MULTIPLE INTELLIGENCES

The Multiple Intelligence theory suggests that no one set of teaching strategies will work best for all students at all times. All children have different proclivities in the seven intelligences, so any particular strategy is likely to be successful with several students, and yet, not for others. Because of these individual differences among students, teachers are best advised to use a broad range of teaching strategies with their students. As long as instructors shift their intelligence emphasis from presentation to presentation, there will always be a time during the period or day when a student has his or her own highly developed intelligence(s) actively involved in learning.

Key Points in MI Theory

- Each person possesses all seven intelligences MI theory is not a "type theory" for determining the one intelligence that fits. It is a theory of cognitive functioning, and it proposed that each person has capacities in all seven intelligences.
- Most people can develop each intelligence to an adequate level of competency - although an individual may bewail his deficiencies in a given area and consider his problems innate and intractable, Gardner suggests that virtually everyone has the capacity to develop all seven intelligences to a reasonably high level of performance if given the appropriate encouragement, enrichment, and instruction.
- Intelligences usually work together in complex ways Gardner points out that each intelligence as described above is actually a "fiction"; that is no intelligence exists by itself in life (except perhaps in very rare instances in savants and brain-injured individuals.) Intelligences are always interacting with each other.
- There are many ways to be intelligent within each category there is no standard set of attributes that one must have to be considered intelligent in a specific area. Consequently, a person may not be able to read, yet be highly linguistic because he can tell a terrific story or has a large, oral vocabulary. Similarly, a person may be quite awkward on the playing field, yet possess superior bodily-kinesthetic intelligence when she weaves a carpet or creates an inlaid chess table. MI theory emphasizes the rich diversity of ways in which people show their gifts within intelligences as well as between intelligences.

"All students can learn and succeed, but not all on the same day in the same way." – William G. Spady

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MULTIPLE INTELLIGENCES TEST

Where does your true intelligence lie? This quiz will tell you where you stand and what to do about it. Read each statement. If it expresses some characteristic of yours and sounds true for

the most part, jot down a "T." If it doesn't, mark an "F." If the statement is sometimes true, sometimes false, leave it blank.

- 1. _____ I'd rather draw a map than give someone verbal directions.
- 2. _____ I can play (or used to play) a musical instrument.
- 3. _____ I can associate music with my moods.
- 4. _____ I can add or multiply in my head.
- 5. _____ I like to work with calculators and computers.
- 6. _____ I pick up new dance steps fast.
- 7. _____ It's easy for me to say what I think in an argument or debate.
- 8. _____ I enjoy a good lecture, speech or sermon.
- 9. _____ I always know north from south no matter where I am.
- 10. _____ Life seems empty without music.
- 11. _____ I always understand the directions that come with new gadgets or appliances.
- 12. _____ I like to work puzzles and play games.
- 13. _____ Learning to ride a bike (or skates) was easy.
- 14. _____ I am irritated when I hear an argument or statement that sounds illogical.
- 15. _____ My sense of balance and coordination is good.
- 16. _____ I often see patterns and relationships between numbers faster and easier than others.
- 17. _____ I enjoy building models (or sculpting).
- 18. _____ I'm good at finding the fine points of word meanings.
- 19. _____ I can look at an object one way and see it sideways or backwards just as easily.
- 20. ____ I often connect a piece of music with some event in my life.
- 21. _____ I like to work with numbers and figures.
- 22. _____ Just looking at shapes of buildings and structures is pleasurable to me.
- 23. _____ I like to hum, whistle and sing in the shower or when I'm alone.

- 24. I'm good at athletics.
- 25. I'd like to study the structure and logic of languages.
- 26. _____ I'm usually aware of the expression on my face.
- 27. I'm sensitive to the expressions on other people's faces.
- 28. I stay "in touch" with my moods. I have no trouble identifying them.
- 29. I am sensitive to the moods of others.
- 30. _____ I have a good sense of what others think of me.

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MULTIPLE INTELLIGENCE SCORING SHEET

Place a check mark by each item you marked as "true." Add your totals. A total of four in any of the categories A through E indicates strong ability. In categories F and G a score of one or more means you have abilities as well.

