Multiple Intelligences

Multiple Intelligences (MI) *is a celebration of the uniqueness and diversity of our students!* ***MI*** *tells us that students are smart not just in one or two ways, but in many ways. To reach all students and to develop the diverse intelligences, we need to teach in many ways, providing varied learning experiences for our students. This* ***SmartCard*** *provides a nutshell description of* ***MI Theory****, explores the 8 intelligences, and gives classroom ideas & activities.*

In a nutshell...

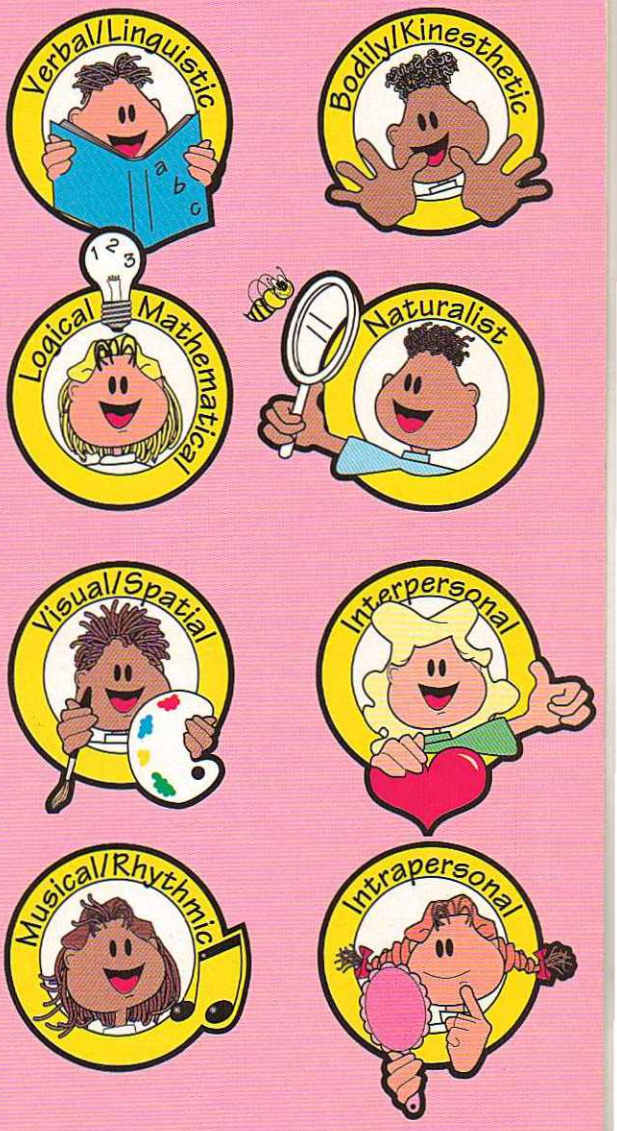
In 1983, Howard Gardner of Harvard University wrote a book entitled, *Frames of Mind: The Theory of Multiple Intelligences.* In this book, Gardner outlines his Theory of Multiple Intelligences. There are two fundamental propositions central to MI Theory: 1) Intelligence is not fixed. We are not stuck with the intelligence level we are born with. We have the ability to develop the intellectual capacity of our students. 2) Intelligence is not unitary. There are many ways to be smart. There is not just one human intelligence, but rather multiple intelligences. Everyone has each intelligence and a unique pattern of intelligences.

Gardner set out in search of the multiple intelligences. He believed that for anything to be considered an intelligence, it had to meet three prerequisites. An intelligence must include:

1) **Skills enabling individuals *to resolve genuine problems.***
2) **The ability to *create an effective product.***
3) **The potential for *finding or creating problems.***

Gardner selected candidate intelligences that met these three prerequisites. He then tested the candidates against eight criteria. Gardner originally identified seven specific intelligences, and has recently added the eighth, the Naturalist intelligence. See The 8 Intelligences at right. Gardner indicates there may be more.

The 8 Intelligences



The 3 Multiple Intelligences Visions

1 Teaching with Intelligences

Just as students are smart in different ways, they learn in different ways. If we only lecture, we inadvertently advantage our verbal/linguistic students at the expense of our other students. By extending our teaching repertoire to encompass all the intelligences, we make the content accessible to all of our students and give all students an equal opportunity to excel.

