistics and TESOL at Ohio University). This group of subjects consisted of teachers who had taught English either in their countries or in the USA. Both groups were composed of male and female subjects from 20 years old on. There were subjects from different countries and continents as an attempt to best represent the EFL/ESL teaching community.

The first group of subjects, Brazilian teachers, was recruited by email contact. I contacted English teachers all over Brazil and asked them to participate voluntarily in the research. I also asked them to forward my survey to any English teachers they knew. The survey was sent to the subjects by email. The surveys were returned to me by email as well. Thirty-four subjects answered the survey. There were participants from different

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18 Since the survey was sent to a group of teachers and they forwarded the message to other teachers, it was not possible to have the exact number of people who received the survey.
regions in Brazil. Sixteen participants were from the north or northeast of Brazil.
Seventeen subjects were from the south or southeast and only one participant was from
the west. Most participants were from the northeast or southeast of Brazil. There were six
males and twenty-eight females; ten of them were under thirty years old and twenty-four
were above thirty.

According to teaching experience, only one subject (2.94%) had taught for less
than five years, eleven (32.35% of) subjects had taught between five to ten years, eleven
(32.35%) had taught between ten to fifteen years, and eleven (32.35%) had taught for
more than fifteen years. All subjects had taught in private language institutes, thirteen of
them had taught in private schools, and four of them had taught in colleges or
universities.

Table 1: Number of years of teaching – Brazilian Subjects

<table>
<thead>
<tr>
<th>Number of years</th>
<th>Number of subjects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td>1-3</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td>3-5</td>
<td>1</td>
<td>2.94 %</td>
</tr>
<tr>
<td>5-10</td>
<td>11</td>
<td>32.35 %</td>
</tr>
<tr>
<td>10-15</td>
<td>11</td>
<td>32.35 %</td>
</tr>
<tr>
<td>+ 15</td>
<td>11</td>
<td>32.35 %</td>
</tr>
<tr>
<td>Total:</td>
<td>34</td>
<td>99.99 %</td>
</tr>
</tbody>
</table>

The second group of subjects was recruited personally. I requested voluntary
participation. The survey was put in the subjects’ mailboxes (and in a few cases, handed
personally) and the subjects returned the surveys to me (or to my mailbox). I also collected data from teachers who had taught ESL/EFL either in the US or in other countries. Twenty-seven subjects answered the survey: twenty-one were OU graduate students (two of them were not in Linguistics but they were in majors related to English teaching), three were PhD students and three were ESL teachers in Ohio. There were participants from different countries and continents: fifteen were from the USA; five were from Latin America and the Caribbean; five from Asia; one from Europe and one from Africa. Most participants were from the USA; however, many of them had also taught in other countries. There were nine males and eighteen females: thirteen of whom were under thirty years old and fourteen were above thirty. Seventeen subjects were NESTs (Native English Speaker Teachers) and ten were NNESTs (Non-native English Speaker Teachers).

According to the number of years of teaching, three (11.11% of the) subjects had taught less than a year, five (18.52%) had taught between one to three years, four (14.81%) had taught between three to five years, seven (25.92%) had taught between five to ten years, six (22.22%) had taught between ten to fifteen years, and only two (7.41%) had taught more than fifteen years. Fourteen subjects had taught in public schools, seven in private schools, nine in language institutes, and twenty-two in universities. Teachers mentioned all the places they had taught.
Table 2: Number of years of teaching - Non-Brazilian Subjects

<table>
<thead>
<tr>
<th>Number of years</th>
<th>Number of subjects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>3</td>
<td>11.11 %</td>
</tr>
<tr>
<td>1-3</td>
<td>5</td>
<td>18.52 %</td>
</tr>
<tr>
<td>3-5</td>
<td>4</td>
<td>14.81 %</td>
</tr>
<tr>
<td>5-10</td>
<td>7</td>
<td>25.92 %</td>
</tr>
<tr>
<td>10-15</td>
<td>6</td>
<td>22.22 %</td>
</tr>
<tr>
<td>+ 15</td>
<td>2</td>
<td>7.41 %</td>
</tr>
<tr>
<td>Total:</td>
<td>27</td>
<td>99.99 %</td>
</tr>
</tbody>
</table>

Twenty-six Brazilian subjects had taught only in an EFL context and eight had taught both in EFL and ESL contexts. Eight non-Brazilian subjects had taught only in an EFL context, seven had taught only ESL, and twelve had taught both EFL/ESL. Table 3 presents the results in percentage.

Table 3: Teaching context

<table>
<thead>
<tr>
<th></th>
<th>Brazilian subjects</th>
<th>Non-Brazilian subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Only EFL</td>
<td>26</td>
<td>76.47</td>
</tr>
<tr>
<td>Only ESL</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Both EFL/ESL</td>
<td>8</td>
<td>23.53</td>
</tr>
<tr>
<td>Total:</td>
<td>34</td>
<td>100.00</td>
</tr>
</tbody>
</table>
According to the educational background of all participants, seventeen subjects held a BA, two subjects had taken a specialization course\textsuperscript{19}, twenty-eight were Master’s students, three held a Master’s degree and three were PhD students. Eight subjects did not give their level of education. Only four Brazilian subjects held a Master’s degree, three were current Master’s students, and none held a PhD degree. Most subjects had been trained in ELT methods, approaches and theories, all thirty-four (100%) Brazilian subjects and twenty-two (81.48%) non-Brazilians. Only five non-Brazilians did not have any training. Most subjects, fifty-three (86.88%), had their training by taking courses.

In terms of teaching experience, Brazilian teachers had taught for more years than the non-Brazilian group, about 97% of Brazilians had taught for more than five years. About 56% of non-Brazilians had taught for more than five years and 44% had taught for less than five years. (See tables 1 and 2 above).

Method of Analysis

When analyzing the data from the survey, the participants’ responses to each item were summed in order to identify if ELT teachers know and use MI Theory, how teachers choose textbooks and extra materials, and the types of materials, activities or techniques teachers incorporate in their teaching. After the answers to each question were counted, tables with the results were created. Most tables present the raw number of answers and some present also the percentages of the results.

\textsuperscript{19} Specialization course is a degree between the B.A. and the M.A. degrees. The course focuses on an area in which the person wants to specialize (e.g. TESOL). Specialization courses are common in Brazil especially before the person pursues a Master’s degree.
The procedure for quantifying the data from Question 12 (see Appendix A) was different from the quantification of the other questions on the survey because Question 12 involved a response in the form of rankings. Question 12 asked participants to rank order a list of 11 criteria (e.g., method, activities, price) that they might use in the selection of textbooks. A rank of 1 meant that it was the most important criterion for the respective participant, and a rank of 11 meant that it was the least important. Most participants ranked the criteria as requested, but there were 5 participants (4 Brazilians and 1 international) who did not respond to this item on the survey at all, and an additional 6 participants (1 Brazilian and 5 international) who simply used checkmarks to indicate which criteria were important to them. The non-responses are not represented in the results of the survey, but the checkmarks were converted to rankings in the following way: All of the criteria that a participant checked were given an equally high ranking, which depended on the number of checked criteria. If a participant checked 5 criteria, for example, those five criteria were given an equal average ranking of 3 (i.e., the average of the ranks 1-5). All of the unchecked criteria were given an equally low ranking. For example, if 5 criteria were checked, then 6 were unchecked, and those 6 unchecked criteria were given an equal average ranking of 8.5 (i.e., the average of the ranks 6-11). To quantify the responses for Question 12, I calculated the sum of the ranks that all participants gave to each criterion (see Table 9). Smaller sums represent more highly ranked criteria.
Since most of the surveys were sent and received through the Internet, some subjects had problems with the configuration of the file and some could not open it. In this case, I had to send it to some subjects twice.

Another problem was related to the order of the questions in the survey. After administering the survey, I realized that it would be better to have the questions about textbook selection before the ones about MI theory. I believe that the sequence of questions influenced some of the results obtained. Some discussion about this problem will be addressed later in this chapter.

Results and Discussion

One of the aims of this study was to find out if ELT teachers knew and used MI theory in their teaching. The answers from the subjects will be presented, compared and discussed in order to answer my first research question.

_Teachers’ Knowledge about MI Theory_

Most subjects mentioned that they knew MI theory: 100% of Brazilian and 85.19% of non-Brazilian subjects. Only 14.81% of non-Brazilian subjects reported that they did not know MI theory.
Table 4: Teachers’ Knowledge about MI Theory

<table>
<thead>
<tr>
<th>Have you ever heard about MI theory?</th>
<th>Brazilian subjects</th>
<th>Non-Brazilian subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>34</td>
<td>100</td>
</tr>
<tr>
<td>Not sure</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total:</td>
<td>34</td>
<td>100</td>
</tr>
</tbody>
</table>

Both groups of teachers mentioned how they learned about MI theory and some of them have learned about it in more than one way. Thirty-four (55.73%) learned about it in workshops; twenty-eight (45.90%) learned about it from other people; twenty-five (40.98%) learned about it in a course; eighteen (29.50%) read books about MI; and five (8.19%) learned about it from other sources such as the Internet or journals. Five (8.19%) subjects did not mention how they learned about MI.

**MI Theory Use**

The results showed that 55.88% of Brazilians claimed that they use MI in their teaching, 35.29% mentioned that they were not sure if they applied the theory, only 5.88% said that they did not apply MI to their teaching and 2.94% did not answer the question. Table 5 presents the number of subjects and corresponding percentages.
Table 5: MI Theory Use - Brazilian subjects

<table>
<thead>
<tr>
<th>Do you think you use MI theory in your teaching?</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>19</td>
<td>55.88</td>
</tr>
<tr>
<td>Not sure</td>
<td>12</td>
<td>35.29</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>5.88</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>2.94</td>
</tr>
<tr>
<td>Total:</td>
<td>34</td>
<td>99.99</td>
</tr>
</tbody>
</table>

As for the non-Brazilians, the results showed that 40.74% claimed that they use MI in their teaching while 59.26% said that they were not sure if they applied the theory.

None of the subjects said that they did not apply the theory (See table 6). One interesting fact was that although four non-Brazilian subjects said that they did not know about MI theory, none of them said that they did not use MI in their teaching; they said that they were not sure. One question remains unanswered: do these four teachers know MI or not? This fact will be addressed later in more detail.

Table 6: MI Theory Use – Non-Brazilian subjects

<table>
<thead>
<tr>
<th>Do you think you use MI theory in your teaching?</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>11</td>
<td>40.74</td>
</tr>
<tr>
<td>Not sure</td>
<td>16</td>
<td>59.26</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total:</td>
<td>27</td>
<td>100</td>
</tr>
</tbody>
</table>
According to the data, 49.18% of all subjects reported that they use MI theory in their teaching, 45.90% subjects were not sure if they applied the theory, 3.28% said that they did not use it and 1.64% did not answer the question (See table 7 below).

<table>
<thead>
<tr>
<th>Do you think you use MI theory in your teaching?</th>
<th>Brazilian</th>
<th>Non-Brazilian</th>
<th>Total of subjects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>19</td>
<td>11</td>
<td>30</td>
<td>49.18</td>
</tr>
<tr>
<td>Not sure</td>
<td>12</td>
<td>16</td>
<td>28</td>
<td>45.90</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>3.28</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1.64</td>
</tr>
<tr>
<td>Total:</td>
<td>34</td>
<td>27</td>
<td>61</td>
<td>100</td>
</tr>
</tbody>
</table>

**Teachers’ Awareness of MI Theory**

In order to find out if teachers applied MI theory consciously or unconsciously, question number 15 was included in the survey (See Appendix A). Question 15 consists of a list of approaches, methods, techniques and activities commonly used in ELT. The list includes at least four materials, activities or techniques that can enhance each of the multiple intelligences in language learners. Teachers marked all the items that they have used in their teaching. The answers revealed that many teachers use MI theory unconsciously. The answers, given by teachers who mentioned that they were ‘not sure’ if they use MI, were analyzed and the results showed that ten Brazilian subjects (out of twelve) use MI in their teaching. Only two subjects do not seem to use MI because only a
few intelligences were included in their teaching and the intelligences included are commonly found in textbooks and materials used in ELT. The data from the two Brazilian subjects who mentioned they did not use MI in their teaching showed that they use the theory as well. This way we can consider that thirty-one Brazilian subjects (91.18%) use MI theory in their teaching, two subjects (5.88%) did not use most intelligences, and one subject (2.94%) failed to answer.

The data from the second group, non-Brazilian subjects, showed similar results to the first group. Most teachers, who were *not sure* if they used MI in their teaching, also incorporate methods, techniques and activities that enhance most intelligences in their learners. Thirteen subjects (out of sixteen) use MI in their teaching. These results suggest that most non-Brazilian subjects also apply MI in their teaching since twenty-four (88.88% of) subjects use MI. Only three (11.11% of) subjects do not seem to apply MI. Although two of them learned about MI in a course, they were not sure if they applied it. According to the data, they used basically the most common intelligences, which are present in textbooks. The third subject did not know about MI and was not sure if she applied it. The data showed that she used only a few intelligences and they were the most common ones (See Figure 1 for more information about common intelligences).
Table 8: Teachers’ Awareness of MI – All subjects

<table>
<thead>
<tr>
<th>Do you think you use MI theory in your teaching?</th>
<th>Brazilian</th>
<th>Non-Brazilian</th>
<th>Total of subjects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conscious use</td>
<td>19</td>
<td>11</td>
<td>30</td>
<td>49.18</td>
</tr>
<tr>
<td>Unconscious use</td>
<td>12</td>
<td>13</td>
<td>25</td>
<td>40.98</td>
</tr>
<tr>
<td><strong>Total of MI use</strong></td>
<td><strong>31</strong></td>
<td><strong>24</strong></td>
<td><strong>55</strong></td>
<td><strong>90.16</strong></td>
</tr>
<tr>
<td>Teachers did not use MI</td>
<td>02*</td>
<td>03**</td>
<td>05</td>
<td>8.20</td>
</tr>
<tr>
<td>Teacher failed to answer</td>
<td>01</td>
<td>00</td>
<td>01</td>
<td>1.64</td>
</tr>
<tr>
<td><strong>General total</strong></td>
<td><strong>34</strong></td>
<td><strong>27</strong></td>
<td><strong>61</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*These subjects knew about MI but were not sure if they used it.  ** Only one subject did not know about MI.

After analyzing the data from the four non-Brazilian subjects that mentioned they did not know about MI and mentioned that they were not sure if they used MI, it was observed that three of them applied MI but one did not apply it. Consequently, it can be concluded that three subjects used MI without knowing about it or without being conscious about it. Since these teachers had been trained in ELT methods/theories/approaches (and had taught for many years), it is possible that they incorporated most intelligences in their teaching.

*Reasons for learning more about MI Theory*

In order to find out if teachers had any interest in learning more about MI theory, question 8 was included in the survey (see Appendix A). The results showed that most teachers had interest in learning more about the theory. However, Brazilian subjects had more interest than non-Brazilians. Eighty-five percent of Brazilians wanted to learn more
while about fifty-six percent of non-Brazilians demonstrated interest in knowing more about MI. Seventy-two percent of all subjects mentioned that wanted to learn more about it.

Several reasons for learning more about the theory were mentioned: it is relevant to TESL; it is good for learners; it is very interesting; it brings variety to class; it improves teaching; using MI and learning styles is good for learners and teachers; it changes class routine; it facilitates learning process; in order to reach different learner types and have more variety; in order to apply it more consciously. One non-Brazilian subject added: “I think it’s a very important theory that addresses the variability of how students learn and takes into account different aptitudes and abilities”.

Results show that most teachers know and use MI theory in their teaching (See Tables 4, 5, 6, 7, and 8 for more details) and many of them have interest in knowing more about it. In terms of knowledge about MI, MI use and teachers’ awareness about MI, the data showed that Brazilian subjects not only knew more about the theory, but also used it more consciously. Moreover, Brazilian subjects showed more interest in the theory as mentioned before.

