Multiple Intelligences Structures - Opening Doors to Learning

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Multiple intelligences—the theory that people are smart in more ways than one—has profound implication for educators. We will look here at MI theory, the visions it holds for educators, and at multiple intelligences structures, a powerful and practical approach for implementing multiple intelligences that truly opens the doors to learning.

I. Multiple Intelligences Theory

Dr. Howard Gardner, a Harvard psychologist, is one of a number of modern scientists who challenge the theory that intelligence is fixed, and that intelligence is a unitary entity. These scientists argue quite convincingly that we are not stuck with the same level of intelligence bestowed upon us at birth. And even more revolutionary, they suggest that there is not one thing called intelligence. **There are multiple intelligences — many ways to be smart.**

When we think of intelligent people, almost invariably, we think of Albert Einstein. His name is virtually synonymous with intelligence thanks to his accomplishments in mathematics and physics. But according to MI theory, logic and mathematical intelligence is but one of the eight ways to be smart.

Another genius that may come to mind is Mozart. He was a musical genius. His symphonies, operas, and concertos were nothing short of brilliant. Was Mozart less intelligent than Einstein? It depends on your definition of intelligence. According to Multiple Intelligences theories, **Einstein and Mozart are both smart, but in very different ways.** Einstein was exceptionally high in the logical/mathematical intelligence, while Mozart was prodigiously brilliant in the musical/rhythmic intelligence. There are many ways to be smart — at least eight types of intelligences according to Dr. Gardner. The chart below illustrates the skills associated with each intelligence and typical professions associated with each intelligence.

Multiple Intelligences: The Many Ways to Be Smart

Intelligence	Skilled With	Typical Professions	Famous Individual
1. Verbal/Linguistic	reading, writing, speaking, listening, vocabulary	authors, speakers	Shakespeare
2. Logical/Mathematical	numbers, logic, computation, analysis, synthesis	accountants, lawyers, scientists	Einstein
3. Visual/Spatial	design, color, detail	artists, architects	van Gogh
4. Musical/Rhythmic	playing, composing, singing	musicians, lyricists	Mozart
5. Bodily/Kinesthetic	motor skills	actors, athletes	Tiger Woods
6. Naturalist	natural world and phenomena	biologists, oceanographers	Charles Darwin
7. Interpersonal	relationships	teachers, politicians, salespeople	Mother Teresa
8. Intrapersonal	introspection, feelings, beliefs	psychiatrists, philosophers, theologians	Confucius

Look at the typical professions for each intelligence. Aren't these valued professions in society? Look at the famous individuals. They were all very smart, but in very different ways. According to MI theory, we all possess all eight intelligences and they are differently developed in each of us.

II. The Three Multiple Intelligences Visions
Multiple Intelligences holds three powerful visions for improving the way teachers teach and the way students learn. The three visions are: **1) Matching 2) Stretching,** and **3) Celebrating.**

Vision 1. Matching
By matching, we mean matching how we teach to how students best learn. If every student is unique, then **no single teaching methodology will be effective for every student**. Some students do exceptionally well with traditional teaching while others do poorly. Does this mean the students who do well are inherently smarter? Not necessarily. There may be a mismatch between how schooling is conducted and how that child learns. Take for example, a very social student. If schooling is comprised of primarily independent work, that students' interpersonal intelligence is rarely engaged. If a student is very "hands-on" and classroom instruction involves a lot of saying, but very little doing, that student's potential is not being met. Academic failure for many students can be attributed to a mismatch between instruction and the students' intelligences.

We can eliminate or radically reduce school failure by teaching with instructional strategies that match each student's intelligences. Theoretically, all we need do is develop instructional strategies for each of the intelligences, and teach with them to make an otherwise inaccessible curriculum accessible — doing wonders to boost self-esteem and liking for school in the process. In essence, we match the way we teach with the way students are smart.

In this vision, the goal of maximizing academic success in all the areas of the curriculum is reached not by transforming the curriculum, but by changing the instructional methods with which the curriculum is taught. In short, academic success is reached by matching instruction to students' multiple intelligences. The belief is that all aspects of the curriculum can be made more accessible by delivering curriculum through instructional strategies which match the intellectual strengths of each student.

Vision 2. Stretching
The second MI vision is **Stretching**. In this vision, the goal is to develop each human intelligence to its maximum by transforming the curriculum to focus on the development of each of the intelligences.

If we accept the premise that there are many ways to be smart, our goal as educators is to **help students develop each of the various intelligences**. We give students opportunities to sing, play instruments, and write music to stretch the development of the musical intelligence. We give students the opportunity to draw, paint, and sculpt to more fully develop their visual/spatial intelligence. We stretch students' many ways to be smart.

Development of intelligences is reached through curriculum-intelligences alignment. It is important to note that this second vision is primarily a call for a shift not in instruction, but in curriculum. The belief is that we can stretch each intelligence to its maximum to create a population smarter in each of the intelligences by aligning our curriculum with the intelligences, teaching for the development of each intelligence.

Vision 3. Celebrating
The third vision for transforming education through the application of MI theory involves a shift in attitudes — attitudes of teachers toward students, students toward each other, and each student toward him or herself. Through the application of MI theory, we can generate among teachers and students a renewed respect for the uniqueness of each individual. This enhanced understanding and respect for self and others is grounded in an understanding and celebration of the unique pattern of intelligences of each individual and the richness in our collective diversity.

