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An Introduction to Multiple Intelligences Theory

Views on Intelligence

How intelligence is defined within any society has a profound effect on the individuals in that society. It affects social status, educational opportunities, and career choices. Even though great importance is attached to the concept of intelligence, most people are unable to define exactly what intelligence is. There is no objective, agreed-upon referent either among the general public or contemporary psychologists.

The Traditional View

It is quite common for people to accept a definition of intelligence that is synonymous with a score on the traditional intelligence test—a test originally designed by Binet and Simon (1905) at the beginning of the twentieth century to predict which youngsters in Parisian primary grades would succeed and which would fail. The test that Binet and Simon designed later became known as the IQ (intelligence quotient) test and has enjoyed great success the world over. This view of intelligence is known as the traditional psychometric view of intelligence. Intelligence is defined operationally; in other words, intelligence is equal to the ability to answer certain test items correctly. Theoretically, how accurately one responds to test items is related to some underlying ability known as intelligence. This traditional psychometric view of intelligence is supported by statistical techniques that compare the responses of different subjects who are of different ages on these intelligence tests. The idea is that intelligence is a single, static construct, an innate attribute that doesn’t change with age, training, or experience. We are born with a certain amount of intelligence that will not change as a result of our life experiences.

The general public seems to have adopted this traditional psychometric view of intelligence. For many people, intelligence is something that an intelligence test measures (Kail and Peregrino 1985). A good example of public acceptance of this theory is Marilyn Vos Savant, the individual with the world’s highest recorded score on the IQ test. She is often referred to as the most intelligent person in the world and, as such, writes a weekly syndicated column for Parade magazine in the United States called, “Ask Marilyn” (Vos Savant 1995). Many people read her column and stand in awe of the logical and precise answers she offers to difficult questions. Whatever intelligence means, Vos Savant is regarded as having a lot of it (see www.marilynvossavant.com).

Developmental and Information Processing Views

Not all cognitive psychologists agree on this psychometric definition of intelligence. One of the problems with the traditional IQ test is that even though the IQ test predicts school performance with considerable accuracy, it is only an indifferent predictor of performance and success in a profession after formal schooling (Jencks 1977). This is one factor that has led some cognitive psychologists to put forth different psychological perspectives on intelligence. For example, within modern psychology, the term “intelligence” is often defined in two additional ways. The first way is to use intelligence to refer to intelligent acts, such as writing a book or designing a new computer program. This is the developmental view of intelligence (Piaget 1970). The second way is to use intelligence to refer to mental processes that give rise to intelligent acts, such as the mental abilities that underlie these acts (e.g., analyzing and synthesizing information). This is the information processing view of intelligence. At one extreme, there is the proposal that each intelligent act is associated with a unique mental process. The other extreme proposes that a single mental ability underlies all intelligent achievements (Kail and Peregrino 1985). One view says that, for example, Mozart was born with a specific talent to write his music. Writing music is an intelligent act, and Mozart was born with this intelligence. The other extreme says that Mozart’s music was an accident of time and place. In other words, Mozart was in the right place at the right time to develop the unique mental processes he needed to write his music. Another person could have written what Mozart wrote. Both views are very attractive (Gardner 1993).

Other Views

In the past two decades, researchers in the cognitive and neural sciences have proposed different views of intelligence and have offered support for a pluralistic view of cognition, suggesting that the mind is organized into relatively discrete realms of functioning (Ceci 1990, Feldman 1980, Fodor 1983, Gardner 1985, and Sternberg 1984, 1985). Howard Gardner’s theory of multiple intelligences (hereafter known as MI theory) is the best-known example among educators of this pluralistic view of the human mind. Howard Gardner’s MI theory pluralizes the traditional concept of intelligence by defining intelligence as “. . . the ability to solve problems or fashion products that are of consequence in a particular cultural setting or community” (Gardner 1993, 15). The problem to be solved could be a computer error, deciding
what move to make next in a game of Monopoly, or figuring out how to plant a garden or saddle a horse. Humans have a biological proclivity to solve problems, so MI theory is framed in light of the biological origins of the specific skills related to each problem being solved. According to Gardner, intelligence is not just a single construct applied in the same way to each task or problem. Rather, intelligence is made up of component pieces. For example, a person may be very good at playing chess and may have mastered all of the skills necessary to succeed in playing the game, but this person may not be very good at playing a Mozart sonata on the piano. Gardner’s theory has been popular with educators because it accounts for the different ways in which humans can be intelligent. MI theory has helped educators by providing a useful framework for talking about the differences we see among the students we teach.