*The Way Teachers Choose Textbooks*

The second research question in this study was about the criteria ELT teachers use to select textbooks and materials. I will present the results from the survey (See Appendix A, questions 12-14) and discuss some important facts observed in the data.
Teachers mentioned the criteria they use to choose textbooks (See question 12 in Appendix A). Teachers ranked the criteria according to their importance. They numbered the criteria from 1 (most important) to 11 (least important). The numbers were summed and the results are shown in table 9 below. The smallest sum represents the most important criterion.

Table 9: The way teachers choose textbooks

<table>
<thead>
<tr>
<th>Rank</th>
<th>Criteria</th>
<th>‘sum’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activities/exercises (meaningful, communicative)</td>
<td>146</td>
</tr>
<tr>
<td>2</td>
<td>Method/approach/theory</td>
<td>147</td>
</tr>
<tr>
<td>3</td>
<td>Extra material available (videos, CDs, audiotapes, etc)</td>
<td>241</td>
</tr>
<tr>
<td>4</td>
<td>Layout (colorful, real pictures, well-organized, etc)</td>
<td>263.5</td>
</tr>
<tr>
<td>5</td>
<td>Cultural component (no stereotypes, for all cultures, etc)</td>
<td>323</td>
</tr>
<tr>
<td>6</td>
<td>Year of publication</td>
<td>378</td>
</tr>
<tr>
<td>7</td>
<td>Guidance (teacher’s notes, suggestion for supplementing the book, etc)</td>
<td>380</td>
</tr>
<tr>
<td>8</td>
<td>Author</td>
<td>405.5</td>
</tr>
<tr>
<td>9</td>
<td>Price</td>
<td>456.5</td>
</tr>
<tr>
<td>10</td>
<td>Publisher</td>
<td>469</td>
</tr>
<tr>
<td>11</td>
<td>Other* (integrated skills, adequate for SS’s needs, American English, explanations, availability, content, length of the book, clarity of text)</td>
<td>486.5</td>
</tr>
</tbody>
</table>

*These items were mentioned by the teachers.

Meaningful and communicative activities/exercises was considered the most important item and method/approach/theory was the second most important; however, the results were very close 146 and 147, respectively. Even though the results from this study showed that teachers considered method/approach/theory when choosing
textbooks, care should be taken in interpreting this result. The reason for these results could be related to the fact that in the survey there were five questions about MI theory prior to the questions about textbook selection, so it is possible that teachers were influenced by those questions. If the questions about textbooks were prior to the ones about MI theory, the results could be different.

The general result showed that the third and fourth criteria were *extra material available* and *layout*. However, Brazilian subjects’ third choice was *cultural component*, which differs from non-Brazilians. This result can be related to the fact that all Brazilian subjects work in BNCs where culture is very much taken into consideration when teaching a language.

There were a few differences in the way both groups of subjects choose textbooks. More differences can be observed when comparing tables 10 and 11 shown below.
Table 10: The way teachers choose textbooks (Brazilian subjects)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Criteria</th>
<th>‘sum’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Method/approach/theory</td>
<td>59.5</td>
</tr>
<tr>
<td>2</td>
<td>Activities/exercises (meaningful, communicative)</td>
<td>73.5</td>
</tr>
<tr>
<td>3</td>
<td>Cultural component (no stereotypes, for all cultures, etc)</td>
<td>132.5</td>
</tr>
<tr>
<td>4</td>
<td>Extra material available (videos, CDs, audiotapes, etc)</td>
<td>136.5</td>
</tr>
<tr>
<td>5</td>
<td>Layout (colorful, real pictures, well-organized, etc)</td>
<td>148</td>
</tr>
<tr>
<td>6</td>
<td>Guidance (teacher’s notes, suggestion for supplementing the book, etc)</td>
<td>179.5</td>
</tr>
<tr>
<td>7</td>
<td>Year of publication</td>
<td>224</td>
</tr>
<tr>
<td>8</td>
<td>Price</td>
<td>225</td>
</tr>
<tr>
<td>9</td>
<td>Author</td>
<td>228.5</td>
</tr>
<tr>
<td>10</td>
<td>Publisher</td>
<td>273</td>
</tr>
<tr>
<td>11</td>
<td>Other* (integrated skills, adequate for SS’s needs)</td>
<td>300</td>
</tr>
</tbody>
</table>

*These items were mentioned by the teachers.

Table 11: The way teachers choose textbooks (Non-Brazilian subjects)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Criteria</th>
<th>‘sum’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activities/exercises (meaningful, communicative)</td>
<td>72.5</td>
</tr>
<tr>
<td>2</td>
<td>Method/approach/theory</td>
<td>87.5</td>
</tr>
<tr>
<td>3</td>
<td>Extra material available (videos, CDs, audiotapes, etc)</td>
<td>104.5</td>
</tr>
<tr>
<td>4</td>
<td>Layout (colorful, real pictures, well-organized, etc)</td>
<td>115.5</td>
</tr>
<tr>
<td>5</td>
<td>Year of publication</td>
<td>154</td>
</tr>
<tr>
<td>6</td>
<td>Author</td>
<td>177</td>
</tr>
<tr>
<td>7</td>
<td>Other* (American English, explanations, availability, content, length of the book, clarity of text)</td>
<td>186.5</td>
</tr>
<tr>
<td>8</td>
<td>Cultural component (no stereotypes, for all cultures, etc)</td>
<td>190.5</td>
</tr>
<tr>
<td>9</td>
<td>Publisher</td>
<td>196</td>
</tr>
<tr>
<td>10</td>
<td>Guidance (teacher’s notes, suggestion for supplementing the book, etc)</td>
<td>200.5</td>
</tr>
<tr>
<td>11</td>
<td>Price</td>
<td>231.5</td>
</tr>
</tbody>
</table>

*These items were mentioned by the teachers.
Although Brazilian teachers (in this study) have taught for more years and have more experience in teaching, they considered *guidance* important. It was the sixth item ranked while non-Brazilian subjects considered it as the tenth item. Another criterion, which was ranked differently, was *author*. Non-Brazilian teachers ranked *author* as the sixth most important criterion while Brazilian teachers ranked it as the ninth most important.

*The Way Teachers Supplement Textbooks*

Regarding supplementing materials, both groups of teachers mentioned the criteria (see question 14 in Appendix A) they use to choose extra materials for their learners. Teachers checked all the items they consider when choosing materials. About 88% of the teachers considered *activity type* (music, game, listening, reading, etc) when they select materials. The second item was *authentic materials* mentioned by 81.96% of teachers. The third and fourth items were *communicative activity* and *current material* mentioned by 72.13% and 70.49% of teachers, respectively. The fifth and sixth items were *layout* and *cultural component* considered by 54.09% and 52.45% of teachers, respectively. *Method/approach/theory, adapted material and other criteria* were mentioned by less than 50% of teachers. Table 12 presents detailed results.
Table 12: The way teachers supplement textbooks

<table>
<thead>
<tr>
<th>Rank</th>
<th>Criteria</th>
<th>Brazilians</th>
<th>Non-Brazilians</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activity type</td>
<td>31</td>
<td>23</td>
<td>54</td>
<td>88.52 %</td>
</tr>
<tr>
<td>2</td>
<td>Authentic material</td>
<td>30</td>
<td>20</td>
<td>50</td>
<td>81.96 %</td>
</tr>
<tr>
<td>3</td>
<td>Communicative activity</td>
<td>27</td>
<td>17</td>
<td>44</td>
<td>72.13 %</td>
</tr>
<tr>
<td>4</td>
<td>Current material</td>
<td>25</td>
<td>18</td>
<td>43</td>
<td>70.49 %</td>
</tr>
<tr>
<td>5</td>
<td>Layout</td>
<td>20</td>
<td>13</td>
<td>33</td>
<td>54.09 %</td>
</tr>
<tr>
<td>6</td>
<td>Cultural component</td>
<td>25</td>
<td>7</td>
<td>32</td>
<td>52.45 %</td>
</tr>
<tr>
<td>7</td>
<td>Method/approach/theory</td>
<td>18</td>
<td>9</td>
<td>27</td>
<td>44.26 %</td>
</tr>
<tr>
<td>8</td>
<td>Adapted material</td>
<td>15</td>
<td>12</td>
<td>27</td>
<td>44.26 %</td>
</tr>
<tr>
<td>9</td>
<td>Other</td>
<td>6</td>
<td>2</td>
<td>8</td>
<td>13.11 %</td>
</tr>
</tbody>
</table>

There were slight differences in the way the groups of subjects choose extra material. However, there are two interesting aspects that were observed in the results. Brazilian subjects once again considered *cultural component* as an important criterion for choosing extra materials (as well as when choosing textbooks). About seventy-four percent of Brazilians mentioned it, while only 25.93% of non-Brazilian subjects considered it. Another interesting fact is that when choosing textbooks, teachers considered *method/approach/theory* as the second most important item however, when they mentioned the criteria to choose extra materials, the criterion *method/approach/theory* was not so relevant, only 44.26% of teachers mentioned it. When comparing the results given by the two groups, there is some distinction: 52.94%
of Brazilians considered method/approach/theory, while 33.33% of non-Brazilian subjects mentioned it.

Table 13: The way teachers supplement textbooks (Brazilian subjects)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Criteria</th>
<th>Brazilians</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activity type</td>
<td>31</td>
<td>91.18</td>
</tr>
<tr>
<td>2</td>
<td>Authentic material</td>
<td>30</td>
<td>88.24</td>
</tr>
<tr>
<td>3</td>
<td>Communicative activity</td>
<td>27</td>
<td>79.41</td>
</tr>
<tr>
<td>4</td>
<td>Current material</td>
<td>25</td>
<td>73.53</td>
</tr>
<tr>
<td>5</td>
<td>Cultural component</td>
<td>25</td>
<td>73.53</td>
</tr>
<tr>
<td>6</td>
<td>Layout</td>
<td>20</td>
<td>58.82</td>
</tr>
<tr>
<td>7</td>
<td>Method/approach/theory</td>
<td>18</td>
<td>52.94</td>
</tr>
<tr>
<td>8</td>
<td>Adapted material</td>
<td>15</td>
<td>44.11</td>
</tr>
<tr>
<td>9</td>
<td>Other</td>
<td>6</td>
<td>17.47</td>
</tr>
</tbody>
</table>

Table 14: The way teachers supplement textbooks (Non-Brazilian subjects)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Criteria</th>
<th>Non-Brazilians</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activity type</td>
<td>23</td>
<td>85.19</td>
</tr>
<tr>
<td>2</td>
<td>Authentic material</td>
<td>20</td>
<td>74.07</td>
</tr>
<tr>
<td>3</td>
<td>Current material</td>
<td>18</td>
<td>66.66</td>
</tr>
<tr>
<td>4</td>
<td>Communicative activity</td>
<td>17</td>
<td>62.96</td>
</tr>
<tr>
<td>5</td>
<td>Layout</td>
<td>13</td>
<td>48.15</td>
</tr>
<tr>
<td>6</td>
<td>Adapted material</td>
<td>12</td>
<td>44.44</td>
</tr>
<tr>
<td>7</td>
<td>Method/approach/theory</td>
<td>9</td>
<td>33.33</td>
</tr>
<tr>
<td>8</td>
<td>Cultural component</td>
<td>7</td>
<td>25.93</td>
</tr>
<tr>
<td>9</td>
<td>Other</td>
<td>2</td>
<td>7.41</td>
</tr>
</tbody>
</table>
Even though some criteria for choosing textbooks and extra materials were similar, teachers considered them slightly different. For instance, as mentioned before, when choosing textbooks the criterion *method/approach/theory* was considered relevant (the second most important) but it was not as relevant when choosing extra materials (the seventh item). Therefore I am not sure if teachers really consider *method/approach/theory* when choosing textbooks.

Some subjects mentioned the reasons why textbooks need to be supplemented. Some of the reasons mentioned were: in order to break class routine; bring variety to classes; give students different ways of learning; avoid boredom; motivate students; make interesting for teachers and students; consider students’ needs and interests; be learner-centered; adapt content to students’ reality to make teaching and learning more meaningful; expand students’ knowledge about a good topic; reinforce content; make learning easier, more effective and to enhance teaching; achieve our goals; use MI; and because books are limited and have mechanical not creative exercises.

Conclusion

In this chapter, we described the instrument used to collect data from ELT teachers, the survey. The survey data provided information about ELT teachers’ background, teaching contexts, as well as information about the knowledge and use of MI in ELT. The data also provided information about how teachers choose textbooks/extra material and the reasons why textbooks need to be supplemented. There were two groups of participants, Brazilians and international teachers. The results show that 85.19% of
subjects know MI, 90.16% of subjects use MI in their teaching; however, 40.98% of subjects use MI unconsciously. Teachers also have interest in knowing more about MI theory. In regards to textbooks, results show that the most important criteria for choosing textbooks are meaningful and communicative activities/exercises and method/approach/theory. In terms of extra materials, results show that activity type (music, game, listening, reading, etc) and authentic material are considered the two most important criteria mentioned by teachers. Results show that method/approach/theory is not as relevant for choosing extra materials as it is for choosing textbooks.

All the information from the survey is important because it gives details about the current context of ELT and it provides information about how MI is being considered by English language teachers. In this study, I have sought to identify the relationship between MI and ELT in current practice especially in relation to textbooks and materials that are being used by teachers. MI theory was considered in this study due to an increasing interest of language teachers in the application of MI in their teaching. This interest is more easily observed in the Brazilian context since many teachers have had training in MI and many language institutes claim that they apply MI to their curriculum, as mentioned in chapter 1. MI is relevant to ELT because it acknowledges learners’ different abilities and ways of learning. According to Gardner (1999), “taking human differences seriously lies at the heart of the MI perspective” (p.91).
Chapter 4

Textbooks

Procedure

As stated before, one of the aims of this study is to analyze current EFL/ESL textbooks in order to know if they respond to MI theory, how they respond to it, and to what extent they engage MI in learners. In order to accomplish the stated goal, I selected six current textbooks that are being used in EFL/ESL contexts, and analyzed each activity in the books in order to know the percentage of activities that engage each of the nine intelligences.\(^{20}\)

Textbook Data Collection

The textbooks were selected by surveying Brazilian private language institutes in order to identify which textbooks are currently being used in several cities all over Brazil, as well as by identifying the textbooks that are also being used in the language program at Ohio University. All the textbooks analyzed are being used in Brazilian language institutes. They were chosen in order to provide information about the application of MI in Brazil. Three of the books selected are being used in the English For All, an outreach program of the Linguistics Department at Ohio University where student-teachers teach ESL classes. The textbooks were analyzed to determine if MI Theory is included in those

\(^{20}\) Since this study was based on Palmberg (2001), nine intelligences (including existential) were analyzed in the textbooks. However, Gardner (1999) has considered eight intelligences and the candidate intelligence, existential (p.47-66).
books and identify the intelligence\textsuperscript{21} profile of the textbooks. I identified which intelligences were included, which intelligences were predominant and which ones were less common or not included in the following textbooks: \textit{American Headway 2, Explorations 1, Gateways 1, Go for it! 4, New Interchange 1, and Passages 1}. These books were published between 1998 and 2001 by major publishers for ESL/EFL teaching and learning and were best sellers. Another factor that determined the selection of the textbooks was that they were written by well-known authors, and some of them are in the field of Applied Linguistics as researchers such as Jack Richards and David Nunan. Furthermore, all the books are in the current CLT paradigm.

Method of Analysis

The textbooks were analyzed by identifying the intelligences included in each activity in the six books chosen including extra activities. Review units and grammar references were not included in the data. After collecting the data, the results were analyzed.