Students who struggle with some traditional school-related tasks, may perform exceptionally well with real-world tasks. Their forte may not be the traditional verbal and logical intelligences, but that does not mean they are not smart in other ways and capable of excelling with other content.

This third vision, in effect, treats MI theory itself as content for students and teachers. To the extent this vision is realized, a student can no longer think of herself as smart or dumb, but rather as **having a unique blend of strengths and weaknesses**. Students celebrate their own uniqueness

and that of others.

School achievement improves when students know and accept their own unique pattern of intelligences because it is easier to improve once we admit a weakness, and **it is much easier to admit a weakness if we know we have other areas of strength**. If we have but one yardstick for thinking about intelligence, each person stacks above or below each other person. When we break the single yardstick and replace it with many, no one is better than anyone else; **we each possess a unique pattern of intelligences to be celebrated**. We ask no longer how smart are we, but how are we smart.

In this vision, the goals of self-knowledge and self-acceptance, as well as knowledge and acceptance of others, are reached by teaching students about multiple intelligences, allowing them to discover their own unique pattern of intelligences and those of others. In short, self-understanding and social understanding is reached through metacognition and by allowing students to discover and celebrate the diversity in intelligences among them.

III. Multiple Intelligences Structures

There are a number of valid ways to implement the theory of multiple intelligences, including creating MI learning centers, designing multiple intelligences lessons and theme units, and tailoring special learning programs to individuals in order to boost their weaker intelligences and/or deliver the curriculum through their stronger intelligences. Based on our experience over the last twenty years with the range of approaches to implementing cooperative learning, we have charted a different approach. We place emphasis on simple multiple intelligences instructional strategies that can be incorporated as part of any lesson. We call these instructional strategies **Multiple Intelligences Structures**.

Multiple Intelligences Structures can be easily integrated into any lesson to release the power of multiple intelligences. Let's look at a few MI Structures:

Team Interview

In a **Team Interview**, students are seated in teams of four. The teacher assigns an interview topic. If, for example, the class just finished reading a book, the teacher may assign each student on the team a different character in the book. The first student stands up and for a pre-determined time period teammates ask the person interview questions in the role of the character. Each teammate has a turn standing and being interviewed by teammates. **Team Interview** is a strong structure for engaging the interpersonal intelligence while exploring the content.

Kinesthetic Symbols

In **Kinesthetic Symbols**, students create and practice body symbols associated with the learning content. For example if students are learning about the three states of matter, they create and practice hand signals for liquid, gas, and solid. **Kinesthetic Symbols** is particularly strong for engaging the bodily kinesthetic intelligence.

Lyrical Lessons

In **Lyrical Lessons**, students create and/or sing a song relating to the content. For example, if students are learning the parts of speech in language arts, they may create and sing a song about nouns, verbs, adverbs, pronouns, and adjectives. **Lyrical Lessons** is particularly strong for engaging the musical/rhythmic intelligence.

These are just three of the many **Multiple Intelligences Structures** we have developed and teach. One terrific feature of MI Structures is that they are re-usable with new content. We can do a **Team Interview** on historical characters in social studies. We can do **Kinesthetic Symbols** for mathematics operations. We can do **Lyrical Lessons** on science content. These MI Structures are not one-time activities. They are instructional strategies that a teacher adopts into his or her teaching repertoire. Instead of a lecture, or independent work, the teacher has a wide range of MI Structures from which to choose. Each time they are used with new curriculum, they engage students various intelligences in a novel way. Once teachers acquire a set of MI Structures, they are well equipped to match, stretch and celebrate students many ways to be smart.

With MI Structures, we reach all students with all intelligence profiles. We use a wide range of MI Structures in our classes. With each MI Structure we match some students' intelligences. **With a large array of MI Structures, we can match all students' intelligences.** With each MI Structure, we make the curriculum attractive and engaging to students strong in the corresponding intelligence. We provide that student access to the curriculum through a natural medium.

But we do more. As we engage each intelligence, we develop it for all students — those strong and those weak in the intelligence. By using MI Structures, students become smarter in many ways. With MI Structures we also stretch students' intelligences.

We do even more yet. As we use a range of instructional strategies, **students get to know their strengths, their weaknesses, their likes, their dislikes.** And they become aware of their unique intelligence profiles of their peers as well. Sure, sometimes their peers flounder. But sometimes they do unbelievably well. The more instructional strategies we use, the more opportunities we provide for each student to shine. Students learn to celebrate their own uniqueness and the diversity among them.

Yes, as we teach with a range of instructional strategies, we make all three MI visions a reality — matching, stretching, and celebrating MI. Through the MI strategies, we do miracles. Without losing a moment from our academic curriculum, we enrich that curriculum while reaching more students, developing their multiple intelligences, promoting self-esteem and fostering social acceptance and harmony.

As teachers, the better equipped we are with a wide range of MI Structures for each intelligence, the more likely we will reach students dominant in each intelligence, and the more likely we will stretch students in all intelligences. Each student has different proclivities in the various intelligences. Any single strategy may be very successful with some students, yet less successful with others. Using a range of teaching strategies opens the door to learning for all students.

About the Authors

Dr. Spencer and **Miguel Kagan** are co-authors of the book, **Multiple Intelligences: the Complete MI Book**.