	Α	В	С	D	Е	F	G
		Logical- Mathematic al			Kinestheti		perso
	7	4	2	1	6	26	27
	8	5	3	9	13	28	29
	14	12	10	11_	15		30
	18	16	20	19_	17		
	25	21	23	22_	24		
Totals							
:							
				_			

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The Seven Multiple Intelligences in Children

Children who are strongly:	Think	Love	Need
Linguistic	in words	reading, writing, telling stories, playing word games, etc.	books, tapes, writing tools paper diaries, dialogues, discussion, debate stories
Logical- Mathematical	by reasoning	experimenting, questioning, figuring out puzzles, calculating, etc.	things to explore and think about, science materials, manipulatives, trips to the planetarium and science museum
Spatial	in images and pictures	designing, drawing, visualizing, doodling, etc.	art, LEGOs, video, movies, slides, imagination games, mazes, puzzles, illustrated books, trips to art museums
Bodily- Kinesthetic	through somatic sensations	dancing, running, jumping, building, touching, gesturing, etc.	role play, drama, movement, things to build, sports and physical games, tactile experiences, hands-on learning
Musical	via rhythms and melodies	singing, whistling, humming, tapping feet and hands, listening, etc	sing-along time, trips to concerts, music playing at home and school, musical instruments
Interpersonal	by bouncing ideas off other people	leading, organizing, relating, manipulating, mediating, partying, etc.	friends, group games, social gatherings, community events, clubs, mentors/apprenticeships
Intrapersonal	deeply inside themselves	setting goals, meditating, dreaming, being quiet,	secret places, time alone, self-paced projects, choices

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CHECKLIST FOR ASSESSING STUDENTS' MULTIPLE INTELLIGENCES

Name of Student:

In each of the following categories, check all items that apply.

Linguistic Intelligence

_____ writes better than average for age

_____ spins tall tales or tells jokes and stories

has a good memory for names, places, dates, or trivia

_____ enjoys word games

_____ enjoys reading books

spells words accurately (preschool: does developmental spelling that is advanced for age) \overline{age}

_____ appreciates nonsense rhymes, puns, tongue twisters, etc.

enjoys listening to the spoken word (stories, commentary on the radio, talking, books)

_____ has a good vocabulary for age

_____ communicates to others in a highly verbal way

Other Linguistic Strengths:

Logical-Mathematical Intelligence

asks a lot of questions about how things work

_____ computes arithmetic problems in his/her head quickly (preschool: math concepts are advanced for age)

enjoys math class (preschool: enjoys counting and doing other things with number)

_____ finds math computer games interesting (no exposure to computers: enjoys other math or counting games)

enjoys playing chess, checkers, or other strategy games (preschool: board games requiring counting squares)

enjoys working on logic puzzles or brain teasers (preschool: enjoys hearing logical nonsense such as in Alice's Adventures in Wonderland)

_____ enjoys putting things in categories or hierarchies

likes to experiment in a way that shows higher order cognitive thinking processes

thinks on a more abstract or conceptual level than peers

has a good sense of cause-effect for age

Other Logical-Mathematical Strengths:

Spatial Intelligence

_____ reports clear visual images

reads maps, charts, and diagrams more easily that text (preschool: enjoys visuals more than text)

_____ daydreams more than peers

_____ enjoys art activities

- _____ draws figures that are advanced for age
- likes to view movies, slides, or other visual presentations
- enjoys doing puzzles, mazes, Where's Waldo? or similar visual activities
- builds interesting three-dimensional constructions for age (e.g., LEGO buildings)
- _____ gets more out of pictures than words while reading
- _____ doodles on workbooks, worksheets, or other materials

Other Spatial Strengths:

Bodily-Kinesthetic Intelligence

excels in one or more sports (preschool: shows physical prowress advanced for age)

- _____ moves, twitches, taps, or fidgets while seated for a long time in one spot
- _____ cleverly mimics other people's gestures or mannerisms
- loves to take things apart and put them back together again
- _____ put his/her hands all over something he/she's just seen

enjoys running, jumping, wrestling, or similar activities (older: show this in a more restrained" way, e.g., woodworking, sewing, mechanics) or good fine-motor coordination in other ways

- _____ has a dramatic way of expressing himself/herself
- _____ reports different physical sensations while thinking or working
- enjoys working with clay or other tactile experiences (e.g., finger-painting)

Other Bodily-Kinesthetic Strengths:

Musical Intelligence

tells you when music sounds off-key or disturbing in some way other way

remembers melodies of songs

_____ has a good singing voice

_____ plays a musical instrument or sings in choir or other group (preschool: enjoys playing percussion instruments and/or singing in a group)

has a rhythmic way of speaking and/or moving

_____ unconsciously hums to himself/herself

_____ taps rhythmically on the table or desks as he/she works

_____ sensitive to environmental noises (e.g., rain on the roof)

Other Musical Strengths:

Interpersonal Intelligence

_____ enjoys socializing with peers

_____ seems to be a natural leader

gives advice to friends who have problems

_____ seems to be street smart

_____ belongs to clubs, committees, or other group organizations (preschool: seems to be part of a general education social group)

_____ enjoys informally teaching other kids

likes to play games with other kids

has two or more close friends

has a good sense of empathy or concern for others

_____ others seek out his/her empathy or concern for others

others seek out his/her company

Other Interpersonal Strengths:

Intrapersonal Intelligence

- _____ displays a sense of independence or a strong will
- has a realistic sense of his/her strengths and weaknesses
- _____ does well when left alone or to play or study
- _____ marches to the beat of a different drummer in his/her style of living and learning
- has an interest or hobby that he/she doesn't talk much about
- _____ has a good sense of self-direction
- _____ prefers working alone to working with others
- _____ accurately expresses how he/she is feeling
- is able to learn from his/her failures and successes in life
- has high self-esteem

Other Intrapersonal Strengths:

Excerpted from Armstrong, Thomas. *Multiple Intelligences in the Classroom*, Alexandria, Virginia, Association for Supervision and Curriculum Development (1994).

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MULTIPLE INTELLIGENCES: STRATEGIES IN THE CLASSROOM

The following list provides a survey of the techniques and materials that can be employed in teaching through the multiple intelligences.

Linguistic Intelligence

- lectures, debates
- large- and small-group discussions
- books, worksheets, manuals
- brainstorming
- writing activities
- word games
- sharing time
- storytelling, speeches, reading to class
- talking books and cassettes
- extemporaneous speaking
- journal keeping
- choral reading
- individualized reading
- memorizing linguistic facts
- tape recording one's words
- using word processors
- publishing (e.g., creating class newspapers)

Logical-Mathematical Intelligence

- mathematical problems on the board
- Socratic questioning
- scientific demonstrations
- logical problem-solving exercises
- creating codes
- logic puzzles and games
- classifications and categorizations
- quantifications and calculations
- computer programming languages
- science thinking
- logical-sequential presentation of subject matter
- Piagetian cognitive stretching exercises
- Heuristic

Spatial Intelligence

- charts, graphs, diagrams, and maps
- visualization
- photography
- videos, slides, and movies
- visual puzzles and mazes
- 3-D construction kits
- art appreciation
- imaginative storytelling
- picture metaphors
- creative daydreaming
- painting, collage, visual arts
- idea sketching
- visual thinking exercises
- graphic symbols

- using mind-maps and other visual organizers
- computer graphics software
- visual awareness activities
- optical illusions
- color cues
- telescopes, microscopes, and binoculars
- visual awareness activities
- draw-and-paint/computer- assisted-design software
- picture literacy experiences

Bodily-Kinesthetic Intelligence

- creative movement, mime
- hands-on thinking
- field trips
- the classroom teacher
- competitive and cooperative games
- physical awareness and relaxation exercises
- all hands-on activities
- crafts
- body maps
- use of kinesthetic imagery
- cooking, gardening, and other "messy" activities
- manipulatives
- virtual reality software
- kinesthetic concepts
- physical education activities
- communicating with body language/ hand signals
- tactile materials and experiences
- body answers

Musical Intelligence

- musical concepts
- singing, humming, whistling
- playing recorded music
- playing live music on piano, guitar, or other instruments
- group singing
- mood music
- music appreciation
- playing percussion instruments
- rhythms, songs, raps, chants
- using background music
- linking old tunes with concepts
- discographies
- creating new melodies for concepts
- listening to inner musical imagery
- music software
- supermemory music

Interpersonal Intelligence

- cooperative groups
- interpersonal interaction
- conflict mediation
- peer teaching
- board games
- cross-age tutoring
- group brainstorming sessions
- peer sharing
- community involvement
- apprenticeships
- simulations
- academic clubs
- interactive software
- parties / social gatherings as context for learning
- people sculpting

Intrapersonal Intelligence

- independent study
- feeling-toned moments
- self-paced instruction
- individualized projects and games
- private spaces for study
- one-minute reflection periods
- interest centers
- personal connections
- options for homework
- choice time
- self-teaching programmed instruction
- exposure to inspirational/ motivational curricula
- self-esteem activities
- journal keeping
- goal setting sessions

Excerpted from Armstrong, T. *Multiple Intelligences In The Classroom*. Alexandria, VA: Association for Supervision and Curriculum Development (1994).

"If we are to achieve a richer culture... we must weave one in which each diverse human gift will find a fitting place."

- Margaret Mead