The units in the six textbooks analyzed are divided in sections, which are usually labeled clearly. The sections vary from one book to the other; however, they usually refer to the four skills (listening, speaking, reading and writing) as well as grammar, vocabulary and pronunciation practices. The sections are usually divided in several exercises (range of 2-5 exercises). In some sections, there is a different combination of the four skills, i.e. listening/speaking or reading/speaking. For the purpose of this study’s\textsuperscript{21} The use of term “intelligence” in relation to textbooks refers to the presence of elements in the textbook activities that help enhance the intelligences in language learners.
In order to identify the intelligences in each activity in the textbooks, a list was created with possible activities and techniques used in language teaching as well as a description of each intelligence. This compilation of information about each intelligence was based on several sources (Christison, 1996; Christison & Kennedy, 1999; Palmberg, 2001); however, most of the information was collected from Christison’s article. Labels were used to identify each intelligence in the course books and the same labels were used in the figures and tables with the results. The labels are as follows: VL for verbal/linguistic; LM for logical/mathematical; SV for spatial/visual; BK for
bodily/kinesthetic; M for musical; IR for interpersonal; IA for intrapersonal; N for naturalist; and E for existential. Appendix B presents the detailed list used for collecting information from the textbooks.

After identifying the intelligences in each activity, the number of occurrences of each intelligence was counted for each unit. Tables were created for each book and the results were put in the tables. The number of activities per book was summed and the number of occurrences of each intelligence per book, too. All the results were put in Excel in order to obtain graphs with them. The results obtained from Excel included the total number of activities in the six books, the sum of occurrences of each intelligence in the six books, and the percentage of occurrence of each intelligence in all the books. The results represent the profile of the six course books analyzed in this study.

The analysis in this study was limited to simply recognize (or categorize) which intelligences were included in the activities. Some elements were taken into consideration when identifying the intelligences in the activities: the type and description of the activity, the elements that were part of the activity (such as pictures, graphs, realia), the techniques and materials necessary for doing the activity, and the skills being practiced.

Considerations about the degree to which each intelligence were being practiced or enhanced in the activities in the textbooks were not analyzed due to the fact that it is difficult to measure it. It is difficult to quantify the strength of an intelligence in an activity. In this study’s data collection each intelligence that was identified in the

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22 As stated before, the existential intelligence was considered in the analysis of the textbooks in this study; however, Gardner only considered it as a candidate for an intelligence rather than a fully fledged intelligence.
activities was counted in the same way. The data from the textbooks is limited to simply identifying them in the activities.

Results and Discussion

The third research question that guided this study was related to MI theory use in current textbooks. The textbooks were analyzed in order to identify the intelligences that were included in the books currently used in ESL/EFL contexts. The research determined the textbook intelligence profiles and the extent to which the textbooks engage MI in learners.

None of the books were designed to incorporate the principles of MI theory in language learners. In fact, to the best of my knowledge, no ELT textbook has been designed to apply MI theory. However, there are resource books for language teachers who desire to apply MI to their teaching, as mentioned in chapter two.

First, the results from the analysis of all textbooks will be presented and discussed; then each book will be discussed separately.

*Textbook Intelligence Profile*

As previously mentioned, the researcher sought to identify the textbook intelligence profile, which refers to the combination of intelligences in the textbooks. Six textbooks were analyzed in order to identify the intelligences included in each activity in the textbooks, 928 activities were analyzed (See table 15 for detailed information). The occurrence of each intelligence was counted and the percentage of each intelligence was
identified. Figure 1 summarizes the percentage of occurrence of each intelligence in the six textbooks analyzed in this study.

Table 15: Number of activities per intelligence and percentage of occurrence

<table>
<thead>
<tr>
<th>Multiple Intelligences</th>
<th>Number of activities #</th>
<th>Percentage of occurrence %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal Linguistic (VL)</td>
<td>928</td>
<td>100</td>
</tr>
<tr>
<td>Logical Mathematical (LM)</td>
<td>348</td>
<td>37.5</td>
</tr>
<tr>
<td>Spatial Visual (SV)</td>
<td>836</td>
<td>90.08</td>
</tr>
<tr>
<td>Bodily Kinesthetic (BK)</td>
<td>77</td>
<td>8.29</td>
</tr>
<tr>
<td>Musical (M)</td>
<td>11</td>
<td>1.18</td>
</tr>
<tr>
<td>Interpersonal (IR)</td>
<td>706</td>
<td>76.07</td>
</tr>
<tr>
<td>Intrapersonal (IA)</td>
<td>928</td>
<td>100</td>
</tr>
<tr>
<td>Naturalist (N)</td>
<td>11</td>
<td>1.18</td>
</tr>
<tr>
<td>Existentialist (E)</td>
<td>03</td>
<td>0.32</td>
</tr>
</tbody>
</table>
The profile of the six textbooks was predominantly the combination of four intelligences: verbal/linguistic, intrapersonal, spatial/visual and interpersonal. These intelligences were present in more than 75% of all activities in the textbooks analyzed. The other intelligences were present in less than 40% of the activities.

*Predominant Intelligences*

The most common intelligences in the six textbooks analyzed in this study were verbal/linguistic, intrapersonal, spatial/visual, and interpersonal, as mentioned before.

VL and IA were present in 100% of the activities in all the books. Since skills like speaking, listening, reading and writing are always present in language textbooks (especially in integrated skills books), the percentage of VL was expected. IA was
present in 100% of the activities since all the activities required tasks with individual elements like doing things by oneself, reflecting, talking about oneself, and giving personal opinions.

SV was present in 90.08% of the activities. Many textbooks have pictures and/or photographs that illustrate situations presented in the books such as dialogues, reading passages, listening activities or vocabulary. There are also many tables, graphs, and graphic organizers especially for vocabulary work and listening activities. Moreover, the activities were developed in order to exploit the visual input in the books. It is worth mentioning that the books designed for beginner levels and for teenagers presented more than 90% of SV intelligence while books designed for intermediate levels presented a little less, from 78% to 87% of SV intelligence. It seems that more visual input is offered to young and beginner learners.

Interpersonal intelligence was present in 76.07% of the activities in the books. Pair work and group work are the most common types of activities that generate interaction among students and enhance the interpersonal intelligence. Peer-teaching, role-plays, and interviews were also identified in the books analyzed. Interpersonal intelligence can be enhanced in several types of activities: speaking, listening, reading even in writing and grammar exercises\(^\text{23}\). Many activities in the books analyzed usually combined the IA and the IR intelligences. In grammar exercises, for example, learners usually work alone then work in pairs or groups to compare their answers and check exercises.

\(^\text{23}\) It was common to see grammar exercises and writing activities presented as activities to be done individually. It was interesting to see that grammar and writing activities are currently being done individually and in pairs/groups.
Less Common Intelligences

Logical/mathematical, bodily/kinesthetic, musical, naturalist, and existential were less common intelligences in the books analyzed. These intelligences were present in less than 40% of the activities in the six books. However, LM intelligence was present in more than 60% of activities in two books (69.53% and 62.37%). The percentage of LM in all the books was 37.5%; BK was present in only 8.29% of the activities; both M and N were present in 1.18% of all the activities in the six books; and E was present in 0.32% of the activities in all the books.

Some activities that enhance the LM intelligence are matching, guessing/making predictions, ranking, and using statistical information with graphs/percentages. The most common activities for the BK intelligence are role-plays, mime, “find someone who…”24, and mingling activities. The M intelligence appears basically in units about music styles. The N intelligence is most common in units about nature, and environmental issues. In the textbooks analyzed, the E intelligence was present in an activity about being concerned about the future of the next human generation. In another activity entitled “life in the 21st century”, students discuss changes that will happen in the future according to the predictions presented in a book called “Visions”. Another activity was a reading passage about a person who had a very unique way to live and who wrote his reflections about life in his diary until his death.

24 See Richards, Hull and Proctor (1997), New Interchange 1, p. IC-2 for an example of “Find someone who…”.
Activities that Cater to Several Intelligences

Berman (1998) suggests that teachers should try to include materials in their lesson plans that enhance all the intelligences. This way, teachers assure that each learner’s unique profile will be reached (p.3). In addition, there will be more variety in the classroom. It is possible to cater to several intelligences in a single activity. Some examples from the six textbooks analyzed will illustrate how it is possible.

One example by Richards, Hull and Proctor (1997, pp. IC17-18) called “Are you ready to order?” in which several intelligences can be used (practiced) by learners: verbal/linguistic, interpersonal, logical/mathematical and bodily/kinesthetic. The activity is a role-play, one student is the waiter/waitress and the other is a customer. By using their speaking and listening skills, students use their VL intelligence; the IR intelligence is enhanced by students working in pairs (and maybe groups when they present it to the class); LM, by dealing with numbers and money while adding up the checks; and BK while performing using movements such as bringing menus, food, and checks; by picking up checks and money.

Another example is by Nunan (2000, p.91), six intelligences are enhanced: VL, IA, SV, IR, LM, and N. The two last ones are less common in books. The unit is called “We’re trying to save the manatees!” The activity is divided in three parts: 1) describing animals using adjectives, 2) listening and circling the words in the first part, and 3) describing an animal that is similar to the student who describes it. In the first activity students are supposed to use the adjectives from a word bank to describe the animals and add other adjectives. There are pictures of the animals and graphic organizers where
learners write their answers. In the second part, students listen to people describing the animals in the pictures and circle the words they hear. In the third part, students should think of an animal that is similar to them and they write about it. After that, they read their descriptions to the class and the class guesses the animal described. VL is enhanced while learners use the four skills (listening, writing, reading and speaking) and the vocabulary. IA is enhanced when they work alone; the pictures and graphic organizers cater to the SV intelligence; IR is present in the group work; LM is enhanced when learners have to reason well in order to guess the animals; and N is enhanced when learners are describing the animals and talking about their characteristics.

A third example is from Soars and Soars (2001, p. 40), in the listening activity learners enhance six intelligences: VL, IA, LM, M, IR, and SV. The activity is called “You’ve got a friend” and it is divided in three parts. In the first one, the students read a few sentences and identify who says these sentences according to the options given (friend, boy/girlfriend). Then they listen to the first verse of the song “You’ve got a friend” and discuss the questions given. It is not stated if the activity is a pair or group work but teachers can choose either one. In the third part, learners listen to song and complete the lyrics. Speaking, listening and writing benefit the VL intelligence; IA is enhanced when students think about their lives, express their opinions and do the activities alone; LM is enhanced when learners need logical argumentation to answer the questions while discussing in pairs or groups; M is present since the activity is based on the song and learners listen to the song (and they can also sing it along afterwards). The
pair or group work benefits the IR intelligence; and there is a picture that benefits the SV intelligence.

Although the examples given above included more than four intelligences in one activity, most activities in the books analyzed include an average of three or four intelligences and the activities usually cater to the four predominant intelligences mentioned above.

It is worth mentioning that the activities that enhance more than four intelligences in learners are often games and extra activities. In some cases, the combination of two skills such as listening/speaking, reading/writing, and reading/speaking also strengthens more intelligences.

Each Book Intelligence Profile

The profile of each textbook will be presented and discussed. The books will be presented in the order in which they were analyzed. The VL and the IA intelligences were present in 100% in the general profile therefore the same result in each textbook.

The profile of New Interchange 1 was similar to the general textbook profile. The predominant intelligences were the same: VL, IA, SV, and IR. However, there were more activities that cater to SV and IR (See Table 15 above for comparison). The percentage of SV in this book was slightly higher than in the general profile. As mentioned before, this result may be an indication that in books for beginning level there is more visual input and the language is presented and practiced through pictures, charts, photos and graphic organizers. The authors stated that, “Charts or graphics often
accompany these task-based exercises to lend support to students” (p. v) when describing the listening activities; however, visuals were not limited to listening activities. The percentage of IR intelligence was 12.75% higher than in the general profile. There are many activities to provide opportunity for students share information and interact.

The less common intelligences were present in less than 20% of the activities. LM was roughly half percentage of the result in the general profile. BK, N, and M were much lower than the other intelligences. The E intelligence was not present in book one. Table 16 summarizes the number of occurrences and percentage of each intelligence in book one.

Table 16: Book One - New Interchange 1

<table>
<thead>
<tr>
<th>MIs</th>
<th>Number of the occurrences of the intelligence</th>
<th>Percentage of occurrence of the intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>VL</td>
<td>197</td>
<td>100 %</td>
</tr>
<tr>
<td>LM</td>
<td>39</td>
<td>19.79 %</td>
</tr>
<tr>
<td>SV</td>
<td>185</td>
<td>93.9 %</td>
</tr>
<tr>
<td>BK</td>
<td>10</td>
<td>5.0 %</td>
</tr>
<tr>
<td>M</td>
<td>01</td>
<td>0.5 %</td>
</tr>
<tr>
<td>IR</td>
<td>175</td>
<td>88.83 %</td>
</tr>
<tr>
<td>IA</td>
<td>197</td>
<td>100 %</td>
</tr>
<tr>
<td>N</td>
<td>02</td>
<td>1.01 %</td>
</tr>
<tr>
<td>E</td>
<td>00</td>
<td>0 %</td>
</tr>
</tbody>
</table>

*Total of activities in the book = 197

The second book profile showed roughly the same results as the general profile in terms of predominant and less common types of intelligences. However, differences in the percentages of some of the intelligences were observed. For instance, the percentage
of IR was higher than SV. When compared to the general profile, the percentage of IR was 17.36% higher.

The results for the other intelligences in Passages 1 were similar to the ones in book one. For instance, LM was about 50% less than the results for the general profile and the BK intelligence was much lower. N was also lower than in the general book. Five percent of the activities cater to the E intelligence but there were no activities that cater to the M intelligence (See Table 17 for detailed information).

Table 17: Book Two – Passages 1

<table>
<thead>
<tr>
<th>MI</th>
<th>Number of the occurrences of the intelligence</th>
<th>Percentage of occurrence of the intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>VL</td>
<td>183</td>
<td>100 %</td>
</tr>
<tr>
<td>LM</td>
<td>33</td>
<td>18.03 %</td>
</tr>
<tr>
<td>SV</td>
<td>158</td>
<td>86.33 %</td>
</tr>
<tr>
<td>BK</td>
<td>04</td>
<td>2.18 %</td>
</tr>
<tr>
<td>M</td>
<td>00</td>
<td>0 %</td>
</tr>
<tr>
<td>IR</td>
<td>171</td>
<td>93.44 %</td>
</tr>
<tr>
<td>IA</td>
<td>183</td>
<td>100 %</td>
</tr>
<tr>
<td>N</td>
<td>01</td>
<td>0.5 %</td>
</tr>
<tr>
<td>E</td>
<td>01</td>
<td>0.5 %</td>
</tr>
</tbody>
</table>

*Total of activities in the book = 183

The profile of the third book, Go for it! 4, was different from the general profile in some ways. The first distinction observed was that the SV intelligence percentage was 8.08% higher than in the general profile, 98.17%. In fact, SV in the third book was the highest percentage of all books. The percentage of IR was lower than in the general
profile. Another distinction observed was that the LM was about 10% more than in the
general profile and much higher than in books one and two. The BK intelligence was
also the highest of all books and it was about double the general profile result. Although
only 4.26% of N was found in the activities in book three, the percentage was the highest
of all books as well. The percentage of M was 3.05% and all activities were in a lesson
about music. None of the activities cater to the E intelligence. Table 18 presents detailed
information.

Table 18: Book Three - *Go for it!* 4

<table>
<thead>
<tr>
<th>MIs</th>
<th>Number of the occurrences of the intelligence</th>
<th>Percentage of occurrence of the intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>VL</td>
<td>164</td>
<td>100 %</td>
</tr>
<tr>
<td>LM</td>
<td>79</td>
<td>48.17 %</td>
</tr>
<tr>
<td>SV</td>
<td>161</td>
<td>98.17 %</td>
</tr>
<tr>
<td>BK</td>
<td>27</td>
<td>16.46 %</td>
</tr>
<tr>
<td>M</td>
<td>05</td>
<td>3.05 %</td>
</tr>
<tr>
<td>IR</td>
<td>106</td>
<td>64.63 %</td>
</tr>
<tr>
<td>IA</td>
<td>164</td>
<td>100 %</td>
</tr>
<tr>
<td>N</td>
<td>07</td>
<td>4.26 %</td>
</tr>
<tr>
<td>E</td>
<td>00</td>
<td>0 %</td>
</tr>
</tbody>
</table>

*Total of activities in the book = 164

*Explorations 1* was the fourth book analyzed and its profile includes 5
predominant intelligences: VL, IA, SV, IR and LM. The percentage of these intelligences
was roughly the same that in the general profile; however, the LM intelligence was much
higher than in the general profile. The percentage of LM is higher in *Explorations 1*
because in many activities learners make predictions, guess, match and reason. BK was slightly lower than in the general profile. There were no activities to cater to M, N, and E.

