Find the activities that appeal to you the most and stand near the sign.
Teaching with Multiple Intelligences “In Mind”

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According to a traditional definition, intelligence is a uniform cognitive capacity people are born with. This capacity can be easily measured by short-answer tests (i.e. IQ).
In his 1983 book, *Frames of Mind*, Howard Gardner of Harvard University identified seven intelligences we all possess. Because our understanding of the brain and human behavior is constantly changing, the number of intelligences is expanding. The last two were added in *Intelligence Reframed* in 1999. Gardner claims that we all have all the intelligences, but that no two people are exactly alike.
Gardner's multiple intelligences theory challenged traditional beliefs in the fields of education and cognitive science.
According to Howard Gardner, intelligence is:

- The ability to create an effective product or offer a service that is valued in a culture;
- A set of skills that make it possible for a person to solve problems in life;
- The potential for finding or creating solutions for problems, which involves gathering new knowledge.
“It’s not how smart you are, it’s how you are smart!”

-Howard Gardner
Multiple Intelligence Theory

- **Verbal/Linguistic**: The capacity to use language to express what's on your mind and to understand other people.
- **Logical/Mathematical**: The ability to understand the underlying principles of some kind of causal system.
- **Visual/Spatial**: The ability to represent the spatial world internally in your mind.
- **Musical/Rhythmic**: The capacity to think in music, to be able to hear patterns, recognize them, and perhaps manipulate them.
- **Bodily/Kinesthetic**: The capacity to use your whole body or parts of your body to solve problems, make something, or put on a production.
- **Naturalist**: The ability to discriminate among living things as well as sensitive to other features of the natural world.
- **Intrapersonal**: Having an understanding of yourself, of knowing who you are, what you can do, etc.
- **Interpersonal**: The ability to understand other people.
- **Existential**: To exhibit the propensity to pose and ponder questions about life, death and ultimate realities.
What does research show?

Understanding learner-centered instruction from the perspective of multiple intelligences
Dr. Marjorie Hall Haley, 1999-2000

- Positive feedback from teachers and students
- Proven that some factors positively affect learning
  - How the lesson is taught
  - What strategies are used
  - In what way the information is delivered
what does research show?

- Providing students with multiple ways to access content improves learning (Hattie, 2011)
- Providing students with multiple ways to demonstrate knowledge and skills increases engagement and learning, and provides teachers with more accurate understanding of students' knowledge and skills (Darling-Hammond, 2010)
- Instruction should be informed as much as possible by detailed knowledge about students' specific strengths, needs, and areas for growth (Tomlinson, 2014)


Tomlinson, C. A. (2014). The Differentiated Classroom: Responding to the Needs of All Learners
What is your Intelligence?
The next time you have a chance to reflect on your class, imagine your students as individuals who have fully realized and developed their intelligences.
Benefits of Multiple Intelligences

BENEFIT #1

You may come to regard intellectual ability more broadly. Drawing a picture, composing, or listening to music, watching a performance -- these activities can be a vital door to learning -- as important as writing and mathematics. Studies show that many students who perform poorly on traditional tests are turned on to learning when classroom experiences incorporate artistic, athletic, and musical activities.
Benefits of Multiple Intelligences

BENEFIT #2

You will provide opportunities for authentic learning based on your students' needs, interests and talents. The multiple intelligence classroom acts like the "real" world: the author and the illustrator of a book are equally valuable creators. Students become more active, involved learners.
BENEFIT #3

Students will be able to demonstrate and share their strengths. Building strengths gives a student the motivation to be a "specialist." This can in turn lead to increased self-esteem.
Benefits of Multiple Intelligences

BENEFIT #4

When you "teach for understanding," your students accumulate positive educational experiences and the capability for creating solutions to problems in life.
Relating Multiple Intelligences to the 4 C’s

21st Century Skills

CRITICAL THINKING SKILLS

COLLABORATION

COMMUNICATION

CREATIVITY
Which of the multiple intelligences seems most difficult to integrate into your lessons?
Verbal/Linguistic

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

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

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

**Write**
- Compare and contrast
- Create a slogan
- Do a crossword puzzle
- 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
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 manipulative
Use spreadsheet software
Write an equation
Write a proof
**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**
- Guided imagery
- Fantasize or visualize
- Imagine or pretend
- Mind map
- Watch films, DVDs

**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
**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
**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

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

**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
**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 DVDs

**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
Interpersonal

**Work Together**
- Debate an issue
- Discuss with a partner
- Do a team presentation
- Do teambuilding & class building
- 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
Intrapersonal

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

**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

**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
Teachers tend to teach in the manner in which THEY learn best. Remember, don't use the Multiple Intelligence Theory to only create experiences in the areas where you and your students are strong. Use a variety of activities to facilitate learning in all content areas.
What will you try?
Education is the most powerful weapon which you can use to change the world.

Nelson Mandela
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