Theory Behind Multiple Intelligences

Howard Gardner – Intelligence Types and Entry Points

- Suggests 8 different types of intelligence preferences or strengths (visual-spatial, logical-mathematical, verbal-linguistic, body-kinesthetic, musical, interpersonal, intrapersonal, and naturalist)
- Asserts that these strengths affect how children take in information, solve problems, and express learning (children with different strengths do so in different ways).
- Believes that using these intelligence preferences as "entry points" or even exit points can allow students to tap into their strengths, interests, and prior experiences, thus enhancing "motivation, success and understanding."

How to Create a MI Assignment

The Teacher…

- … selects the knowledge, skills and essential understandings that s/he would like students to either1) begin to explore, or 2) synthesize and demonstrate mastery of.
- … looks at these K-U-Ds and finds learning modes through which students could demonstrate this learning.
- … selects jobs/occupations that are associated with the different learning styles.

How to Create a MI Assignment, cont.

Examples …

- Visual – Spatial: Artist, Cartoonist, Magazine layout editor
- Logical-Mathematical: Architect, Engineer, Mathematician
- Interpersonal – Counselor, Tour Guide, Teacher
- Musical/Rhythmic: Songwriter, Performing Artist
- Verbal-Linguistic: Writer, Commentator, Announcer
- Body-Kinesthetic: Actor, Builder
- Intrapersonal: Poet, Songwriter, Reflector (Journal)
- Naturalistic: Forest Ranger, Botanist

How to Create a MI Assignment, cont.

Remember that …

- Many intelligence preferences overlap with one another, and
- Most students have more than one preference;…

… therefore, it is not necessary to use them all! Simply select those that are most conducive to the demonstration of your learning goals.

How to Create a MI Assignment, cont.

- Create several product assignment options in which students assume the role of a professional in order to demonstrate the learning outcomes you've targeted.
- Survey students to determine their "professional" preference.
- Assign product assignments accordingly

Multiple Intelligences Assignment Adaptations

- Survey your students first to determine their "professional" preference, then you can make up assignment options that best reflect the interests of the class.
- Every assignment option can cover the same K-U-Ds   OR
- You can use the options as part of a "Jigsaw" assignment and structure different products to target different skills and knowledge. Students would then share and be held responsible for other students' information.

Other Ways to Differentiate with Multiple Intelligences Assignment

- Group Orientation: Students can work individually, in groups, or be given the choice. Some preferences are more conducive to group work than others. You may want to alert students to this when they are selecting their preferences.
- Readiness Level: You can make various versions of each "profession" you choose to target for the levels represented in your classroom. Students still receive their choice of "profession," but you assign them the product option that matches their readiness level. You can explain the differing assignments by emphasizing the need for "variety" in the classroom as long as the tasks are equally engaging and respectful.

Multiplying by 3 and 6!

- Play Multiplication Memory card game (Kinesthetic, interpersonal).
- Make a picture book of multiplication facts for 3 and/or 6 (visual/spatial).
- Make up a song about (or of) the multiplication facts for 3 and/or 6 (musical).
- Write a diary entry about the 3 and 6 multiplication facts. What are they? How can you remember them? If you forget one, how could you figure it out? (Intrapersonal / verbal linguistic)
- Write a story that involves multiplication by 3 and 6 (verbal linguistic).
- Show as many different models of multiplication by 3 and 6 of which you can think. How is multiplying by 6 related to multiplying by 3? (Logical / Mathematical)

Multiple Intelligence Ideas for Proofs!

- Logical Mathematical: Generate proofs for given theorems. Be ready to explain!
- Verbal Linguistic: Write in paragraph form why the theorems are true. Explain what we need to think about before using the theorem.
- Visual Spatial: Use pictures to explain the theorem.

Multiple Intelligence Ideas for Proofs!

- Musical: Create a jingle or rap to sing the theorems!
- Kinesthetic: Use Geometer Sketchpad or other computer software to discover the theorems.
- Intrapersonal: Write a journal entry for yourself explaining why the theorem is true, how they make sense, and a tip for remembering them.

Introduction to Change (MI)

- *Logical/Mathematical Learners***:** Given a set of data that changes, such as population for your city or town over time, decide on several ways to present the information. Make a chart that shows the various ways you can present the information to the class. Discuss as a group which representation you think is most effective. Why is it most effective? Is the **change** you are representing constant or variable? Which representation best shows this? Be ready to share your ideas with the class.

Introduction to Change (MI)

- *Interpersonal Learners***:** Brainstorm things that **change** constantly. Generate a list. Discuss which of the things change quickly and which of them change slowly. What would graphs of your ideas look like? Be ready to share your ideas with the class.