Table 19: Book Four – Explorations I

<table>
<thead>
<tr>
<th>MIs</th>
<th>Number of the occurrences of the intelligence</th>
<th>Percentage of occurrence of the intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>VL</td>
<td>101</td>
<td>100 %</td>
</tr>
<tr>
<td>LM</td>
<td>63</td>
<td>62.37 %</td>
</tr>
<tr>
<td>SV</td>
<td>88</td>
<td>87.12 %</td>
</tr>
<tr>
<td>BK</td>
<td>08</td>
<td>7.92 %</td>
</tr>
<tr>
<td>M</td>
<td>00</td>
<td>0 %</td>
</tr>
<tr>
<td>IR</td>
<td>78</td>
<td>77.22 %</td>
</tr>
<tr>
<td>IA</td>
<td>101</td>
<td>100 %</td>
</tr>
<tr>
<td>N</td>
<td>00</td>
<td>0 %</td>
</tr>
<tr>
<td>E</td>
<td>00</td>
<td>0 %</td>
</tr>
</tbody>
</table>

*Total of activities in the book = 101

As for the fifth book analyzed, Gateways I, the profile was once again with four predominant intelligences: VL, IA, SV and IR. The SV intelligence was slightly higher than in the general profile; however, the IR intelligence was 8.99% lower. LM was 8.5% lower than in the general profile, BK and M were slightly higher. No occurrences of N and E were found in book five. Table 20 presents the results for book five.
Table 20: Book Five – *Gateways 1*

<table>
<thead>
<tr>
<th>MIs</th>
<th>Number of the occurrences of the intelligence</th>
<th>Percentage of occurrence of the intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>VL</td>
<td>155</td>
<td>100 %</td>
</tr>
<tr>
<td>LM</td>
<td>45</td>
<td>29 %</td>
</tr>
<tr>
<td>SV</td>
<td>143</td>
<td>92.25 %</td>
</tr>
<tr>
<td>BK</td>
<td>14</td>
<td>9.03 %</td>
</tr>
<tr>
<td>M</td>
<td>02</td>
<td>1.29 %</td>
</tr>
<tr>
<td>IR</td>
<td>104</td>
<td>67.09 %</td>
</tr>
<tr>
<td>IA</td>
<td>155</td>
<td>100 %</td>
</tr>
<tr>
<td>N</td>
<td>00</td>
<td>0 %</td>
</tr>
<tr>
<td>E</td>
<td>00</td>
<td>0 %</td>
</tr>
</tbody>
</table>

*Total of activities in the book = 155

*American Headway 2* was the last book analyzed and its profile differs from the general profile and the other books. Four intelligences were predominant in book six: VL, IA, SV and LM. The percentage for LM was the highest of all books, 69.53%. The high percentage of LM is due to many matching activities and because the ‘grammar spot’ activities always require reasoning and drawing conclusions. The IR intelligence was identified in 56.25% of the activities. BK, M and E were higher than in the general profile while N was lower, only 0.78% of all activities. Table 21 presents detailed data.
Table 21: Book Six - *American Headway 2*

<table>
<thead>
<tr>
<th>MI</th>
<th>Number of the occurrences of the intelligence</th>
<th>Percentage of occurrence of the intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>VL</td>
<td>128</td>
<td>100 %</td>
</tr>
<tr>
<td>LM</td>
<td>89</td>
<td>69.53 %</td>
</tr>
<tr>
<td>SV</td>
<td>101</td>
<td>78.90 %</td>
</tr>
<tr>
<td>BK</td>
<td>14</td>
<td>10.93 %</td>
</tr>
<tr>
<td>M</td>
<td>03</td>
<td>2.34 %</td>
</tr>
<tr>
<td>IR</td>
<td>72</td>
<td>56.25 %</td>
</tr>
<tr>
<td>IA</td>
<td>128</td>
<td>100 %</td>
</tr>
<tr>
<td>N</td>
<td>01</td>
<td>0.78 %</td>
</tr>
<tr>
<td>E</td>
<td>02</td>
<td>1.56 %</td>
</tr>
</tbody>
</table>

*Total of activities in the book = 128

Conclusion

Since one of the aims of this study was to analyze current textbooks in order to know if they respond to MI theory and to identify the textbook intelligence profiles, in this chapter, we first described the methodology for the data collection in detail and the scope of the data collection. Then the results and discussion for the general textbook intelligence profile was presented with information about the predominant intelligences, the less common ones and activities that cater to many intelligences in all books. Each book profile was compared to the general profile and tables present the detailed information about each book.

The results show that the textbook intelligence profile of the six books analyzed in this study is predominantly composed of four intelligences: verbal/linguistic, intrapersonal, spatial/visual and interpersonal. According to the analysis in this study, VL and IA were present in 100% of the activities; SV was present in 90.08%; and IR was
present 76.07% of all the activities in the six books. The less common intelligences were: logical/mathematical, bodily/kinesthetic, musical, naturalist and existential. The percentage of occurrence of the less common intelligences were as followed: LM, 37.5%; BK, 8.29%; M, 1.18%; N, 1.18%; and E, 0.32% of all the activities in the six books.

The results show that activities that enhance more intelligences are usually games, extra activities (activities which are present at the end of the books apart from the unit activities or as an extension of the activities in the unit), and the combination of two skills such as listening/speaking.

As for the profile of each book, the results show that the profiles are roughly the same; however, book six differs from the general profile and the other books. Some differences were observed in the books in terms of percentage of some intelligences. The results also suggest that the books for beginning level and younger learners offer more visual input than the ones for intermediate learners.

The low percentage of occurrences of existential intelligence could be related to the fact that this intelligence deals with controversial issues such as religions and mysticism. It also deals with complex areas of study such as philosophy. Level of proficiency (and age) could also be related to the lack of existential intelligence in the books. It seems that learners need a much higher level of proficiency to discuss complex issues.

The analysis of the textbooks in this study identified their intelligence profiles, provided more information about the application of MI theory in current English
textbooks and reinforced the need to supplement textbook activities or to use extra materials in order to apply MI theory in language teaching.
Chapter 5

Exploiting and Supplementing Textbooks

Since many language teachers have interest in MI theory and textbooks are mainly used in language courses as discussed in chapter two, one of the purposes of this study was to identify the intelligences that were included in books in current use. Results showed that textbook profiles are limited to four intelligences, which are verbal/linguistic, intrapersonal, spatial/visual and interpersonal. The other intelligences, which are logical/mathematical, bodily/kinesthetic, musical, naturalist and existential, are less common in books. In order to include the less common intelligences in one’s teaching, the activities in a textbook can be exploited in other manners. Another possibility is to supplement textbooks with extra materials or activities. These changes not only include the less common intelligences but also help balance the types of intelligences in teaching to fit learners’ profiles. Teachers can include the intelligences in which learners are strong to benefit and consider students’ strengths. Teachers can also include students’ weak intelligences in order to help learners improve them.

In this chapter, I will first present some tools that have been suggested by researchers on how to assess teachers’ and learners’ intelligences. Then there will be suggestions on categorizing activities for each intelligence, exploiting materials/activities
Assessing Teachers’ and Learners’ Intelligence Profiles

As mentioned before, intelligence profile is the combination of the multiple intelligences in each person. Each person has a unique combination of the eight (or more) intelligences. This combination depends on people’s experience in life and their educational background. Gardner (1999) states “intelligences arise from the combination of a person’s genetic heritage and life conditions in a given culture and era” (p.45). Throughout life people can change and develop their intelligence profiles by strengthening weak intelligences and/or improving the strong ones. The profile can change even more if people are exposed to all intelligences especially in school - the earlier the better.

Christison (1998c) encourages teachers to learn about their own intelligence profiles in order to connect their experiences in life with MI theory. This connection can help teachers understand the theory better. When teachers know more about their strengths and weaknesses, they can make better decisions for their students. Christison (1998a) has developed an inventory (See Appendix C) that determines each of the intelligences. McKenzie (1999) has also developed a survey to determine intelligence profiles (See Appendix D).

Although Christison’s inventory was created to assess ESL teachers’ profiles, it can assess the profiles of all kinds of teachers. The inventory is divided in eight sections that assess eight intelligences. Each section corresponds to an intelligence and it is
composed of 10 statements related to the intelligence being assessed. While Christison’s inventory was created for teachers, McKenzie’s survey can assess anyone’s profiles. The survey assesses 9 intelligences (including existential). The sections are numbered instead of labeled with each intelligence type. At the end of the survey, each section reveals the type of intelligence that was being assessed.

McKenzie (1999) states that his inventory is “a snapshot in time” since the intelligence profile can change (p.5). Gardner warns us about the implications of labeling people. He states that assessing a person’s intelligences is not as simple as many of us have thought. In the words of Gardner (1999):

If I were asked to assess someone’s intelligences, I would not be satisfied until I had observed him solving problems and fashioning products in a number of settings. This is usually not practical. And even then, I would have no guarantee that the intelligences profile would remain the same a year or two later (p. 139).

Teachers can also assess their learners’ intelligence profiles in order to know them better and understand how they can enhance their learners’ unique profiles. It is also important for learners to know their own intelligence profiles in order to know them better and understand their process of learning. Learners can also benefit from this knowledge in their life outside the classroom. Knowing their strengths and weaknesses will make learners aware of ways of using their strong intelligences in order to enhance their weak ones. Teachers need to be aware of the fact that “M.I. is meant to empower, not label people!” as suggested by McKenzie (1999, p.5). Christison (1996, 1999) has created an inventory for learners, which is a compilation of statements given by her
students about how they used MI in their lives (See Appendix E). Lazear (1993) has developed several instruments to be used with students in the classroom. There are self-analysis surveys for elementary, middle and secondary school levels. These instruments can be used (or adapted to be used) with language learners at different ages (See Appendix F, G and H).

Categorizing Activities According to Each Intelligence

Christison (1996) suggests that language teachers, who want to apply MI in their lessons, should identify the activities they often do in their classes and categorize them according to each intelligence. A compilation of activities for enhancing each intelligence is provided below (See Figure 2). Several sources (Berman, 1998; Christison, 1996 & 1998c; Lazear, 1993) were combined in a single list. It is worth mentioning that some activities can enhance more than one intelligence.
Figure 2: Classification of activities/materials for multiple intelligences

<table>
<thead>
<tr>
<th>Verbal Linguistic Intelligence</th>
<th>Logical Mathematical Intelligence</th>
<th>Spatial Visual Intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>Scientific demonstrations and experiments</td>
<td>Charts, grids, maps, diagrams</td>
</tr>
<tr>
<td>Small and large group discussions</td>
<td>Creating/deciphering codes</td>
<td>Visualizations</td>
</tr>
<tr>
<td>Reading (books)</td>
<td>Logic problems and puzzles</td>
<td>Photography</td>
</tr>
<tr>
<td>Worksheets</td>
<td>Games</td>
<td>Videos, slides, movies</td>
</tr>
<tr>
<td>Word (building) games</td>
<td>Science thinking</td>
<td>Art, and other pictures</td>
</tr>
<tr>
<td>Student speeches</td>
<td>Story problems and problem solving activities</td>
<td>Imaginative storytelling</td>
</tr>
<tr>
<td>Story-telling</td>
<td>Calculations</td>
<td>Painting or collage</td>
</tr>
<tr>
<td>Listening (to cassettes or talking books)</td>
<td>Logical argumentation</td>
<td>Using mind maps</td>
</tr>
<tr>
<td>Debates</td>
<td>Logical-sequential presentation of subject matter</td>
<td>Graphic organizers</td>
</tr>
<tr>
<td>Journal keeping</td>
<td>Guided discovery</td>
<td>Optical illusions</td>
</tr>
<tr>
<td>Memorizing</td>
<td>Statistics</td>
<td>Telescopes, microscopes</td>
</tr>
<tr>
<td>Using word processors</td>
<td>Showing relationship</td>
<td>Visual awareness activities</td>
</tr>
<tr>
<td>Publishing (creating class newspapers or collections of writings)</td>
<td></td>
<td>Student drawings</td>
</tr>
<tr>
<td>Writing (essays)</td>
<td></td>
<td>Pretending</td>
</tr>
<tr>
<td>Taking notes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving presentations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speaking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poetry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humor/jokes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bodily Kinesthetic Intelligence</td>
<td>Musical Intelligence</td>
<td>Interpersonal Intelligence</td>
</tr>
<tr>
<td>Brain gym</td>
<td>Songs/ video clips</td>
<td>Group work</td>
</tr>
<tr>
<td>Body language</td>
<td>Singing</td>
<td>Cooperative groups</td>
</tr>
<tr>
<td>Creative movement</td>
<td>Humming</td>
<td>Cooperative learning activities</td>
</tr>
<tr>
<td>Hands-on activities</td>
<td>Playing recorded music</td>
<td>Conflict mediation</td>
</tr>
<tr>
<td>Classroom aerobics</td>
<td>Playing live music (piano, guitar)</td>
<td>Peer teaching</td>
</tr>
<tr>
<td>Cooperative group rotation</td>
<td>Group singing</td>
<td>Board games</td>
</tr>
<tr>
<td>Mother-may-I?</td>
<td>Mood music</td>
<td>Group brainstorming</td>
</tr>
<tr>
<td>Field trips</td>
<td>Music appreciation</td>
<td>Pair work</td>
</tr>
<tr>
<td>Folk/creative dance</td>
<td>Student made instruments</td>
<td>Group problem solving</td>
</tr>
<tr>
<td>Mime</td>
<td>Jazz chants</td>
<td>Project work</td>
</tr>
<tr>
<td>Role Play</td>
<td>Rhymes</td>
<td>Giving/receiving feedback</td>
</tr>
<tr>
<td>Relaxation exercises</td>
<td>Music composition/creation</td>
<td>Group projects</td>
</tr>
<tr>
<td>Craftwork</td>
<td>Background music</td>
<td></td>
</tr>
<tr>
<td>Cooking and other “mess” activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ring games</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26 See Berman, M. (1998, p. 96)
28 See [http://www.gameskidsplay.net/games/mental_games/mother_may_i.html](http://www.gameskidsplay.net/games/mental_games/mother_may_i.html)
29 See Bell, D. (1999)
Some teachers may find difficult to connect some intelligences with language teaching, for instance, the logical/mathematical intelligence. However, if teachers look for different types of materials to use in their lessons, they will realize that there are infinite sources of materials to be used in language teaching. Teachers should also try to use the same material for different purposes, levels of proficiency and students’ age (of course, some adaptations need to be done). They would be surprised with the number of possibilities and with their own ideas. Some suggestions for activities or materials to be used to enhance the LM intelligence will be presented below.

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30 Since there is very little in the literature about existential intelligence, the suggestions given were based on McKenzie’s survey (See Appendix D section 4). This intelligence was not as represented as the others.
One possibility for creating/deciphering codes for children is to create a code with letters/words and pictures (A = apple, B = bird, C = cat, etc). Teachers can create words/sentences using the code (pictures) and students use the code to find out the word/sentence. Students can also create their own codes and make words/sentences for their classmates decipher. Teachers can also adapt “codeword”, which is found in puzzle magazines, for teenage and adult learners. In codeword, numbers represent letters of the alphabet.

Graphs and charts are used in some textbooks to present statistical information. Some other ways of presenting statistics is through rankings, pools, and surveys. Students can collect information by interviewing people and present results using statistics. Calculations can be done through the use of extra materials such as card games, children games, toy money, and some educational software programs. One of the games is “The Great Balloon Game”. It can be used for practicing numbers, addition, subtraction, and counting with children. There are educational software programs that practice math skills such as measurement, and arithmetic. Although these software programs were originally created for children from preschool to 2nd grade, they can be used for language learning as well. One of these programs is Arthur’s from LearningBuddies, several intelligences can be practiced with it.