A Personal Perspective
My interest in the theory of multiple intelligences and its application to the second and foreign language classroom began in the early 1990s. Since my first year of teaching in 1970, I have been troubled greatly by the traditional concept of intelligence as a single, static construct. It didn’t seem to make sense when I applied it to my own life and the lives of my students. My students demonstrated so many different individual strengths and skills; they were constantly changing, learning, and growing. I remember during the first year of teaching when I would sit in the faculty room at lunchtime and listen to my colleagues talk about the students we shared. I was so surprised to find out that my best student in Spanish and English was failing math. Another student was struggling in my courses, but was an extremely talented musician. If someone had asked me to select the most intelligent student in my classes, I could not have done so. My experiences as an educator taught me that intelligence was not just one form of cognition that cut across all human thinking. Rather, there were quite possibly different intelligences. It took me almost 20 years to find the theory that supported these beliefs and my own experiences.

Gardner’s theory (1983) proposes different and autonomous intelligence capacities that result in many different ways of knowing, understanding, and learning about our world. As an L2 educator, it has been important for me to get away from defining intelligence in terms of tests and correlations among tests and begin to look more seriously at how my students from around the world develop skills important to their lives. As Gardner states:

It is of the utmost importance that we recognize and nurture all of the varied human intelligences, and all of the combinations of intelligences. We are all so different largely because we all have different combinations of intelligences. If we recognize this, I think we will have at least a better chance of dealing appropriately with the many problems we face in the world. (Gardner 1993, 15)

Gardner’s MI theory proposes an alternative definition of intelligence based on a radically different view of the mind. He proposes “... a pluralistic view of the mind, recognizing many different and discrete facets of cognition and acknowledging that people have different cognitive strengths and contrasting cognitive styles (Gardner 1993, 6). This view of intelligence states that some finite set of mental processes gives rise to a full range of intelligent human activities. This intelligence is most completely realized in the process of solving problems and fashioning products in real-life situations.

The problem-solving skill allows one to approach a situation in which a goal is to be obtained and to locate the appropriate route to that goal. The creation of a cultural product is as crucial to such functions as capturing and transmitting knowledge or expressing one’s view or feelings. The problems to be solved range from creating an end for a story to anticipating a mating move in chess to repairing a quilt. Products range from scientific theories to musical compositions to successful political campaigns. (Gardner 1993, 15)

The Theory of Multiple Intelligences

Intelligences Defined

There is frequently confusion among educators about the relationship between learning styles and multiple intelligences. Many teachers all over the world have asked me if the concepts were one and the same. They are not. I believe that the confusion has resulted because as L2 educators, the learning styles that we are most familiar with are the perceptual learning styles, such as visual and kinesthetic. We use similar terms to talk about some of the intelligences such as visual/spatial and bodily/kinesthetic. There is bound to be confusion. Let me offer a short example
that might be helpful in sorting out these two concepts—multiple intelligences and perceptual learning styles. Let’s say there are two people who want to develop their musical intelligence. Musical intelligence is basic to all people even though it may be manifested in different ways. The first person goes to the music store and buys several of his favorite CDs. He takes them home, listens to them, and then tries to play what he hears. The second person goes to the music store and buys sheet music. She takes the selections home, reads the written music, and then sits down to play. Both of these individuals are working to develop their musical intelligence, but they are doing it in different ways. The preferred learning style for accessing music for the first person is auditory; the preferred learning style for accessing music for the second person is visual. A preferred learning style may vary from task to task.

When considering multiple intelligences and learning styles, it is also important to remember that there are many different ways to talk about learning styles. Perceptual learning styles form only one piece of the puzzle. There are other learning styles that describe how people prefer to process and perceive information (Christison 1998). Some people are impulsive learners. They like to process information quickly and take action to solve problems almost immediately. Other people are reflective learners. They like to take their time in processing information and prefer to wait and consider options before making decisions. There are also field independent and field dependent learners. The distinction between these two styles of learning and processing information is concerned with whether you see the forest first or the trees. Do you like to have the big picture first and then fill in the details, or do you prefer to work with the details first and then get the big picture? (For a more complete overview of learning styles, see Christison 1998 and Reid 1997.)