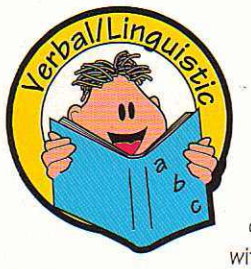
2 Developing the Intelligences

As a pluralistic society, we value the capabilities, products and end-states of each intelligence. Why, then, have we chosen to elevate the status of certain intelligences in the classroom while disregarding others? By broadening our curriculum in the classroom to include the development of all the intelligences, we help every student be all they can be.

3 Celebrating Uniqueness and Diversity

If we have but one ruler to measure intelligence, each student is smarter than some and dumber than others. When we break the ruler into eight separate rulers, each student is not smarter or dumber, but has a unique pattern of intelligences to be celebrated. By teaching our students about their uniqueness and valuing diverse intelligences, we validate all students. Students enjoy a sense of self-worth, and more readily respect the uniqueness of others.

Multiple Intelligences T



Word Smart

When students use their verbal/linguistic intelligence, they are being "Word Smart." Students show they are word smart when they are good at reading, writing, speaking, read frequently, have a good vocabulary, tell stories, play with words. Students using their word smarts think in words and often learn best through verbal presentations, reading, writing and discussing. People who put their word smarts to work include authors, poets, public speakers, attorneys, salespeople. Famous folks include William Shakespeare, John Steinbeck, Jane Austin, Emily Dickinson.

Students are Word Smart when they:

★ Learn through reading, writing, discussing
★ Communicate effectively
★ Have a good vocabulary
★ Write clearly
★ Spell easily
★ Think in words

Logic/Math Smart

When students use their logical/mathematical intelligence, they are being "Logic/Math Smart." Students show they are logic/math smart when they are good with numbers, computations, quantify, sequence, analyze, evaluate, synthesize, apply. Students using their logic/math smarts think in numbers, abstract symbols, algorithms and logical sequences. They often learn best by appeal to logic, or when numbers or math are involved. People who put their logic/math smarts to work include accountants, scientists, computer programmers, mathematicians, detectives. Famous folks include Albert Einstein, Bertrand Russell, Marie Curie, Isaac Newton.

Students are Logic/Math Smart when they:

★ Think in numbers, patterns and algorithms
★ Think clearly and analytically
★ Learn by appeal to logic
★ Use abstract symbols
★ Solve logic problems easily
★ Are good in math

Body Smart

When students use their bodily/kinesthetic intelligence, they are being "Body Smart." Students show they are body smart when they unite body and mind to perfect physical performance, have good motor skills, can use their bodies to communicate, are good at dancing, athletics, acting, use the body in highly differentiated and skilled ways. Students using their body smarts think in movements, gestures, body language. They often learn best when there is movement or the content is presented in a "hands-on" form. People who put their body smarts to work include athletes, surgeons, dancers, carpenters, gymnasts. Famous folks include Mary Lou Retton, Michael Jordan, Babe Ruth, Monica Seles.

Students are Body Smart when they:

★ Are highly coordinated
★ Use gestures and body language
★ Take things apart and fix them
★ Learn through "hands-on" activities
★ Enjoy acting and role-playing
★ Enjoy dancing and athletics

Nature Smart

When students use their naturalist intelligence, they are being "Nature Smart." Students show they are nature smart when they have a keen awareness of the natural world and phenomena, discriminate natural items like: animals, insects, birds, fish, rocks, minerals, plants, trees, flowers, stars, planets; or non-natural items like: cars, airplanes, sneakers. They often learn best when the content may be sorted and classified or is related to the natural world. People who put their nature smarts to work include ecologists, oceanographers, zoologists. Famous folks include Charles Darwin, Carl Sagan, Jane Goodall, Jacques Cousteau, Henry David Thoreau.

Students are Nature Smart when they:

★ Are aware of their natural surroundings
★ Discriminate different flora and fauna
★ Are good at sorting and classifying
★ Have keen observational skills
★ Understand natural phenomena
★ Garden or care for pets or animals

he 8 Intelligences At-A-Glance

Art/Space Smart

When students use their visual/spatial intelligence, they are being "Art/Space Smart." Students show they are art/space smart when they have good artistic capabilities, an eye for detail and color, spatial awareness, enjoy painting, drawing, sculpting. Students using their art/space smarts think in pictures and can "see" through visualization and imagination. They often learn best by use of think time, guided imagery, films, videos and visual aids. People who put their art/space smarts to work include artists, decorators, designers, architects, photographers. Famous folks include Georgia O'Keefe, Pablo Picasso, Claude Monet, M.C. Escher.