Teachers need to be aware of the fact that potential materials are available for them anywhere. Some materials (or sources) that can be adapted to language teaching are: children toys, card games, board games, children games, children books, TV

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31 Adapted from an idea by K. Silva, personal communication, October 12, 2002.
cartoons, TV programs, photos, maps, puzzle magazines, LEGOS®, encyclopedias, SCRABBLE®, BOGGLE®, toy money, educational software and Internet sites. Teachers just need to use their creativity to adapt the materials to present, practice, reinforce or review any subject matter.

Exploiting Textbook Activities in Several Manners to Cater to More Intelligences

Palmberg (2001) states that not all teachers “are eclectic in the sense that they select their texts and exercises from various sources and make adaptations whenever needed” (p.1). Teachers tend to choose a text as the basis for their teaching practice and their choices of exercises are according to their personal preferences and “judgment of what they find useful for their students” (Palmberg, 2001, p.3). When teachers adapt course books they omit some exercises, change or supplement others. According to Snider (2001), several factors determine the procedures that are used in the classroom such as student backgrounds and institutional support, as well as the instructor’s background. Teaching depends on teacher training, teachers’ styles and especially teachers’ strengths. “Moreover, an instructor who easily comprehends and enjoys grammar may choose to teach using a grammar-oriented approach, whereas one who tends to enjoy the interpersonal aspects of languages may use a more communicative approach”(Snider, 2001, p.14).

Teachers need to be aware of the fact that textbooks can fit their intelligence profiles and/or students’ intelligence profiles. In case teachers and students have different profiles, teachers tend to make choices based on his/her preferences, styles or strengths
(Palmberg, 2001; Snider, 2001). When teachers know their intelligence profiles, their students’ intelligence profiles and the textbook intelligence profile, they can adapt the textbook to best fit their learners’ as well as their interests. Teachers can also choose textbooks that would help them and/or their learners to overcome their weaknesses.

Since many teachers have to use textbooks that do not necessarily match their learners’ or their profiles, one alternative is adapting textbook activities in order to engage learners’ intelligences. Some activities from the textbooks analyzed in this study were chosen to provide suggestions on how to adapt activities to enhance more intelligences especially the less common types of intelligences. A few examples will illustrate how to adapt textbook activities.

The following activities are from *American Headway 2*, unit 3. The unit focuses on past tenses: past simple and past continuous. The first example is the first activity in the unit (p. 18). The activity enhances 3 intelligences: verbal/linguistic, intrapersonal and spatial/visual: VL since it is a grammar practice, IA because it is done individually (although it is not stated, this activity may be done individually), and SV because of the way the information is presented and organized.
Two adaptations could be made in order to enhance other intelligences:

Music Box Activity - Teacher (T) writes each verb in the activity above separately in small slips of paper (another option is to enlarge the activity above in a copying machine and separate the verbs by cutting into 12 pieces). Then teacher puts the slips of paper in a small box or container with a lid. In the classroom, teacher asks students (SS) to sit in a circle (either on their desks or on the floor, depending on the class). T explains the activity and sets the rules for the activity. T plays music (T cannot look at the SS) and SS pass the box. When the music stops, the student (S) who has the box takes a slip of paper out of the box and says the present form of the verb (SS can also spell the verb form, in this case two points can be scored). If the answer is correct, the S scores a point. If the answer is wrong, the S puts the verb back in the box. T should vary the time to play music in order to “catch” a student unexpectedly and give opportunities to most students participate. The activity can be done with students working individually or in groups. In case of groups, T divides the class in two groups: A and B; students sit in the circle in the following sequence: A, B, A, B, A, B. Students score points for their groups when their answers are correct. They cannot ask the group to help answering. The answer should be given individually.
The adapted activity enhances 3 more intelligences besides the 3 mentioned in the original activity (VL, IA, SV). Bodily/kinesthetic is enhanced since some movements were included such as moving to a circle, passing and receiving the box. Musical since the activity is carried out in the rhythm of music and SS’s participation depends on the music being played (if the song is “fast” like rock or pop music, SS tend to pass the box faster following the rhythm). The interpersonal intelligence is enhanced since SS work in groups or interact with the group while doing the activity.

The second adaptation for the “Starter” is the game “dominoes”. T makes a domino game\(^{32}\) with the verbs in the exercise. More verbs can be added and practiced. In order to have the total number of pieces in a domino game, 16 more verbs can be added. SS play dominoes (in groups) with the verbs in order to match present with past forms of the verbs. T needs 3 or 4 sets of dominoes\(^{33}\), one for each group. The game would be played as shown below:

![Figure 4: Dominoes](image)

\(^{32}\) Adapted from an idea by K. Silva, personal communication, August 15, 2003.

\(^{33}\) The domino game can be used many times with any students who study the past tense. It can also be used to review past tense.
The next piece would be the one with the verb “told”. The rules for playing the game are basically the same for playing dominoes but the pieces have verbs instead of numbers/spots. SS should play more than once in order to practice the verbs better since each time they get different pieces (verbs). See Appendix I for a sample domino game.

The adapted activity enhances 5 intelligences. SS manipulate and arrange the pieces while playing the game (BK, SV) and practice the verb forms (VL). SS work individually (IA) and in groups (IR) at the same time.

The third adapted activity is also from *American Headway 2*, unit 3, page 20 (See Appendix J). The original activity includes 4 intelligences: VL, IA, SV, and LM. It is a reading activity that practices past simple and introduce past continuous. The activity seems to be designed for individual work. The adapted activity enhances 2 more intelligences: IR and BK. The activity is explained below (See Appendix J in order to better understand the suggestions).

1) Split the class into 2 groups, A and B. Group A reads text “a” and group B reads text “b”. T can copy page 20, separates the two texts and gives the texts to the each S in the groups. Another possibility is to fold the page in order to separate the texts or cover the other text.

2) Each S reads the assigned text and does exercise 1 individually.

3) Groups A and B work separately in order to make sure that everyone in the group understands the text and help with vocabulary (T helps groups only if necessary).

4) SS close their books or turn over the texts. Groups will tell the story to the other groups in a role-play. T helps providing ‘realia’ such as ‘bag’, ‘hamburger’, ‘toy
money’, ‘toy clock’, ‘note’, ‘party decorations’, and ‘jewels’. SS can make the ‘mask’. T encourages SS to be creative in their ‘story telling’. Groups rehearse and present the role-play. After the role-play, the other group retells the story and asks questions for clarification.

5) SS do exercise 2 individually or in pairs. If SS work in pairs, one S from group A works with one S from group B.

6) SS listen to the story and check their answers (T 3.5).

7) Getting information (exercise 3 on page 21), which is an extension of text “b”.

In the adapted activity, BK is enhanced during the role-play, SS moving around the class and manipulating the realia (or making some objects for the role-play). IR is enhanced when SS work in pairs or in groups and when they help one another with vocabulary and role-play.

The fourth activity is from *New Interchange1*, unit 8, page 47. The unit focuses on describing a neighborhood and location of places. The activity chosen is part of a “Grammar Focus” exercise, which introduces *there + to be* and *prepositions* (next to, across from, between, etc). SS should write questions about some places in the map below using the grammar mentioned above. The original activity enhances 4 intelligences: VL, IA, IR, and SV.
The adapted activity will add two more intelligences: BK and LM. It will also extend the practice of SV and IR.

Chinese Whisper Game - T divides the class into two groups, A and B. Groups stand in lines. The first two SS in the lines receive a marker or a piece of chalk. The two SS in the back of the line will look at the map above (only the last SS in the line can look at the maps). T reads sentences about places in the map (for instance, it is on the corner of Main St. and First Ave. across from the park and next to Joe’s Gym) and students look at the map to locate the place. T repeats the sentences several times to allow some time for SS to find the places. Once they locate the place, they whisper the name of the place to the next person (who is in front of them in the line), SS whisper to the next person until reaching the first S in the line. The first S writes the answer on the board. Students should
write the words correctly to score points. First S to write it correctly scores points to the group. Then the first S goes to the back of the line this way each S takes turns.

Figure 6: Classroom Setting for Chinese Whisper Game

BK is enhanced since SS move around the class (cooperative group rotation); LM and SV are enhanced once SS have to reason well while using their spatial/visual intelligence to solve the problem, locate the places in the map. More IR is enhanced since learners interact with their group and compete with the other group. SS usually enjoy this activity, especially adult learners.

The fifth activity is from Gateways 1, unit 5, pages 34 and 35 (See Appendix K). The original activity, which is a reading and writing, enhances 4 intelligences: VL, IA, SV and LM. The adapted activity enhances 7 intelligences: IR, N, M and the four intelligences in the original activity. The adapted activity is explained below:
1) T copies\textsuperscript{34} page 34 and cuts the postcards separating the photos from the written part.

2) T divides the class in 4 groups. Each group gets a photo. Groups brainstorm words related to the pictures.

3) Each group shows the photos to the class and mentions the words brainstormed.

4) T gives the written parts of the postcards to the class and SS match photos to texts (SS have the opportunity to see if the words brainstormed were related to the text: countries, cities, monuments, etc).

5) SS open their books on page 34 and answer exercise 1 and 2 individually. SS report their answers in order to check them.

6) SS circle all the new words in the postcards. They work individually.

7) SS answer the following two exercises\textsuperscript{35} (exercise A and B) individually. T explains the exercises orally.

\textsuperscript{34} If possible, it is better to scan and print the page, so the photos are in colors.

\textsuperscript{35} The exercises were based on Berman, M. (1998, pp. 157 & 178).
Figure 7: Fifth activity: exercise A

1) Find the odd man out:

<table>
<thead>
<tr>
<th>wonderful</th>
<th>hotel*</th>
<th>friendly</th>
<th>delicious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Japan</th>
<th>Thailand</th>
<th>Tokyo</th>
<th>Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Taiwan</th>
<th>Korea</th>
<th>Japan</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ko Samui</th>
<th>Seoul</th>
<th>Tokyo</th>
<th>Honolulu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>temple</th>
<th>museum</th>
<th>interesting</th>
<th>hotel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Items in bold are the answers.

Figure 8: Fifth activity: exercise B

2) Group the following words in 3 categories and name the categories.

<table>
<thead>
<tr>
<th>magnificent</th>
<th>Seoul</th>
<th>fabulous</th>
<th>Japan</th>
<th>traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kyoto</td>
<td>Thailand</td>
<td>Taiwan</td>
<td>Honolulu</td>
<td></td>
</tr>
</tbody>
</table>

|           |           |           |         | |
|-----------|-----------|-----------|---------|
|           |           |           |         | |
|           |           |           |         | |
|           |           |           |         | |


8) SS work in groups and check the exercises above. Then SS help their groups with the new vocabulary (circled before – see step 6 above). T helps only if necessary.

9) SS do the following exercise individually (pre-writing activity).

Choose a city or a country you want to visit. Brainstorm things you know about it (places, food, monuments, weather, adjectives, etc). See the example below.

Figure 9: Mind mapping example

old

Venice

gondolas

bridges

Italian

cafes

romantic

10) SS open their books on page 35 and write the postcard. Another option is to write the postcard to a classmate and exchange postcards. SS can also draw pictures on the postcards.

The adapted activity can enhance 7 intelligences. The N intelligence is enhanced since SS categorize or group the words according to their relationship. IR is enhanced in pair work/group work, sharing/comparing/checking exercises, and exchanging cards. In order to add the M intelligence, T can play instrumental music while SS do steps 4, 5, 6 and 7. If possible, T plays Asian music (the music should be low). VL is present in using
vocabulary, identifying adjectives/nouns, brainstorming, reading and writing. LM is enhanced when SS draw conclusions, match photos with texts, identify similarities and differences. SV is present in photos, map, route tracing, creating a mental picture (step 9), and drawing the postcard. IA is enhanced when SS work individually and/or contribute to the groups.

The adapted activities suggested above enhanced 5 or more intelligences; however, teachers do not have to include many intelligences in an activity, they should try to make adaptations to include different types of intelligences in order to enhance most intelligences in their students and include the less common types of intelligences.

Combining the 4-MAT Model with MI Theory to plan lessons

Some researchers such as Silver et al. (1997) suggested the combination of MI with learning styles. The 4MAT System developed by Bernice McCarthy considers learning styles therefore the combination of 4MAT with MI is suggested for planning lessons that enhance both learning styles and intelligence profiles. First, the 4MAT System will be described then three 4MAT lesson plans will be presented in order to explain how MI can be combined with the 4MAT model.

McCarthy (1990) developed the 4MAT System in order to help teachers consider diverse ways in which people learn. The 4MAT System is based on different research in the fields of education, psychology among others. McCarthy (1990) states that 4MAT is mainly based on the theory of David Kolb about perceiving and processing information. There are four major learning styles that are related to processing and perceiving
information: 1) Imaginative learners, 2) Analytic learners, 3) Common Sense learners, and 4) Dynamic learners.

Both imaginative learners and analytic learners process information reflectively; however, they perceive it in different ways: concretely and abstractly, respectively. Common sense learners and dynamic learners process information actively but while common sense learners perceive it abstractly, dynamic learners perceive it concretely.

There are two major premises in the 4MAT System: “people have major learning styles and hemispheric (right-mode/left-mode) processing preferences”; and teaching and learning can be improved through “multiple instructional strategies in a systematic framework” (McCarthy, 1990, p.31).

Both sides of the brain (right and left hemispheres) are equally important to learning and people rely more on one hemisphere than on the other. Information is processed differently in each side. While the left-mode is analytic, rational, sequential, the right-mode is holistic, intuitive, and simultaneous. 4MAT System highlights the need to include the whole-brain in learning. McCarthy (1990) states:

It is the whole brain that flexes and flows. If the left mode engages in analyses – breaks down, specializes, names things, and agrees on the existence of these things – and if the right mode seizes upon the character of the whole – understands from experience and grasps directly – then it is clear we need to honor both modes of processing in our schools: we must engage the whole brain (p.33).

The 4MAT system is a cycle of instruction (and learning). It is divided in four quadrants and each quadrant is divided in two parts, one part is for the right-mode and the other for left-mode types of instruction. Since there are both left-mode and right-mode
dominant learners, with 4MAT “learners will be comfortable half of the time and will learn to adapt the other half of the time” (McCarthy, 1996). Each quadrant emphasizes different things. In quadrant one, students relate their experience in life to learning in order to motivate the learning process. This quadrant answers the question WHY? Learning needs to be meaningful for learners. Quadrant two is related to content and curriculum. It is necessary to integrate content to encourage learners to make meaningful connections themselves. This quadrant answers the question WHAT? Quadrant three is related to the “transferability of learning”. Learners need to transfer learning to their lives and see the usefulness of their learning. This quadrant answers the question HOW? Quadrant four provides opportunities for learners use their creativity in unique ways and share their new knowledge with others. This quadrant answers the question IF?

Kuhel36 (K. Kuhel, personal communication, September 18, 1998) presents some advantages of using the 4MAT model with MI Theory in ELT: 1) teachers plan lessons in a more holistic manner without focusing on individual aspects like grammar points, 2) each part of the lesson is integrated with the others, 3) teachers are encouraged to “ask the purpose of each activity or task” in their lessons, 4) the lesson plan is well-balanced, varied and interesting, and 5) “focus is not only on how a person learns but also on the content of the learning and its relationship to how a person learns” (p.3).

The following lessons were planned for children and pre-teen groups at the BNC, Associação Brasil-América, in Recife, Brazil. The children class (LP # 1) was level 4 and students were 9 or 10 years old. The pre-teen class (LP # 2 and 3) was level 3 and

36 K. Kuhel presented workshops at the BRAZ-TESOL 6th National Convention, July 1998 and at the BNC in Recife, Brazil on Sept. 18. The workshop was called: 4MAT – A Lesson Planning Model that Addresses Multiple Intelligences. The citation was taken from the material presented in the workshop.
students were 11 or 12 years old. Each level corresponds to one semester of classes. The lesson plans will illustrate how 4MAT is used for planning a single lesson (LP # 1), or a whole unit with 4 lessons (LP # 2 and 3). The lessons also include multiple intelligences (MI) and they include most intelligences except for existential. Lesson plan # 1 includes 8 intelligences; LP # 2 includes 7 intelligences except for musical and LP # 3 includes 8 intelligences. In LP # 1, quadrant one is called “Experiencing”, quadrant two is “Conceptualizing”, quadrant three is “Applying” and quadrant four is “Creating”; however, in LP # 2 and 3 the quadrants were labeled: I- Motivation, II- Concept Development, III- Practice, and IV- Application. There are different labels in the literature.