MI theory is framed in the light of biological origins. In order to arrive at the list of eight intelligences, Gardner gathered evidence from many different sources:

. . . we consulted evidence from several different sources: knowledge about normal development and development in gifted individuals; information about the breakdown of cognitive skills under conditions of brain damage; studies of exceptional populations, including prodigies, idiot savants, and autistic children; data about the evolution of cognition over the millennia; cross-cultural accounts of cognition; psychometric studies, including examinations of correlations among tests; and psychological training studies, particularly measures of transfer and generalization across tasks. (Gardner 1993, 16)

Gardner identified eight basic criteria that must be considered for an official intelligence. He wanted to make a clear distinction between an intelligence with biological origins and a talent or skill. He was being purposely provocative in his choice of words.

The Eight Theoretical Bases

1 Brain Damage Studies. When people suffer brain damage as a result of an injury, one intelligence is often damaged. For example, if a person has damage to Broca’s area (the left frontal lobe), linguistic intelligence may be impaired. The individual could have trouble reading, writing, or speaking; yet, the person might still be able to do math, dance, play the piano, etc. Gardner is actually proposing the existence of eight autonomous brain systems. His premise is that as long as a person can lose ability in one area while others are spared, there cannot simply be a single intelligence.

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

3 Developmental History. Each intelligence has its own developmental history—its time of arising in childhood, its time of peaking during one’s lifetime, and its time of gradual decline. Musical intelligence, for example, peaks early, but linguistic intelligence often peaks very late.

4 Evolutionary History. Each intelligence has roots in the evolutionary history of human beings. For example, archaeological evidence supports the presence of early musical instruments—evidence of musical intelligence. The cave drawings of Lascaux are good examples of visual/spatial intelligence.
5 **Psychometric findings.** We can look at many existing standardized tests for support of the theory of multiple intelligences. The Weschsler Intelligence Scale for Children includes sub-tests that focus on several of the different intelligences.

6 **Psychological tasks.** We can look at psychological studies and witness intelligences working separately. For example, subjects may master a specific skill, such as an arithmetic problem, but may still not be able to read well. Also, individuals may have a superior memory for words but not for faces, hereby indicating that these tasks seem to be independent of each other.

7 **Core operations.** Each intelligence has a set of core operations. For example, with musical intelligence, a person needs to be able to discriminate between rhythmic structures and be sensitive to pitch. For bodily/kinesthetic intelligence, a person would need to be able to imitate movements by others.

8 **Symbol system.** Intelligences are susceptible to being encoded. For example, there are spoken and written languages, graphic languages, computer languages, musical notation systems, ideographic languages, and dance notation systems.

Gardner (1983) states that "... it must be admitted that the selection (or rejection) of a candidate's intelligence is reminiscent more of an artistic judgment than of a scientific assessment." Only those intelligences that have satisfied all or a majority of the criteria mentioned above have been selected as bonafide intelligences.

### The Eight Intelligences

Having sketched out the criteria for an intelligence, Gardner identified seven original intelligences and has since added an eighth. The list is not meant to be final or exhaustive. The point is not the exact number of intelligences, but simply the plurality of the intellect. Each person has raw biological potential. We differ in the particular intelligence profiles with which we are born and the ways in which we develop them. Weinreich-Haste (1985) claims that many people are surprised at some of the intelligence categories that Gardner has selected because they never think of the areas of bodily/kinesthetic, interpersonal, or intrapersonal, for example, as being related to "intelligence." They think of the categories more as talents or aptitudes.

1 **Linguistic intelligence:** the ability to use words effectively both orally and in writing. This intelligence includes such skills as the ability to remember information, to convince others to help you, and to talk about language itself. All of the activities in this book help students develop linguistic intelligence by creating a rich print environment—things to look at and write about—and by providing many opportunities for interaction—among students and between the teacher and the students. When students read, write, talk to each other, and communicate their ideas in any form, they are developing their linguistic intelligence.

2 **Logical/mathematical intelligence:** the ability to use numbers effectively and reason well. It includes such skills as understanding the basic properties of numbers, developing the ability to analyze data, understanding the principle of cause and effect, and being able to use simple machines. You can help students develop logical/mathematical intelligence by providing manipulatives for experimentation with numbers and using simple machines or computer programs to help students think about cause and effect. When students are asked to analyze a problem and work with numbers, they are developing their logical/mathematical intelligence.

3 **Visual/spatial intelligence:** the ability to have sensitivity to form, space, color, line, and shape. It includes the ability to graphically represent visual or spatial ideas. You can help students develop visual/spatial intelligence by providing opportunities for visual mapping activities and encouraging students to vary the arrangements of materials in space, for example, by creating charts and bulletin boards. When students draw a picture and label it, talk about an art piece, imagine a scene and then write about it, or read a map, they are developing their visual/spatial intelligence.