Students are Art/Space Smart when they:

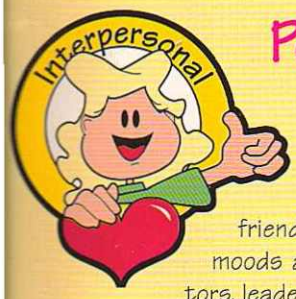
★ Think in pictures and images
★ Are good with spatial relations
★ Have a good eye for detail and color
★ "See" solutions to problems
★ Learn through visuals
★ Like to draw and create

Music Smart

When students use their musical/rhythmic intelligence, they are being "Music Smart." Students show they are music smart when they have the ability to communicate or gain meaning from music, listen to music frequently, play an instrument or sing, are sensitive to pitch, timbre, timing, tone and rhythm of sounds. Students using their music smarts often think in rhythms, melodies or lyrics and learn best through music or while music is played in the background. People who put their music smarts to work include musicians, composers, conductors, singers. Famous folks include Ludwig van Beethoven, Madonna, Louis Armstrong, Wolfgang Amadeus Mozart.

Students are Music Smart when they:

★ Have a good sense of rhythm and melody
★ Like to sing, hum, chant and rap
★ Enjoy listening to music
★ Read and write music
★ Learn through music and lyrics
★ Enjoy creating music



People Smart

When students use their interpersonal intelligence, they are being "People Smart." Students show they are people smart when they make and maintain friends easily, are sensitive to the feelings moods and motives of others, are good mediators, leaders and organizers, put themselves in the role of the other and see things from their perspective. They often learn best when they can interact with others over the content. People who put their people smarts to work include politicians, teachers, actors, sociologists, philanthropists. Famous folks include Mother Teresa, Winston Churchill, Martin Luther King Jr., John F. Kennedy.

Students are People Smart when they:

★ Make and maintain friends easily
★ Understand and respect others
★ Lead and organize others
★ Resolve conflicts
★ Learn by interacting with others
★ Like to work and be with others

Self Smart

When students use their intrapersonal intelligence, they are being "Self Smart." Students show they are self smart when they are introspective, aware of their own feelings, strengths, ideas, values and beliefs, set and meet goals, enjoy private time to think and reflect. They often learn best when they are given time to process information, formulate their ideas and reflect on their learning. People who put their self smarts to work include theologians, philosophers, psychologists, psychiatrists. Famous folks include St. Thomas Aquinas, Sigmund Freud, Confucius, Mohandas Gandhi.

Students are Self Smart when they:

★ Need time to process information
★ Think about their own thinking
★ Have strong opinions and beliefs
★ Are introspective
★ Know themselves well
★ Like quiet time alone

Ideas and Activities for My Class

Have students...

Verbal/Linguistic

Read
- Read a book, novel
- Read a poem, essay
- Read a short story, play

Speak & Discuss
- Communicate, share ideas
- Discuss or debate
- Explain a concept
- Give a speech, impromptu
- Tell a story, tall tale
- Tell jokes, puns, riddles

Write
- Compare and contrast
- Create a slogan
- Do a crossword puzzle
- Do creative writing
- Do descriptive writing
- Keep a journal or diary
- Make a word-web
- Use the writing process
- Write a biography
- Write a book report
- Write a letter
- Write a narrative
- Write an autobiography
- Write a newspaper article
- Write a persuasive paper
- Write a play or skit
- Write a poem
- Write a research report
- Write a speech
- Write instructions

Language
- Learn a second language
- Learn vocabulary words
- Practice grammar, spelling
- Study etymology

Bodily/Kinesthetic

Body Expression
- Act out a role
- Act out a word, concept
- Choreograph or perform a dance, movement sequence
- Depict concepts with movement, formations
- Do a task without talking
- Learn sign language
- Perform a pantomime
- Perform a skit or play
- Play charades
- Use physical gestures

"Hands-On" Learning
- Build a model
- Create projects
- Create props and crafts
- Do math with manipulatives
- Do science experiments
- Explore learning materials
- Put together a puzzle
- Touch or feel parts
- Visit places

Fine Motor Skills
- Assemble/disassemble appliances, machines
- Dissect plants, animals
- Play computer or video games requiring hand-eye coordination or fine motor skills
- Use tools

Physical Exercise
- Hop, skip, jump, run
- Play sports
- Stretch, do yoga
- Work out, jump rope