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37 As mentioned before, Gardner considered existential as a candidate for the ninth intelligence in 1999.
Addressing MI\textsuperscript{38} through a 4MAT lesson plan

Figure 10: Lesson Plan One\textsuperscript{39} (8 INTELLIGENCES) NO ‘E’

\textsuperscript{38} VL= Verbal/linguistic; SV= Spatial/visual; IA= Intrapersonal; IR= Interpersonal; LM= Logical/mathematical; BK= Bodily/kinesthetic; M= Musical; N= Naturalist and E= Existential.

R= right hemisphere and L= left hemisphere.

\textsuperscript{39} Lesson plan by Rozário Botelho (1998).
Lesson Plan One will be detailed in order to explain how MI is enhanced in each part of the 4MAT model. All the quadrants are divided in two sections, each section will be described below:

1) Experiencing (Right Mode) - Visual input was used to activate students’ prior knowledge of the vocabulary to be presented in this lesson: wild (endangered) animals. The wall charts and the flashcards are full of pictures and photos of the animals. The spatial/visual intelligence is enhanced in learners through the use of the visual aids. The LM intelligence is present in the matching of the names of animals and countries. The N intelligence is present in the topic, animals. The VL is enhanced through the use of vocabulary and students’ interaction and negotiation.

2) Experiencing (Left Mode) – The IA intelligence is presented in individual reflection; VL, when students talk about their reflections and share with the class. IR is present in the interaction among students and teacher.

3) Conceptualizing (Right Mode) – Video and photos enhance learners’ SV intelligence. VL is enhanced when learners make comments about the topic/pictures, learn more vocabulary, and name animals. Talking about animals helps with the N intelligence and the BK is enhanced when learners move around the class to look at the pictures.

4) Conceptualizing (Left Mode) – Listening to the song about wild animals enhances 4 intelligences: VL, since students are listening (to the song); M, through listening to the song, the melody, the lyrics and singing along; SV, since there are pictures
related to the song in the book and N, the song is about animals and their natural habitats.

5) Applying (Left Mode) – Reflecting about endangered animals helps enhancing IA (individual reflection and comment), and N. Using the song melody and lyrics to reflect about the animals enhances the M intelligence. When learners express their feelings, and opinions, they are using their VL intelligence and IR (interacting with the group).

6) Applying (Right Mode) – Students go to the library (BK); students use their VL intelligence when researching (reading) about endangered species (N) in books and encyclopedias. Working in groups enhances the IR intelligence as well as interacting with teacher and librarians. Looking for pictures of animals and cutting them help with SV and BK.

7) Creating (Left Mode) – Working in small groups enhances both IA and IR intelligences. Writing about endangered species enhances both VL and N. Making posters enhances both BK and SV.

8) Creating (Right Mode) – When presenting their posters to the class, students enhance their IA, IR and VL intelligences. Displaying posters and “starting the campaign to protect endangered species” enhances their SV and N intelligences.

If teachers want to incorporate more intelligences such as the BK intelligence, some adaptations could be made to this lesson. For instance, a field trip to a local zoo (if available) could be done and students could interview zookeepers to find out information
about the animals (their origins, habitats, food and behavior). Students could report their findings in the next class. When visiting the zoo, students could take pictures of the animals or videotape them. The report could be done to another group(s) in the school. These adaptations would enhance more BK (field trip), N, SV, IA and IR (interacting with zookeepers and other classes). The adaptations would be part of the last two quadrants, applying and creating.

The original lesson was planned for one class, 75 minutes; however, part of the next class was used for finishing the posters and presentations with one of the classes I taught. If adaptations were made, the 4MAT would be for 3 lessons. The field trip would be the second class.
**Figure 11: Lesson Plan Two  (7 INTELLIGENCES) NO “M” or ‘E’**

<table>
<thead>
<tr>
<th>MOTIVATION</th>
<th>1st. Class:</th>
</tr>
</thead>
</table>
| | • Create an experience  
| | • Provide a hook that connects to student’s lives |
| | • Animal Quiz.  
| | • Teacher divides the class into groups. T asks a question. If SS answer it correctly, the group will get a chocolate from the other groups. If the answer is not correct, the group has to give a chocolate. |
| | MI: N, LM, IR, VL, BK, IA |

<table>
<thead>
<tr>
<th>CONCEPT DEVELOPMENT</th>
<th></th>
</tr>
</thead>
</table>
| | • Discuss and reflect on the experience  
| | • Brainstorm animals. |
| | MI: LM, N, VL, IA, SV |

<table>
<thead>
<tr>
<th>CONCEPT DEVELOPMENT</th>
<th></th>
</tr>
</thead>
</table>
| | • Integrate the experience with the material to be presented  
| | • Classify animals (reptile/ mammal/ carnivore/ omnivore/ animals in danger). |
| | MI: N, LM, VL, IA or IR |

<table>
<thead>
<tr>
<th>DEVELOPMENT</th>
<th></th>
</tr>
</thead>
</table>
| | • Teach content, concepts and skills  
| | • T writes on the board: |
| | **BEARS**  
| | **CAN** / **CAN’T** |
| | • T gives each S a piece of paper with an activity. SS have to decide where they’ll put the activity.  
| | • SS talk about the differences between CAN/CAN’T and give more examples. |
| | MI: SV, VL, BK, LM, IR, IA, N |
Figure 11: Lesson Plan Two: continued.

<table>
<thead>
<tr>
<th>Practice</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd. Class:</td>
<td>Reinforce content through practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tic-tac-toe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2nd. Class:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Warm-up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Book – page 16 (True or false w/ pictures/dialogue to check)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Video – Free Willy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T divides the class into pairs. SS will mime what they can/can’t do.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3rd. Class:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Warm-up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gorilla activity (Speaking – information gap exercise)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Book – pages 18 and 19 (reading a “zoo brochure”)</td>
<td></td>
</tr>
<tr>
<td>MI:</td>
<td>IR, IA, SV, LM, VL, N, BK</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Practice</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4th. Class:</td>
<td>Students create an application to demonstrate their understanding</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T divides the class into groups. Groups go to the library to research and complete the chart.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Animal in danger</th>
<th>Why?</th>
<th>Solution?</th>
<th>Other information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MI: IR, IA, BK, VL, N, SV

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Figure 11: Lesson Plan Two\textsuperscript{41}: continued.

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Teacher and students evaluate the products</td>
</tr>
<tr>
<td></td>
<td>• Students create a poster using the pictures they’ve brought and the information they’ve found. T helps SS, if necessary.</td>
</tr>
<tr>
<td>MI: SV, BK, IA, IR, VL, N</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Students share their applications</td>
</tr>
<tr>
<td></td>
<td>• Students present their work to their classmates. (If possible, T can display students’ work at the library).</td>
</tr>
<tr>
<td>MI: IA, IR, SV, VL, N, BK</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{41} Lesson plan reproduced from Karina Silva (1998) with permission.
Figure 12: Lesson Plan Three (8 INTELLIGENCES) NO “E”

<table>
<thead>
<tr>
<th>MOTIVATION</th>
<th></th>
</tr>
</thead>
</table>
| **1st. Class:** | • Warm-up – teacher asks three volunteers to be the “actors”. (They’ll have the script).  
• Then teacher asks other volunteers to do the same things… |
| MI: BK, VL, IR, IA, SV (realia) | |
| **MO TEM** | |
| • Create an experience  
• Provide a hook that connects to student’s lives | |
| **ONCEPT** | |
| • Discuss and reflect on the experience | |
| • Teacher asks students to identify all the objects used in the role-play (fork, knife, spoon, glasses, dishes, hamburger, catsup, menu…) and say where they were, what they did and what they thought about the experience. | |
| MI: SV, BK, VL, LM, IA, IR | |
| **DEVELOPMENT** | |
| • Integrate the experience with the material to be presented | |
| • Teacher puts the dialogue on the board and asks students to say how do we ask for what we want and what the waiter says.  
• Teacher gets the food from the menu and asks students to put them in the correct column (COUNT or NON-COUNT). Then teacher asks students to explain the difference. | |
| MI: SV, LM, BK, IA, IR, VL, N (classification) | |
| • Teach content, concepts and skills | |
| **2nd. Class:** | • Warm-up – teacher gives students an incomplete menu and students have to complete it with words or pictures.  
• Teacher puts some sentences on the board and asks students to identify the differences (SOME & ANY).  
• (pair work) Teacher gives students some pieces of paper and they are supposed to create sentences. |
| MI: SV, BK, LM, VL, IR, IA | |
Figure 12: Lesson Plan Three: continued.

<table>
<thead>
<tr>
<th>Practice</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3rd. Class:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reinforce content through practice</td>
</tr>
<tr>
<td></td>
<td>(pair work) Students will sit back to back. They’ll have incomplete menus. They’ll take turns asking and answering: “how much is it?” to complete them.</td>
</tr>
<tr>
<td></td>
<td>Students will listen to the tape and complete a dialogue.</td>
</tr>
<tr>
<td></td>
<td>Run dictation – students will have to look at the pictures and complete the crossword.</td>
</tr>
<tr>
<td></td>
<td>Warm-up: Music box – students will read the sentence and complete it with SOME or ANY.</td>
</tr>
<tr>
<td></td>
<td>Book(^{42}) – page 31 – exercise 6 (complete a dialogue w/ some or any)</td>
</tr>
<tr>
<td></td>
<td>Book – page 32 (speaking, pair work / reading, match, questions)</td>
</tr>
<tr>
<td></td>
<td>(pair work) Students will tell their friends what they like/don’t like to eat. Their friends will take notes. Finally students will talk about their friends’ likes and dislikes.</td>
</tr>
<tr>
<td></td>
<td>(pair work) students will watch a part of a movie (Scent of a Woman) and then, they’ll create a dialogue. Students will read their dialogues.</td>
</tr>
</tbody>
</table>

**MI:** IR, IA, BK, SV, VL, LM, M

<table>
<thead>
<tr>
<th>Practice</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4th. Class:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students create an application to demonstrate their understanding</td>
</tr>
</tbody>
</table>

**Warm-up –** Students will research at the library the meaning of the words: HEALTHY, VITAMINS, PROTEIN, FIBER and FAT. They will also look for examples.  

**MI:** BK, VL, IA, IR

Figure 12: Lesson Plan Three\textsuperscript{43}: continued.

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Teacher and students evaluate the products</td>
</tr>
<tr>
<td></td>
<td>• Students will help each other to correct their sentences, if necessary.</td>
</tr>
<tr>
<td></td>
<td>• Students will, as a whole class, create a poster about healthy/non-healthy food.</td>
</tr>
<tr>
<td>MI: IA, IR, SV, VL, BK</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Students share their applications</td>
</tr>
<tr>
<td></td>
<td>• Students will teach their friends (another class) what they’ve learned about healthy meals.</td>
</tr>
<tr>
<td>MI: IA, IR, VL, SV, BK</td>
<td></td>
</tr>
</tbody>
</table>

Keeping Track of the Intelligences When Planning Lessons

According to Christison (1996), teachers should track the activities they do in their teaching to know what intelligences are being focused on in their lessons (weekly or monthly). This way, teachers can plan their lessons in order to include and balance all (or most of) the intelligences. MI Theory reinforces the necessity to consider each learner’s strengths, learning styles and diverse learning potentials in ELT and language learning.

Teachers can also plan their lessons using a “mind map” (See Appendix L). A lesson topic (for instance, “Endangered Species”) should be written in the space in the middle of the mind map. Teachers brainstorm activities, materials and techniques they want to use in their lessons. Teachers can refer to the “Classification of

\textsuperscript{43} Lesson plan reproduced from Karina Silva (1998) with permission.
activities/materials for multiple intelligences” (See Figure 2) while planning the lessons in order to include different intelligences and keeping track of the intelligences used in their lessons. This suggestion was presented to East Elementary teachers in Athens, Ohio during a workshop\(^44\) about MI.

According to Christison (1998a) each teacher will find their own way to apply the theory in their teaching. Since MI allows diversity in the class (Gardner & Lazear, 1995), it also allows diversity in teaching. Christison (1998a) states:

There is no single correct answer or road to follow. What is important for you as a teacher educator is to understand the theory and your own MI profile. It is also important to know how MI theory informs your own teaching. Once you understand this concept, then you can consciously apply the theory to your lesson planning and curriculum development. It takes patience, time, imagination, and creativity to bring a new theory into one's teaching. I believe that if we all work from our own personal strengths, we will be effective teacher educators (p. 15).

Conclusion

In this chapter, four main points were discussed: intelligence profiles, exploitation of textbook activities and supplementation of textbooks with extra activities and materials and keeping track of intelligences.

Intelligence profiles are ways of knowing more about individual profiles by creating inventories or surveys that connect each intelligence with activities and interests in everyday lives. These instruments are not meant to measure learners’ and/ or teachers’ intelligences; they were created to make connections between the theory and its

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\(^{44}\) The workshop presenters were Rhonda Koch and Rozário Botelho.
application in our experiences in life. They are not meant to label people or to highlight their weaknesses. They are helpful to make people aware of their strengths and reflect on their profiles in order to know them better and to understand the theory.

Considerations about the need of exploiting textbooks in order to include the less common intelligences identified in this study were also made. Suggestions on how to adapt textbook activities were offered; however, the adaptations do not imply that the activities in the books are not good. The authors of these textbooks carefully planned the activities. The adaptations were used to illustrate how textbook activities can be changed to include more intelligences especially the less common ones.

As for the supplementation of textbooks with extra activities or materials, the combination of the 4MAT system and MI was suggested for planning lessons. 4MAT was described and some advantages of combining it with MI were presented. The three 4MAT lesson plans incorporate most intelligences and the first one was described in details in order to explain how each intelligence was incorporated in the activities. In lesson plan one, the starting point was the topic in the textbook (endangered species) and the song activity. The lesson was developed “around” the song; however, the activities used were not limited to the book. There were extra materials (and activities) such as wall charts, video, and library resources. The textbook was an important part of the lesson but it was not the only source/tool used. Lesson plans #2 and 3 include all the content suggested in the textbook units; however, the textbook activities were carefully chosen and/or adapted to achieve better results in the lessons.
Chapter 6

Conclusion

Summary

This study has investigated the application of MI theory in English language teaching due to a growing interest in MI especially in language institutes in Brazil. Brazilian teachers have had training in MI and many Brazilian Bi-National Centers claim that they apply MI to their teaching. However, the interest in MI theory is not limited to the Brazilian context. Many teachers and researchers throughout the world have considered and discussed the application of MI in several contexts (see chapter two for more information). The literature on MI is vast, interesting and diverse.

The review of literature in this study included several issues: IQ tests and MI theory descriptions, similarities between MI theory and other theories, methods and approaches, current application of MI, textbook selection and analysis of MI in textbooks.

Since MI theory differs from intelligence tests (IQ tests) and from the psychometric view of intelligence, both IQ tests and MI theory were described, compared and discussed in chapter two. While IQ tests consider intelligence as a singular faculty (Gardner, 1993, p. 14). MI theory considers the existence of (at least) eight intelligences, which can (and should) be developed throughout life. IQ tests measure human capacities basically in terms of logic and verbal skills (Gardner, 1999, p.12). Gardner’s view of
intelligence and each intelligence were described in chapter two. The impact of MI in
education was also discussed in chapter two. As mentioned before, many schools have
changed their curriculum in order to apply MI Theory. Educators have changed their
view of intelligence and their teaching styles have also changed. Teachers have sought to
find new ways of teaching in order to consider their learners’ needs as well as their
intelligence profiles.