4 **Bodily/kinesthetic intelligence:** the ability to use the body to express ideas and feelings, and to solve problems. This includes such physical skills as coordination, flexibility, speed, and balance. You can help your students develop their bodily/kinesthetic intelligence by providing opportunities for physical challenges during the second/foreign language lesson, such as conducting an experiment, acting out an idea, performing a dance, or participating in a role-play.
5 INTERPERSONAL INTELLIGENCE: the ability to understand another person’s moods, feelings, motivations, and intentions. This includes such skills as responding effectively to other people in some pragmatic way, such as getting students or colleagues to participate in a project. As a second language educator, you can help students develop interpersonal intelligence through activities that require them to work with others to solve problems and resolve conflict, teach each other new skills, and learn how to encourage other members of a group or team.

6 INTRAPERSONAL INTELLIGENCE: the ability to understand yourself, your strengths, weaknesses, moods, desires, and intentions. This includes such skills as understanding how you are similar to or different from others; reminding yourself to do something; knowing about yourself as a language learner; and knowing how to handle your feelings, such as what to do and how to behave when you are angry or sad. You can help students develop intrapersonal intelligence by giving them opportunities to express their own preferences, reflect on how they participated in an activity, set goals for their own learning, and help them evaluate their own styles of learning.

The two personal intelligences have been referred to collectively as “emotional intelligence” (Salovey and Mayer 1990; Goleman 1995, 1998). Emotional intelligence (EQ) includes features of both intrapersonal and interpersonal intelligence, such as self-awareness, impulse control, persistence, zeal, self-motivation, empathy, and social deftness. Goleman (1995) believes that these are qualities that mark people who excel in real life. These qualities are also the hallmarks of character and self-discipline. We must develop these basic human capacities if society is to survive. Goleman’s belief is that lack of emotional intelligence can sabotage the intellect and ruin careers, taking the greatest toll on children. Risks to children include depression, eating disorders, aggressiveness, and violent crime.

7 MUSICAL INTELLIGENCE: the ability to have sensitivity to rhythm and pitch. Musical intelligence includes such skills as the ability to recognize simple songs and the ability to vary speed, tempo, and rhythm in simple melodies. You can help students develop musical intelligence by using cassette or CD players for listening, singing along, and learning new songs. When students relax to music and beat out a rhythm to a favorite tune, they are developing their musical intelligence.

8 NATURALIST INTELLIGENCE: the ability to find patterns and recognize and classify plants, minerals, and animals, including rocks and all varieties of flora and fauna. It is also the ability to recognize cultural artifacts like cars or sneakers. You can help your students develop their naturalist intelligence by focusing their attention on the world outside the classroom. When students work to identify parts of real plants or participate in field trips to learn about different trees or animals, they are developing their naturalist intelligence. The Naturalist Intelligence was the last intelligence added by Gardner.

Other Intelligences

In his book, Intelligence Reframed (1999), Gardner states that he is repeatedly asked about adding other intelligences to his list of eight. People have asked if there is a cooking intelligence, a sexual intelligence, an intelligence for humor, a spiritual intelligence, a moral intelligence, an existential intelligence, and an intelligence for creativity. So far, Gardner has added none of these proposed intelligences. However, the existential intelligence is currently a candidate intelligence. The strength of the evidence for this intelligence varies. The existential intelligence “...scores reasonably well on the eight criteria ... Although empirical psychological evidence is sparse, what exists certainly does not invalidate the construct.” (Gardner 1999, 64) Gardner has also gone so far as to speculate on the core ability for this intelligence and provide a preliminary definition.

As far as a core ability, Gardner writes that it is an ability to “...locate oneself with respect to the farthest reaches of the cosmos, the infinite no less than the infinitesimal, and the related capacity to locate oneself with respect to the most existential features of the human condition, 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 human being or total immersion in a work of art.” This capacity has been valued in every known human culture. Gardner also offers a preliminary definition of the existential intelligence: Individuals who exhibit the proclivity to pose and ponder questions about life, death, and ultimate realities. Yet, Gardner does not add existential to the list at this time. He does find the proposed intelligence perplexing. He believes that the “...distance away from other intelligences is vast enough to dictate prudence” (64).
Implications of MI Theory for Second Language Education