Logical/Mathematical

Logic & Higher-Level Thinking
- Analyze data
- Apply information
- Brainstorm ideas
- Classify & categorize
- Compare & contrast
- Conduct an experiment
- Decipher codes
- Discover patterns, trends
- Evaluate ideas
- Formulate hypotheses
- List or organize facts
- Make associations
- Make predictions
- Outline material
- Play pattern games
- Sequence events
- Solve logic problems
- Synthesize ideas
- Test hypotheses
- Use abstract symbols
- Use deductive/inductive thinking
- Use graphic organizers

Math
- Build answers
- Calculate probability
- Do calculations
- Make a graph
- Play number games
- Symbolize in numbers
- Solve math problems
- Solve story problems
- Use calculator, compass
- Use math manipulatives
- Use spreadsheet software
- Write an equation
- Write a proof

Naturalist

Observe
- Go to a zoo, farm, aquarium, forest
- Observe natural phenomena
- Observe planets, stars, comets, space
- Take a nature hike, camp
- Visit the ocean, tide pool
- Visit a river, lake, park
- Watch nature videos

Record Observations
- List characteristics
- Record changes, developmental stages
- Record color, size, form, function
- Use a log or journal

In or With Nature
- Capture nature with photographs
- Care for classroom pet
- Collect specimens
- Grow flowers, vegetables
- Plant a tree

Classify & Categorize
- Classify by color, size, form, function
- Devise classification system
- Learn taxonomy system, names
- Sort & categorize natural items: seashells, leaves, animals, plants, flowers, insects, rocks, minerals
- Sort & categorize non-natural items: buttons, pasta, nuts and bolts
- Use graphic organizers

Visual/Spatial

Arts & Crafts
- Create a collage, montage
- Create a pattern, texture
- Design a brochure, logo
- Design or decorate clothes
- Design postcards, stamps
- Draw a design
- Draw a scene from the story/math problem
- Illustrate a book
- Make a mobile
- Make a poster
- Make a sculpture
- Make puppets
- Make visual aids
- Paint or draw
- Play with colors
- Practice perspective, shading, coloring
- Take photographs
- Use painting or drawing software

Visualization
- Do guided imagery
- Fantasize or visualize
- Imagine or pretend
- Mind map
- Watch films, videos

Spatial
- Build or draw in 3D
- Chart a route
- Estimate size, distance
- Make or read map
- Play with geometric shapes
- Play with puzzles, mazes
- Use page layout software
- Use graphic organizers

Interpersonal

Work Together
- Debate an issue
- Discuss with a partner
- Do a team presentation
- Do teambuilding & classbuilding
- Establish team goals
- Interview each other
- Make a team project
- Paraphrase each other
- Practice active listening
- Practice constructive criticism
- Practice taking turns
- Process interactions
- Share with others
- Take role of another
- Tutor a classmate
- Use roles
- Work on communication skills
- Write a collaborative paper or report

Solve Conflicts
- Practice compromising
- Practice mediation skills
- Reach consensus
- Role-play
- Solve problems as a team
- Solve real or simulated conflicts

Organize Others
- Assign roles or tasks
- Mediate conflicts
- Motivate others
- Plan an event

Musical/Rhythmic

Create Music
- Compose a melody
- Copy sounds and melodies
- Create a musical collage
- Hum, clap, click, bang, snap in tune
- Write a song, poem, jingle

Perform
- Play an instrument solo
- Play as a class
- Play as a team, band
- Sing a duo, trio, quartet
- Sing a solo, as a class

Learn about Music
- Evaluate music
- Learn about instruments
- Learn an instrument
- Learn to read notes, symbols, expressions
- Learn sensitivity to sound, rhythmic patterns
- Listen to music of different times, genres, cultures
- Study or report on a musician, instrument, era
- Use music software

Learn through Music
- Change the words to a song, jingle, rap
- Interpret lyrical meanings
- Listen to curriculum music songs
- Listen to music, background music
- Write or sing a song including facts about topic

Intrapersonal

Set Goals & Priorities
- Keep a "To Do" list
- Make an action plan
- Prioritize items
- Set goals and work on achieving goals

Reflection & Introspection
- Describe feelings about topic, situation
- Keep a daily log or diary
- List priorities
- Make a journal entry
- Meditate
- Observe mood changes
- Read silently
- Record, analyze dreams
- Reflect on learning
- Relate content to personal experiences
- Think about actions
- Think about thinking
- Weigh alternatives
- Work independently
- Write about thinking
- Write about actions
- Write about wants/needs
- Write an autobiography
- Write personal poetry

Values & Beliefs
- Choose between alternatives
- Defend a position
- Express likes, dislikes
- Respond to hypothetical ethical dilemmas
- Take a stance
- Write ethical code, rules of conduct