MI was also discussed in relation to other theories such as learning styles and
brain-based education. Guild (1997) described schools that apply different theories:
learning styles, brain-based education and MI. Some similarities among the theories were
observed in the schools: learning-centered approach, reflective teachers and students,
and individualized teaching that celebrate students’ unique profiles.

Considerations about the application of MI theory in language teaching were also
discussed along with methods and approaches in ELT. Several methods/approaches share
similarities with MI and they were described in order to highlight some common traits.
An approach such as Communicative Language Teaching can enhance all intelligences in
learners. Teachers just need to consider several ways of teaching and make choices that
help learners develop their strengths and potentials (or improve their less-developed
intelligences). Teachers can also make choices in terms of methods, approaches or
techniques to use in their teaching in order to enhance students’ intelligences. Students’
intelligence profiles should also be taken into consideration in language teaching.

As discussed in chapter two, the interest in MI theory is not only observed in K-
12 schoolteachers but also in language teachers. More language teachers (and
researchers) have demonstrated their interests in MI by writing papers about it, attending workshops about the theory and, in some cases, trying to establish connections between MI and language teaching. Some examples were mentioned in this study. Christison has written several articles about MI and she has also given (presented) several workshops and courses on the application of MI in language teaching. Studies such as Palmberg (2001) and Snider (2001) have also demonstrated the growing interest in the application of MI in language teaching.

Due to the growing interest in MI theory in language teaching, one of the aims of this study was to examine the application of MI theory especially in Brazil. A survey was administered to two groups of English teachers, thirty-four Brazilian and twenty-seven international\textsuperscript{45} ones. The survey was used in order to identify if English teachers knew and used MI in their teaching especially in language institutes that apply MI. The results show that most subjects in this study know MI theory and use it in their teaching. Moreover, many subjects have shown interest in knowing more about the theory in order to benefit their learners and improve their teaching. However, the data in this study shows that not all teachers use MI theory consciously. About 41% of subjects use MI unconsciously. Many subjects use it without being aware of it. This fact indicated that teachers needed suggestions on how to apply MI in their teaching in a more conscious manner (in case they want to apply the theory). I have also sought to identify how English teachers choose textbooks, how (and if) they supplement textbooks with extra materials and the reasons why textbooks need to be supplemented or adapted.

\textsuperscript{45} For the purpose of this study, international teachers are those from countries other than Brazil.
Since textbooks are mainly used in language teaching (Palmberg, 2001 and Sheldon, 1988), one of the primary goals of this study was to analyze textbooks in order to know how they responded to MI theory. I have sought to identify the intelligences that were (or were not) included in textbooks and the textbook intelligence profiles. Six current English textbooks were analyzed in this study and the profiles were identified. Results showed that the textbook profiles were mainly composed of four intelligences: VL, IA, SV and IR. These intelligences were identified in more than 75% of the activities analyzed. Five intelligences were less common in books: LM, BK, M, N and E. These intelligences were observed in less than 40% of all the activities in the six books. The results were presented in detail in chapter four.

Exploitation of textbook activities and supplementation of textbooks to incorporate MI theory were suggested in chapter five due to the following reasons identified in this study: 1) teachers demonstrated interest in MI, 2) not all teachers applied MI consciously, 3) textbook profiles were basically composed of four intelligences, 4) textbook is an important tool used in language teaching, 5) MI can be applied in combination with many methods, approaches and theories.

Due to the fact that textbooks are commonly used in language teaching for several reasons (see chapter two for detailed discussion) and textbook do not provide activities that enhance all intelligences, exploitation of textbook activities were suggested. Five activities from the textbooks analyzed in this study were adapted to include the less common intelligences identified and to illustrate how textbook activities can be adapted.
Suggestions on how to supplement textbooks with extra materials were made due to two facts: textbooks are mainly used in language teaching and they may not include activities that help enhance most intelligences. Moreover, many language teachers consider learners’ differences in styles, needs and potentials and teachers seek to make learning interesting, meaningful, and motivating (as mentioned in chapter three). Furthermore textbooks should not be the only source in language teaching as researchers have suggested (Garinger, 2001). The 4MAT system was suggested for planning lessons that incorporate most intelligences. Three lessons plans illustrated how 4MAT and MI can be used in combination to not only address different learning styles and intelligence profiles but also to enhance them.

Since MI is a philosophy of education not a prescribed approach (Gardner & Lazear, 1995), one way of considering MI in language teaching is by combining it with different methods, approaches and techniques that appeal to each teaching context, learners’ needs and teachers’ experience and interests. MI can be easily incorporated in one’s teaching and researchers have provided suggestions on how to address it, as discussed in chapters two and five. The literature on MI is as diverse as learners and teachers.

Recommendations for further research

In this study I have sought to analyze the relationship between MI and ELT in terms of the application of MI theory in current textbooks and materials. Since one of the limitations of this study was the number of textbooks analyzed (six textbooks), more
textbooks could be considered in another study. Comparisons of findings could be considered in order to make generalizations about the application of MI in textbooks. Another possibility could be to examine the application of MI in children’s and in adults’ textbooks. The data could be compared in order to identify if the application of MI theory in children’s textbooks is more evident (or consistent) than in textbooks for adults. It seems that the activities in children’s textbooks help enhance more intelligences than the ones in adults’ textbooks. For instance, activities that enhance musical and bodily/kinesthetic intelligences may be more common in children’s textbooks. There are songs, rhymes and activities that incorporate both M and BK intelligences. Further research is also required into the effectiveness of MI in comparison with other methods and approaches.
References


Appendix A: Survey

Researcher: Rozario Botelho (rozariobotelho@yahoo.com)

Name: _______________________________________________________

Age: ( )under 20   ( )20-30   ( )30-40   ( )40 years old on

Nationality: ____________________________ (mention city and country)

Educational background: ________________________________________

( ) coordinator    ( ) teacher

Completion and return of the survey implies your consent to use the data for research purposes.

Please, read the following questions and answer them to best describe you and your teaching experience. Feel free to add any relevant information for each question.

1 – How long have you taught? (Number of years)

( ) zero   ( ) 1-3   ( ) 3-5   ( ) 5-10   ( ) 10-15   ( ) more than 15 years

2 - Have you taught EFL (English as a Foreign Language), ESL (English as a Second Language), or both?

Please, mention how long you have taught:

1- EFL: ______________ Where? (city and country)____________
2 - ESL: ______________ Where? (city and country)____________

3 – Where have you taught? (Mark all possible answers.)

( ) public school - How long? ______ Where? (city and country)_______
( ) private school - How long? ______ Where? (city and country)_______
( ) language institute – How long? ______ Where? (city and country)_______
( ) university – How long? ______ Where? (city and country)_______

4 - What levels have you mainly taught? ________________________________

Please, mention the age range of the students you have taught: ______________

5 – Have you ever had any training in ELT (English Language Teaching) methods, approaches and / or theories?

( ) yes   ( ) no
If yes, how?
( ) self-study / books ( ) workshop ( ) course

6 – Have you ever heard about Multiple Intelligences (MI) Theory?
( ) yes ( ) not sure ( ) no

If yes: How did you learn about it?
( ) book ( ) course ( ) workshop
( ) learning from co-workers / friends

If you read any books related to MI, mention the book(s) - if possible. _________

7 – Have you ever researched about MI Theory?
( ) yes ( ) no

8 – Would you like to know more about MI Theory?
( ) yes ( ) maybe ( ) no

Why (not)? : _______________________________________________________

9 – Do you think you use MI Theory in your teaching?
( ) yes ( ) not sure ( ) no

If yes: How much do you apply it?
( ) very much ( ) not very much ( ) a little

And how often do you apply it in your lessons?
( ) always ( ) usually ( ) often ( ) sometimes ( ) seldom

10 – Is MI implemented in your institution?
( ) yes ( ) no ( ) I don’t know
11- Who chooses textbooks in your institutions? (Circle all applicable items.)

(   ) director                         (   ) coordinator                  (   ) teacher
(   ) teacher and students    (   ) students             (   ) no textbooks in my institution

12 – What criteria do you use to choose textbooks? (Rank them from 1 to 11 according to the importance. 1 = most important)

(   ) publisher
(   ) year of publication
(   ) price
(   ) author
(   ) method/approach/theory
(   ) extra material available (videos, CDs, audiotapes, etc)
(   ) activities / exercises (meaningful, communicative)
(   ) cultural component (no stereotypes, for all cultures, etc)
(   ) guidance (teacher’s notes, suggestion for supplementing the course book, etc)
(   ) layout (colorful, real pictures, well-organized, etc)
(   ) other: ________________________________________________________

13 – Do you supplement textbooks with extra material?

(   ) yes        (   ) not sure      (   ) no

If yes: How often?

(   ) always     (   ) usually     (   ) often       (   ) sometimes       (   ) seldom

And why? _________________________________________________________

14- How do you choose extra material? (Check all applicable items.)

(   ) activity type (music, game, listening, reading, etc)
(   ) method/ approach/theory
(   ) layout (nice pictures, colorful, etc)
(   ) Because it is a communicative activity
(   ) Because it is current material (songs, readings, movies, etc)
(   ) authentic materials
(   ) Because it is adapted for language learners
(   ) cultural component
15. Which of these types of materials, activities or techniques do you incorporate in your lessons? (Mark all applicable items.)

| ( ) categorizing items (animals, adjectives, nouns, etc) | ( ) making sculptures or art craft with clay, wood, or other materials |
| ( ) reflective journal | ( ) reading |
| ( ) group problem solving | ( ) maps |
| ( ) pair work | ( ) talking about mankind and related issues |
| ( ) songs / video clips | ( ) coloring |
| ( ) role plays | ( ) speaking |
| ( ) board games | ( ) personal journal keeping |
| ( ) TPR (Total Physical Response) / mime | ( ) talking about environmental issues |
| ( ) cooperative learning activities | ( ) activities with a self-evaluation component |
| ( ) field trips (zoo, museums, restaurants, etc) | ( ) jazz chants / rhymes |
| ( ) debates | ( ) singing |
| ( ) videos / movies | ( ) charts / grids |
| ( ) individualized projects | ( ) dancing |
| ( ) note-taking | ( ) group work |
| ( ) drawing | ( ) running |
| ( ) listening | ( ) body language |
| ( ) playing musical instruments | ( ) story telling |
| ( ) statistics | ( ) logic puzzles and games |
| ( ) group brainstorming | ( ) moving around the class |
| ( ) talking about (or “practicing”) sports | ( ) slides |
| ( ) hands-on activities | ( ) story problems with numbers |
| ( ) options for homework | ( ) peer teaching |
| ( ) writing | ( ) classifying and categorizing activities |
| ( ) crossword puzzles | ( ) talking about philosophical issues |
| ( ) visual aids (flashcards, pictures, wall charts, etc) | ( ) providing materials related to the natural world |

( ) Other: _______________________________________________________________

Thank you very much for your cooperation and contribution to this research.
Appendix B: List of Activities, Techniques, Materials and Descriptions of Each Intelligence

**Verbal/Linguistic**

1. Note taking  
2. Riddles  
3. Worksheets  
4. Listening to lectures  
5. Word play games  
6. Listening to talking books  
7. Reading books  
8. Discussions  
9. Story telling  
10. Journal keeping  
11. Debates  
12. Memorizing  
13. Writing

The ability to use words effectively both orally and in writing. Remembering information, convincing others to help and talking about language itself.

**Logical/Mathematical**

1. Science demonstrations and experiments  
2. Logic puzzles and games  
3. Story problems with numbers  
4. Logical/sequential presentation of subject matter  
5. Logical argumentation  
6. Problem solving

The ability to use numbers effectively and reason well. Ability to predict, understand the basic properties of numbers, principles of cause and effect. Recognizing abstract patterns; creating codes.

**Spatial/Visual**

1. Illustrations  
2. Graphs  
3. Tables  
4. Using charts and grids
5. Videos, slides and movies
6. Using art
7. Maps
8. Photos
9. Using graphic organizers
10. Imaginative story telling
11. Painting/picture/collage
12. Mind maps
13. Telescopes/microscopes
14. Visual awareness activities
15. Student drawings

Sensitivity to form, space, color, line, and shape. Ability to graphically represent visual or spatial ideas.

**Bodily/Kinesthetic**

1. Hands-on activities
2. Field trips
3. Role-plays
4. Creative movement
5. Mime
6. Body language
7. Classroom aerobics
8. Cooperative group rotation
9. Cooking and other “mess” activities

The ability to use the body to express ideas and feelings and to solve problems. Skills: coordination, flexibility, speed, and balance.

**Musical**

1. Singing
2. Songs
3. Playing recorded music
4. Playing live music
5. Jazz chants
6. Music appreciation
7. Student made instruments
8. Background music

Sensitivity to rhythm, pitch, and melody. Recognizing simple songs and being able to vary speed, tempo, and rhythm in simple melodies.
Interpersonal

1. Pair work  
2. Peer teaching  
3. Board games  
4. Group brainstorming  
5. Group problem solving  
6. Project work  
7. Work cooperatively

The ability to understand another person’s moods, feelings, motivations, and intentions. Skills: responding effectively to other people, problem solving, and resolving conflict.

Intrapersonal

1. Activities with a self-evaluation component  
2. Interest centers  
3. Options for homework  
4. Personal journal keeping  
5. Checklist  
6. Inventories  
7. Individualized projects  
8. Doing things by yourself

The ability to understand yourself, your strengths, weaknesses, moods, desires, and intentions. Skills: understanding how one is similar to or different from others, reminding oneself to do something, knowing how to handle one’s feelings, knowing about oneself as a language learner.

Naturalist

The ability to recognize and classify plants, minerals, and animals, including rocks, grass, and all variety of flora and fauna. Classifying and categorizing activities.

Existential

1. Being concerned with philosophical issues such as the status of mankind in relation to universal existence.
Appendix C: Multiple Intelligences Inventory for (ESL) Teachers

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

Verbal - Linguistic Intelligence (VL)

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

Musical Intelligence (M)

_____ 1. I have no trouble identifying or following a beat.
_____ 2. When I hear a piece of music, I can easily harmonize with it.
_____ 3. I can tell if someone is singing off-key.
_____ 4. I have a very expressive voice that varies in intensity, pitch, and emphasis.
_____ 5. I often use chants and music in my lessons.
_____ 6. I play a musical instrument.
_____ 7. I listen to music frequently in the car, at work, or at home.
_____ 8. I know the tunes to many songs.
_____ 9. I often hum or whistle a tune when I am alone or in an environment where I feel comfortable.
_____ 10. Listening to music I like makes me feel better.

Logical-Mathematical Intelligence (LM)

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

Spatial-Visual Intelligence (SV)

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

Bodily-Kinesthetic Intelligence (BK)

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

Intrapersonal Intelligence (IA)

1. I regularly spend time meditating.
2. I consider myself independent.
3. I keep a journal and record my thoughts.
4. I would rather create my own lessons than use material directly from the book.
5. I frequently create new activities and materials for my classes.
6. When I get hurt or disappointed, I bounce back quickly.
7. I articulate the main values that govern my life and describe the activities that I regularly participate in that are consistent with these values.

8. I have hobbies or interests that I enjoy doing on my own.

9. I frequently choose activities in the classroom for my students to work on alone or independently.

10. I encourage quiet time and time to reflect (on what they are doing) in my classes.

Interpersonal Intelligence (IR)

1. I prefer going to a party rather than staying home alone.

2. When I have problems, I like to discuss them with friends.

3. People often come to me with their problems.

4. I am involved in social activities several nights a week.

5. I like to entertain friends and have parties.

6. I consider myself a leader and often assume leadership roles.

7. I love to teach and show someone how to do something.

8. I have more than one close friend.

9. I am comfortable in a crowd or at a party with many people I don't know.

10. My students help decide on the content and learning process in my classes.

Naturalist Intelligence (N)

1. I am good at recognizing different types of birds (or animals).

2. I am good at recognizing different types of plants.

3. I like to garden (or to appreciate the beauty of a garden).

4. I enjoy having pets (or caring for animals).

5. It's easy for me to tell the make and year of most cars.

6. I often look at the sky and can tell you the different types of clouds and what kind of weather they bring (as well as appreciating different seasons).