MI Theory Among Educators

The theory of multiple intelligences was developed first as an account of human cognition that could be subjected to empirical tests (Gardner 1993, 27). When Gardner wrote *Frames of Mind* in 1983, he believed that his work would be of interest chiefly to persons trained in his discipline of developmental psychology. In truth, *Frames of Mind* did not arouse much interest within the discipline of developmental psychology; most developmental psychologists ignored it. The reception among educators, however, was quite different. Gardner writes:

Some months after the publication of *Frames*, I was invited to address the annual meeting of the National Association of Independent Schools, the umbrella organization for American private or “independent” schools. I expected the typical audience of fifty to seventy-five persons, a customary talk of fifty minutes followed by a small number of easily anticipated questions. Instead, arriving at the auditorium a few minutes early, I encountered a new experience: a much larger hall, entirely filled with people, and humming with excitement. It was almost as if I had walked by mistake into a talk given by someone who was famous. But the audience had, in fact, come to hear me: it listened attentively, and grew steadily in size until it spilled out into the hallways on both sides of the room. The talk was very well received; thought-provoking questions poured forth, and after the session had concluded, I was ringed by interested headmasters, teachers, trustees, and journalists who wanted to hear more and were reluctant to allow me to slip back in anonymity. (1993, xiii)

Key Points for Educators

The theory of multiple intelligences seems to harbor a number of educational implications that are worthy of consideration. Armstrong (1994) has synthesized these ideas into four key points that educators find attractive about the theory:

1. **Each person possesses all eight intelligences.** In each person the eight intelligences function together in unique ways. Some people have high levels of functioning in all or most of the intelligences; a few people lack most of the rudimentary aspects of intelligence. Most people are somewhere in the middle—with a few intelligences highly developed, most modestly developed, and one or two underdeveloped.

2. **Intelligences can be developed.** In the traditional view, intelligence is defined as an attribute that doesn’t change with age, training, or experience. Traditional views of intelligence support the notion that we are born with a certain amount of intelligence and that intelligence will not change as a result of life experiences. MI theory, on the other hand, suggests that humans have the capacity to develop all eight intelligences to a reasonably high level of performance with appropriate encouragement, enrichment, and instruction.

3. **Intelligences work together in complex ways.** No intelligence really exists by itself. Intelligences are always interacting with each other. For example, in order to cook a meal, one must read a recipe (linguistic), perhaps double it (logical/mathematical), and prepare a menu that satisfies others you may cook for (interpersonal) and yourself (intrapersonal).

4. **There are many different ways to be intelligent.** There is no set standard of attributes that one must have in order to be considered intelligent. I remember a friend in high school who was completely awkward in dance class and yet a marvel in building construction. Both activities required bodily/kinesthetic intelligence.

It is important to remember that Howard Gardner was not designing a curriculum or preparing a model to be used in schools with his multiple intelligences theory (Hoerr 1997). Educators have taken the theory, put it together in different ways, and applied it to their lesson planning and program and curriculum development. The theory provides a framework within which teachers can use their imaginations and creativity in designing materials for the second
Applying MI Theory in the Second Language Classroom

Steps to Follow

Overall, there are few theories that have been embraced more enthusiastically by second language teachers in the past few years than MI theory. We have seen more papers being written on the topic (for example, Reid 1997 and Christison 1998) and more workshops and papers being offered at conferences (see TESOL Convention Programs 1997–2004). As second language educators, we want information and resources about the theory; we want to know how to apply the theory in the classroom. MI theory offers second language teachers a way to examine their best teaching techniques and strategies in light of human differences. There are several important steps to follow in applying the theory in your own classrooms.

1. INTRODUCE YOURSELF TO THE BASIC THEORY. If you are reading this introduction now, you are taking the first step in applying MI theory to your classroom. Once you have read through the basics, see if you understand them well enough to answer the simple and straightforward questions below. If you are working alone, you might use the questions to check your understanding. If you are able to work with other teachers, discuss the questions with them. If you are a teacher educator, you might use the questions in a “mix and mingle” activity with your students. Each student gets one of the ten questions and talks to five other people. After asking and answering a question with the first person, the partners switch questions and find other partners. So each time a teacher asks a question, he/she has a new question and a new partner!