Introduction to Change (MI)

- *Visual/Spatial Learners*: Given a variety of graphs, discuss what **changes** each one is representing. Are the changes constant or variable? How can you tell? Hypothesize how graphs showing constant and variable changes differ from one another. Be ready to share your ideas with the class.

Introduction to Change (MI)

- *Verbal/Linguistic Learners***:** Examine articles from newspapers or magazines about a situation that involves **change** and discuss what is changing. What is this change occurring in relation to? For example, is this change related to time, money, etc.? What kind of change is it: constant or variable? Write a summary paragraph that discusses the change and share it with the class.

Relating Equations and Points on a Line (MI)

- Before breaking off into groups based on Gardner's Theory of Multiple Intelligences, all of the students should practice finding equations of lines given a point and the slope, two points, or a graph. A worksheet that the students complete independently is appropriate for this practice. When the students complete their independent practice, they should choose one of the following activities to complete in a group:

Nanci Smith

Relating Equations and Points on a Line (MI)

- ***Musical Intelligence:*** Prepare a rap that teaches how to find the equation of a line given two points.
- ***Visual/Spatial and Mathematical/Logical Intelligences:*** Make a flow chart that show the steps involved in finding the equation of a line using 1) two points, 2) a point and the slope, and 3) a graph of a line.

Nanci Smith

Relating Equations and Points on a Line (MI)

- *Verbal/Linguistic Intelligence:* Write a poem or short story that explains how to find the equation of a line given a graph.

- *Interpersonal and Kinesthetic Intelligences:* Perform a skit that demonstrates how to find the equation of a line using two points.

- *Intrapersonal Intelligence:* Next to each practice problem completed previously, explain the steps to finding the equation.

Nanci Smith

The Maturation of Tom Sawyer
The Adventures of Tom Sawyer by Mark Twain

Learning Preference	Level 1: On or Below Grade Level	Level 2: On or Above Grade Level
Artist	**The Writing's On the Wall** You ARE Tom Sawyer. You will create a "Growth Mural" of yurself to give to Becky in order to show her how much you've matured.	**Life is Like a Box of Chocolate** Illustrate Tom's growth or maturation through the use of an extended metaphor or simile that compares Tom's growth process to _____
Announcer:	**Hannibal on a Wire** Create an audio recording of the scene that you feel was the most important to Tom's growth.	**Tommy Goes to Hollywood** Create and produce an NPR segment in which the hosts of the show interview Steven Sielberg about his upcoming film adaptation of *The Adventures of Tom Sawyer*
Writer:	**Growth Report Card** You are a psychologist hired by Aunt Polly to examine Tom's behavior and assess his growth.	**Investigative Report** Develop a Private investigator's Report about Tom's emotional and mental growth and well-being.
Actor:	**Lights, Camera, Action!** Choose an important scene that demonstrates Tom's growth of character, and act it out using props, costumes, etc.	**Live with Dr. Phil!** Act out an episode of the Dr. Phil show in which characters from the book will discuss whether or not they believe that Tom has grown or changed and how.

The Road Not Taken
10th Grade English

The task card reads:

We have been working with how writers' lives (and ours) are like metaphors which they (we) create through actions an deeds—including writing. Robert Frost wrote a poem called "The Road Not Taken." Your task is to analyze the poem as a metaphor for Frost's life. To do that, you should:

❑ Find the poem, read it, interpret it, and reach consensus on what's going on with it and what it means.

The Road Not Taken
10th Grade English

❑ Research Frost's life, making a "stepping stones" diagram of his life, similar to the ones you created for your own life earlier this month.

❑ Develop a soundscape which takes us along Frost's "journey in the woods" using music, found sounds, sound effects, and appropriate mime, body sculpture or narration to help your audience understand the feelings which a "journeyer in the woods" would have as they come to straight places, landmarks, decision points, etc.

❑ Create an "overlay" of his life and the poem, using words and images in such a way that they illustrate the metaphorical relationships between the two.

❑ Transfer the key ideas in the poem to the life and experience of a noted person about whom we are all likely to know a bit – and about whom we are likely to be able to learn a bit more. Your "transfer" must be shared with the class in a way which is clear in regard to the person and the poem, and clarifying in regard to ways in which literature can help us understand ourselves.

The Road Not Taken
10ᵗʰ Grade English

❑ Be certain that your final products demonstrate your understanding of metaphor, the relationship between varied art forms in communicating human meaning, and details of the people and poem with whom/which you are working.

❑ As usual, you should appoint a group leader and materials monitor. Determine the best roles for each person in your group to play in completing your task. Develop a written work plan, including a timeline and group conference times. In the end, be ready to share the rubric by which your group's work should be assessed (including required elements as well as your own sense of what else constitutes an appropriate product.) You may have up to 30 minutes to make your presentation(s) – plus a ten minute question exchange with others in the class who view your work.