7. It's easy for me to tell the weeds from the plants.

8. I like to spend time in the outdoors.

9. I enjoy learning about rocks (and geographic features).

10. I have plants in my home, classroom and/or office.

Scoring: Add your total scores in each area. The higher your total score, the stronger that intelligence. Here is your intelligence profile:

<table>
<thead>
<tr>
<th>VL</th>
<th>M</th>
<th>LM</th>
<th>SV</th>
<th>BK</th>
<th>IA</th>
<th>IR</th>
<th>N</th>
</tr>
</thead>
</table>

Adapted from Christison, M. A. (1998a).
Appendix D: Multiple Intelligences Survey

Part I

Complete each section by placing a “1” next to each statement you feel accurately describes you. If you do not identify with a statement, leave the space provided blank. Then total the column in each section.

Section 1
- I enjoy categorizing things by common traits
- Ecological issues are important to me
- Hiking and camping are enjoyable activities
- I enjoy working on a garden
- I believe preserving our National Parks is important
- Putting things in hierarchies makes sense to me
- Animals are important in my life
- My home has a recycling system in place
- I enjoy studying biology, botany and/or zoology
- I spend a great deal of time outdoors

- TOTAL for Section 1

Section 2
- I easily pick up on patterns
- I focus in on noise and sounds
- Moving to a beat is easy for me
- I’ve always been interested in playing an instrument
- The cadence of poetry intrigues me
- I remember things by putting them in a rhyme
- Concentration is difficult while listening to a radio or television
- I enjoy many kinds of music
- Musicals are more interesting than dramatic plays
- Remembering song lyrics is easy for me

- TOTAL for Section 2

Section 3
- I keep my things neat and orderly
- Step-by-step directions are a big help
- Solving problems comes easily to me
- I get easily frustrated with disorganized people
- I can complete calculations quickly in my head
- Puzzles requiring reasoning are fun
I can’t begin an assignment until all my questions are answered
Structure helps me be successful
I find working on a computer spreadsheet or database rewarding
Things have to make sense to me or I am dissatisfied

TOTAL for Section 3

Section 4
It is important to see my role in the “big picture” of things
I enjoy discussing questions about life
Religion is important to me
I enjoy viewing art masterpieces
Relaxation and meditation exercises are rewarding
I like visiting breathtaking sites in nature
I enjoy reading ancient and modern philosophers
Learning new things is easier when I understand their value
I wonder if there are other forms of intelligent life in the universe
Studying history and ancient culture helps give me perspective

TOTAL for Section 4

Section 5
I learn best interacting with others
The more the merrier
Study groups are very productive for me
I enjoy chat rooms
Participating in politics is important
Television and radio talk shows are enjoyable
I am a “team player”
I dislike working alone
Clubs and extracurricular activities are fun
I pay attention to social issues and causes

TOTAL for Section 5

Section 6
I enjoy making things with my hands
Sitting still for long periods of time is difficult for me
I enjoy outdoor games and sports
I value non-verbal communication such as sign language
A fit body is important for a fit mind
Arts and crafts are enjoyable pastimes
Expression through dance is beautiful
I like working with tools
I live an active lifestyle
I learn by doing

TOTAL for Section 6

Section 7
I enjoy reading all kinds of materials
Taking notes helps me remember and understand
I faithfully contact friends through letters and/or e-mail
It is easy for me to explain my ideas to others
I keep a journal
Word puzzles like crosswords and jumbles are fun
I write for pleasure
I enjoy playing with words like puns, anagrams and spoonerisms
Foreign languages interest me
Debates and public speaking are activities I like to participate in

TOTAL for Section 7

Section 8
I am keenly aware of my moral beliefs
I learn best when I have an emotional attachment to the subject
Fairness is important to me
My attitude effects how I learn
Social justice issues concern me
Working alone can be just as productive as working in a group
I need to know why I should do something before I agree to do it
When I believe in something I will give 100% effort to it
I like to be involved in causes that help others
I am willing to protest or sign a petition to right a wrong

TOTAL for Section 8

Section 9
I can imagine ideas in my mind
Rearranging a room is fun for me
I enjoy creating art using varied media
I remember well using graphic organizers
Performance art can be very gratifying
Spreadsheets are great for making charts, graphs and tables
Three dimensional puzzles bring me much enjoyment
Music videos are very stimulating
I can recall things in mental pictures
I am good at reading maps and blueprints
TOTAL for Section 9

Part II

Now carry forward your total from each section and multiply by 10 below:

<table>
<thead>
<tr>
<th>Section</th>
<th>Total Forward</th>
<th>Multiply</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>X10</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>X10</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>X10</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>X10</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>X10</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>X10</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>X10</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>X10</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>X10</td>
<td></td>
</tr>
</tbody>
</table>

Part III

Key:

Section 1 – This reflects your Naturalist strength
Section 2 – This suggests your Musical strength
Section 3 – This indicates your Logical strength
Section 4 – This illustrates your Existential strength
Section 5 – This shows your Interpersonal strength
Section 6 – This tells your Kinesthetic strength
Section 7 – This indicates your Verbal strength
Section 8 – This reflects your Intrapersonal strength
Section 9 – This suggests your Visual strength

Remember:
- Everyone has all the intelligences!
- You can strengthen an intelligence!
- This inventory is meant as a snapshot in time – it can change!
- M.I. is meant to empower, not label people!

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http://surfaquarium.com/MIinvent.htm
Appendix E: Student-Generated Inventory for Secondary-Level and Young Adult Learners

Directions: Rank each statement 0, 1, or 2. Write 0 if you disagree with the statement. Write 2 if you strongly agree. Write 1 if you are somewhere in between.

Verbal - Linguistic Intelligence (VL)

___ 1. I like to read books, magazines, and newspapers.
___ 2. I consider myself a good writer.
___ 3. I like to tell jokes and stories.
___ 4. I can remember people’s names easily.
___ 5. I like to recite tongue twisters.
___ 6. I have a good vocabulary in my native language.

Musical Intelligence (M)

___ 1. I can hum the tunes to many songs.
___ 2. I am a good singer.
___ 3. I play a musical instrument or sing in a choir.
___ 4. I can tell when music sounds off-key.
___ 5. I often tap rhythmically on the table or desk.
___ 6. I often sing songs.

Logical-Mathematical Intelligence (LM)

___ 1. I often do arithmetic in my head.
___ 2. I am good at chess and/or checkers.
___ 3. I like to put things into categories.
___ 4. I like to play number games.
___ 5. I love to figure out how my computer works.
___ 6. I ask many questions about how things work.

Spatial-Visual Intelligence (SV)

___ 1. I can read maps easily.
___ 2. I enjoy art activities.
___ 3. I draw well.
___ 4. Movies and slides really help me learn new information.
___ 5. I love books with pictures.
___ 6. I enjoy putting puzzles together.
Bodily-Kinesthetic Intelligence (BK)

1. It is hard for me to sit quietly for a long time.
2. It is easy for me to follow exactly what other people do.
3. I am good at sewing, woodworking, building, or mechanics.
4. I am good at sports.
5. I enjoy working with clay.
6. I enjoy running and jumping.

Intrapersonal Intelligence (IA)

1. I go to the movies alone.
2. I go to the library alone to study.
3. I can tell you some things I am good at doing.
4. I like to spend time alone.
5. My friends find some of my actions strange sometimes.
6. I learn from my mistakes.

Interpersonal Intelligence (IR)

1. I am often the leader in activities.
2. I enjoy talking to my friends.
3. I often help my friends.
4. My friends often talk to me about their problems.
5. I have many friends.
6. I am a member of several clubs.

Naturalist Intelligence (N)

1. I like houseplants.
2. I have or would like to have a pet.
3. I know the names of many different flowers.
4. I know the names of many different wild animals.
5. I like to hike and to be outdoors.
6. I notice the trees and plants in my neighborhood.

Adapted from Christison (1996, 1999)
Appendix F: Self-Analysis (Elementary)

<table>
<thead>
<tr>
<th>What Do I Like?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading and writing</td>
</tr>
<tr>
<td>Working with numbers</td>
</tr>
<tr>
<td>Drawing and painting</td>
</tr>
<tr>
<td>Body stuff (dancing, running, playing sports, moving around)</td>
</tr>
<tr>
<td>Singing</td>
</tr>
<tr>
<td>Working/playing with others</td>
</tr>
<tr>
<td>Being alone</td>
</tr>
<tr>
<td>Playing with animals, stones, leaves, and flowers</td>
</tr>
</tbody>
</table>

Adapted from David Lazear (1993, p. 97)
Appendix G: Self-Analysis (Middle School)

What do I like and what am I good at?

+++ = “super!”     - - - = “ugh!”
+ + = “okay”       - - = “fair”
+ = “so, so”       - = “so, so”

<table>
<thead>
<tr>
<th>Verbal/linguistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
</tr>
<tr>
<td>Writing</td>
</tr>
<tr>
<td>Speaking/listening</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Logical/Mathematic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with numbers</td>
</tr>
<tr>
<td>Solving problems</td>
</tr>
<tr>
<td>Thinking logically</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Visual/Spatial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretending and using the imagination</td>
</tr>
<tr>
<td>Drawing/painting/working with clay</td>
</tr>
<tr>
<td>Finding my way</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bodily/Kinesthetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playing roles</td>
</tr>
<tr>
<td>Playing physical games</td>
</tr>
<tr>
<td>Exercising my body</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Musical/Rhythmic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singing or playing music</td>
</tr>
<tr>
<td>Sounding rhythm or beats</td>
</tr>
<tr>
<td>Recognizing different sounds</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interpersonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening to others</td>
</tr>
<tr>
<td>Encouraging and supporting others</td>
</tr>
<tr>
<td>Being part of a team</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intrapersonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking positively to myself</td>
</tr>
<tr>
<td>Being aware of my feelings</td>
</tr>
<tr>
<td>Liking to do some things alone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Naturalist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classifying and categorizing things</td>
</tr>
<tr>
<td>Recognizing animals, plants and rocks</td>
</tr>
<tr>
<td>Going hiking or camping</td>
</tr>
</tbody>
</table>

Adapted from David Lazear (1993, p. 98)
Appendix H: Self-Analysis (Secondary)

<table>
<thead>
<tr>
<th>What am I good at?</th>
<th>Score</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 = WOW!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
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<tr>
<td>6</td>
<td></td>
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<td>5</td>
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<td></td>
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<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 = UGH!</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Verbal/linguistic:**
1. Reading and understanding what I’ve read
2. Communicating through writing something I’m thinking
3. Making a speech or giving a report

**Logical/Mathematical:**
1. Doing math in my head
2. Knowing that I’ve received the correct change at the store
3. Figuring out how to solve everyday problems

**Visual/Spatial:**
1. Finding my way using a map
2. Drawing an object or scene on paper
3. Pretending or imagining things

**Bodily/Kinesthetic:**
1. Playing charades or roles (as in drama)
2. Dancing or playing games that require body movement
3. Exercising my body for better body performance

**Musical/Rhythmic:**
1. Being able to hum a tune I’ve heard on the radio, a tape or a CD
2. Recognizing different recorded instruments and sounds
3. Using music to alter my feelings and moods

**Interpersonal:**
1. Listening to others’ opinions and feelings (even when I disagree)
2. Doing my part when I’m part of a team project
3. Giving encouragement and positive support to other people

**Intrapersonal:**
1. Spending time alone thinking things through
2. Being aware of and dealing with my own feelings
3. Evaluating my own thinking patterns and improving them

**Naturalist:**
1. Categorizing things by common traits
2. Spending a great deal of time outdoors
3. Putting things in hierarchies makes sense to me

Adapted from David Lazear (1993, p. 99) and McKenzie (1999)
Appendix I: Sample Dominos Game

The game can be made as followed:

Create a table and write the verbs in it. Print the game and cut the pieces. Make sure you cut the pieces correctly. Each piece should have one verb in the present and one in the past form (See one piece below).

<table>
<thead>
<tr>
<th>were</th>
<th>saw</th>
<th>went</th>
<th>told</th>
<th>said</th>
<th>had</th>
</tr>
</thead>
<tbody>
<tr>
<td>see</td>
<td>go</td>
<td>tell</td>
<td>say</td>
<td>have</td>
<td>take</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>took</th>
<th>gave</th>
<th>got</th>
<th>could</th>
<th>made</th>
<th>did</th>
</tr>
</thead>
<tbody>
<tr>
<td>give</td>
<td>get</td>
<td>can</td>
<td>make</td>
<td>do</td>
<td>are</td>
</tr>
</tbody>
</table>
Appendix J: Third Adapted Activity (American Headway 2, unit 3, p. 20)

NEWSPAPER STORIES
Past Continuous

1. Read each text and underline the Past Simple of the verbs in the boxes.

   have  can  steal  give  say  break  hear  come  leave  go

   Hands up, I’ve got a burger!

   Last Tuesday a man armed with just a hot hamburger in a bag stole $1,000 from a bank in Danville, California. Police Detective Bill McGinnis said that the robber entered the Mount Diablo National Bank at about 1:30 p.m. and gave the teller a note demanding $1,000. He claimed that he had a bomb in the bag. The teller said she could smell a distinct odor of hamburger coming from the bag. Even so, she handed the money to the man. He dropped the bag with the hamburger. He escaped in a car.

   Teenage party ends in tears

   When Jack and Kelly Harman went away on vacation, they left their teenage daughter alone in the house. Sue, aged 16, wanted to stay at home (+). Her parents said she could have some friends stay over. However, Sue decided to have a party (+). Things started to go wrong. Forty uninvited guests arrived (+). They broke furniture, smashed windows, and stole jewelry. When Mr. and Mrs. Harman heard the news, they came home immediately.

2. Match each phrase to an article. Where exactly does each phrase go?

   because she was studying for a test
   as he was running out of the bank
   everyone was having a good time when suddenly
   that was waiting for him outside
   and some of them were carrying knives
   who was wearing a mask

   135 Listen and check. Practice the sentences.
Appendix K: Fifth Adapted Activity (Gateways 1, Unit 5, pp.34-35)

**Reading and Writing**

1. Look at these postcards. What part of the world is Sue in?

- **The Golden Pavilion, Kyoto**
  - June 10
  - Dear Beth and Ed,
    - Japan is wonderful! The weather is beautiful, and the people are friendly.
    - The Golden Temple is really magnificent. My next stop is Hawaii.
    - See you soon.
    - Love, Sue
  - Mr. and Mrs. Ed Bond
  - 907 Main St.
  - Vancouver, BC V6A 2V8
  - CANADA

- **The Taipei Museum of Art**
  - May 31
  - Dear Beth and Ed,
    - Here's a piece from the Taipei Museum of Art. It's fabulous! My hotel is nearby. I'm having a great time.
    - Love, Sue
  - Mr. and Mrs. Ed Bond
  - 907 Main St.
  - Vancouver, BC V6A 2V8
  - CANADA

- **The Big Buddha of Wat Phra Yai**
  - May 21
  - Dear Beth and Ed,
    - Here I am in Ko Samui. Thailand is fascinating, and the food is delicious.
    - This is the Big Buddha. From here I go to Taiwan.
    - Love, Sue
  - Mr. and Mrs. Ed Bond
  - 907 Main St.
  - Vancouver, BC V6A 2V8
  - CANADA

- **Seoul, Korea**
  - June 5
  - Dear Beth and Ed,
    - Korea is really interesting, and the people are very nice.
    - These are Korean women in traditional dress. Aren't they beautiful? Bye for now.
    - Love, Sue
  - Mr. and Mrs. Ed Bond
  - 907 Main St.
  - Vancouver, BC V6A 2V8
  - CANADA
Appendix K: *Gateways 1*, Unit 5, p.34-35: continued.

2. Which countries did Sue visit? Number them in the correct order on the map. Draw lines from each city to trace Sue's route.

3. Imagine that you are on a trip. Write a postcard to a friend or family member.
Appendix L: Mind Map for Lesson Planning using MI