<table>
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<tr>
<th>Basic MI Theory Questions</th>
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<tr>
<td>List the eight intelligences and explain how each one is used.</td>
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<td>Why are there only eight intelligences?</td>
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<tr>
<td>What are the theoretical bases that Gardner uses to determine an intelligence?</td>
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<td>According to Gardner, what’s the difference between a talent and an intelligence?</td>
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<td>Why do you think MI theory has been popular with educators?</td>
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<td>What are Armstrong’s key points concerning MI theory for educators?</td>
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<td>What is the traditional psychometric view of intelligence?</td>
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<td>What is the developmental view of intelligence? The information processing view?</td>
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<td>What is meant by the phrase “pluralistic view of the mind”?</td>
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<td>What is Gardner’s definition of intelligence? Do you agree with the definition? Disagree?</td>
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If you are a second language teacher educator hoping to make MI theory part of your teacher education curriculum, you have a challenge (Marzano, et al. 1988). Second language teacher educators are responsible for creating curricula for the programs that provide prospective second language teachers with a foundation for what they should know as professional language teachers. Much of what is traditionally included in second language teacher education programs (TESL/TEFL) is based on academic tradition. Because second language teachers are expected to know about methods, testing, L2 theory, as well as the teaching of grammar, reading, speaking, and listening, most teacher...
education programs include courses in all of these subject areas. Teacher education programs are also expected to keep current by introducing teachers to the newest and most creative ideas in second language pedagogy. When new concepts and ideas are embraced by the profession, second language teacher education programs are challenged with the notion of how to integrate them into the already existing program. When I am working with pre-service teachers (i.e., those teachers who are working to get their degree) or in-service teachers (i.e., those teachers who have a degree or certification and want to get a specialization or endorsement in teaching English as a second language or another language), I have had great success using a simple, interesting, and unique introductory MI theory activity. It has been my experience that before I can start talking about the details of MI theory, I need to capture the students’ attention and interest. I have had success with an adaptation of the familiar second language teaching activity entitled “Find Someone Who . . . ” (see activity 1.1).

The statements listed in the “Find Someone Who . . .” activity each represent one of the eight intelligences. In-service or pre-service teachers follow the directions and obtain the necessary signatures. Once all signatures have been obtained, the follow-up discussion should focus on the different intelligences needed to complete the activity (i.e., “likes to dance”—bodily/kinesthetic, “will sing part of a favorite song”—musical). With a little imagination and creativity, teachers and teacher educators will find many possibilities for introducing MI to their L2 students.

Armstrong (1994) suggests two activities to use when teaching students (in this case, L2 students) about MI theory. He offers a version of “Find Someone Who . . .” called “The Human Intelligence Hunt.” Armstrong’s list includes seven actions—one for each of the original intelligences. The student who signs the paper must actually perform the action to the other student’s satisfaction. This version works well with ESL/EFL students. Armstrong also suggests the “Multiple Intelligence Pizza” for young children. The instructor draws a circle on the board and divides it into eight pieces. The instructor then asks the students to tell him/her the different ways in which a person can be smart (i.e., music smart, word smart, body smart, number smart, nature smart, etc.). Finally, students are asked to choose the different ways in which they are smart and write down the things they do to demonstrate the particular intelligences chosen. Showing L2 teachers how to introduce MI theory to their students is an important part of this first step.

2 Take an MI Inventory. Armstrong (1994) believes that before teachers apply a model of learning to the classroom, they should apply it to themselves as educators. Therefore, the next step in applying MI theory to the classroom is for teachers to determine their own multiple intelligences profile. The “Multiple Intelligences Inventory” for prospective second language teachers appears in the appendices. Other inventories such as the “Teele Inventory of Multiple Intelligences” are also very useful (Teele 1992). I encourage L2 teachers and prospective teachers to complete an inventory and share the results with each other.

Inventories can also be used with L2 students. There are inventories for language students in the appendices. Choose the MI inventory that is the most appropriate for your students. If none of the inventories included in the appendices at the end of this book seems to work with your situation, you can create your own. Once you have introduced your students to the idea that they can be smart in many different ways and have presented Gardner’s eight intelligences, ask students to write down three different ways in which they focus on each intelligence in their daily lives. Then collect the responses and create your own inventory, making certain that none of the items are repeated and that each intelligence has the same number of items. When you use this technique, you make certain that the inventory is personal and directly related to the lives of your students.

Once you learn more about your own multiple intelligences profile, you will become more confident in the choices you make that affect your teaching. The purpose of taking an MI inventory is to connect your life experiences to the ideas presented in MI theory. Inventories are not intelligence tests. Scoring high on an inventory merely gives you a sense of how much you are focusing on this intelligence in your daily life. The types of learning activities you select for your classes are often directly related to your experiences in the real world.

The choices you make as a teacher for your classroom can affect the MI profiles of the students in your classes. The same rule of thumb applies to teacher educators. You will choose classroom activities that complement your own MI profile. There is nothing inherently wrong with choosing classroom activities to complement your own MI profile, but it is important to understand that the choices you make as a teacher educator determine how you present information to prospective teachers. This, in turn, can affect their MI profiles and ultimately the MI profiles of the students they teach. The key for language teachers and teacher educators is to make informed choices. Both language students and language teachers benefit from instructional approaches that help them reflect on their own learning.
3 Learn to Categorize Familiar Language Activities. In order to begin lesson planning, it is important for you to be able to identify the activities you normally use in your lessons as they relate to the different intelligences. This is another step in making informed choices. There are a number of ways in which you might identify activities. Campbell (1997) suggests creating menus (a linguistic menu, logical/mathematical menu, musical menu, etc.). When I first began working with MI, I found this suggestion very useful. I looked back at my old lesson plans and made a list of the different activities that I used in these lessons (see activity 1.2). After I had a list of commonly used activities, I used the list and the MI Menu Chart (see activity 1.2) and put the activities in the appropriate spaces.

If you are an L2 teacher educator, you can take this activity one step further and use the information as a mix and mingle activity. Write the activities you generated from your own practice on separate strips of paper. Tape the intelligence menus on the walls around the room (e.g., linguistic intelligence, logical/mathematical intelligence, spatial/visual intelligence). Then give teachers the strips of paper and ask them to decide under which menu the strips belong. Once all the activities have been placed under the intelligence menus, conduct a large group discussion. Many of the activities support more than one intelligence, so you should expect a healthy discussion. While all activities for the second language classroom will support the linguistic intelligence, the activities will develop other intelligences as well. For each activity type being used, it is important to get an overall MI activity profile. For example, consider the “Find Someone Who . . . ” activity previously explained. This activity clearly helps students develop their linguistic intelligence, but it also develops interpersonal, intrapersonal, and bodily/kinesthetic intelligences. The MI activity profile for “Find Someone Who . . . ” is linguistic, bodily/kinesthetic, interpersonal, and intrapersonal. When planning curricula, it will be important to recognize the chief intelligence being focused on as well as the other intelligences being developed.

4 Conduct a Personal Audit of Your Own Teaching. I have found this activity very helpful in applying MI theory in my own classroom and use these same techniques in my teacher education courses and workshops. The activity is reflective in nature and requires that teachers look at the activities they include in their lessons over a given period of time, say one week. The activities are then categorized according to the different intelligences, using activity 1.3. Other intelligences are also noted.

When I reviewed the results from one of my own classes, I was surprised. During the two-week period that I tracked, I did not use any activities in my classes that helped students develop their logical/mathematical intelligence or their musical intelligence; whereas, the other intelligences were equally represented. There were two things I could have done with this information. I could have simply considered it interesting and taken no action to change, or I could have used the information to explore ways of introducing these different intelligences in my lessons. I made a decision to do the latter and tried to think of ways to include these two intelligences in my language teaching.

In order to include opportunities for students to develop their musical intelligence, I taught my students the tunes and words to two very simple folk songs, “Skip to My Lou” and “Down in the Valley.” They enjoyed singing these songs, and I managed to accompany them on the guitar. In a later lesson, I asked students to work in groups, take the information from the chapter, write a simple verse, and put the words to one of the tunes that I had previously taught them. The students continued to enjoy the activity. Most of the student groups performed the new songs for the entire class. They also commented to me later that the technique made it easy to remember the content of the chapter. Trying this new activity was a big risk for me. However, when I saw how much my students learned from each other, how much they were interacting and using English, how much they seemed to enjoy it, and how successful they felt about the activity, I was glad that I had taken the risk.

The above anecdote is an excellent example of how MI theory influenced language teaching and learning in my classroom. My decisions about activities as they relate to MI theory were made by choice and not by accident. This is perhaps the most important point I try to get across to the teachers in my own pre-service and in-service courses. If you are working through this material by yourself, it is also an important point to remember.

5 Develop Assessment Techniques that Address the Eight Intelligences. Another important component of applying MI theory in the second language classroom is assessment. Not only should you be concerned with integrating MI into your lesson plans, you should also be concerned with the assessment techniques you employ. The two paradigms—teaching and assessment—must evolve if you want to make any significant changes in your curriculum and in the ways in which your students learn and respond to your classes (Lazear 1994). There are a number of assessment challenges that a MI curriculum brings to the forefront.
First, an MI curriculum supports the idea that each student is unique and that instruction and assessment must be varied. It also supports a variety of assessment instruments so that we can get a more complete, accurate, and fair picture of what students know. In an MI curriculum, the lines between instruction and assessment are always blurred because assessment is occurring in and through the curriculum and daily instruction. For example, you are familiar with the concept of giving short, pen-and-paper quizzes as self-tests. If you are a classroom teacher, quizzes are designed to help students reflect on the material and concepts. If you are a teacher educator, you can use the same technique with the teachers with whom you work. Not all “quizzes” have to be of the pen-and-paper variety. Instead of using the traditional method, you might use the same information to create a “Find Your Partner” activity (see activity 1.4).

The left-hand side of the chart in activity 1.4 contains some sample questions that you might give after the first introductory lesson on MI theory. Rather than simply handing out the questions and having the students or teachers answer them, give half of the class the questions and half of the class the answers. Then ask them to find their partners. By changing the focus of the assessment component, you integrate assessment with instruction and expand on the number of intelligences that are being developed through assessment. Pen-and-paper assessment techniques work to develop the linguistic intelligence; the “Find Your Partner” version adds the bodily/kinesthetic intelligence as well as the interpersonal intelligence.

Secondly, an MI curriculum for either language education or teacher education should teach students or teachers how to learn, how to think, and how to be intelligent in as many different ways as possible. In developing assessment practices consistent with an MI curriculum, teachers face an enormous challenge. In many language programs, students are given standardized tests. This is true even in progressive settings. The basic premise of MI theory suggests that not all learning of content can be measured in a standardized way. In pursuing a new MI assessment paradigm, teachers must explore multi-modal testing practices based on the eight intelligences—not just the verbal/linguistic and logical/mathematical practices that dominate educational assessment.

I remember several years ago when two distraught students came to my office. They were students in a content-based ESL course that I was teaching on American culture and history. Both students had done poorly on the traditional pen-and-paper test that I had given in class. Their complaint was that they had studied hard for the test and believed they knew most of the information in the chapter; yet, the test had not given them a chance to demonstrate what they knew.

Because I had made such an effort to revise my course curriculum and because these students had done well in class activities and in small group discussions, I decided to regard what they were saying as true and find out what they wanted me to do. I said that I was interested in their perspective and would like them to put themselves in my shoes. Specifically, what would they like to do to show me that they knew and understood the content of the chapter? They agreed to think about the task and return the following day.

When they came back to my office the following day, they told me what they wanted to do. Since they were both musicians, they asked if they could write a song about the content of the chapter, perform the song, and teach the chorus to the other students in the class. The chapter had been about early European explorers in North America, so I felt that the content would lend itself well to this particular task. I gave them three days to complete the assignment and told them that the song had to be memorized. In three days, the students came to class with their guitars and performed the song for their classmates.

I must admit that I had expected a short song with perhaps one or two verses and a chorus that would be repeated. The students, in fact, created nine different verses that covered the contributions of twelve early explorers and included a clever refrain. They had memorized all of the verses, and they taught the chorus to their classmates who were delighted to sing along with them. Needless to say, I was surprised and pleased. This experience was a turning point for me in how I view assessment. I now encourage my students to participate in the assessment process and I focus on giving them options.

Finally, an MI curriculum should recognize that students are at varying developmental stages and at varying levels of language acquisition, even in a curriculum where students are tested and placed. Assessment practices must be individualized and developmentally appropriate.
The definition of successful teaching in an MI curriculum is about helping students develop skills for “solving problems and fashioning products” in their real lives. It is about preparing students for experiences outside of the classroom. Are students assessed in ways that are consistent with what they will be expected to know and do in the wider world?

In Conclusion

I realize that no two teachers who read this chapter will use MI theory in exactly the same way. Some teacher educators will use MI theory as an entry point into lesson content. Others will attempt to engage all eight intelligences. There is no correct answer or road to follow. What is important is to understand how MI theory informs your own teaching. Once you understand this concept, you can consciously apply the theory to your lesson planning and curriculum development. There are no hard and fast rules. You certainly do not need to have every intelligence in every lesson. Much of how you decide to balance the intelligences in your curriculum will depend on the circumstances in which you teach. For example, are you working closely with other teachers or is the class that you teach part of an overall program?

It takes patience, time, imagination, and creativity to bring a new theory into your teaching. In the case of MI theory, I believe that the effort will be worth it!