

Multiple Intelligence Theory as a Means of Reaching Students

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Today's Goals

- Review of intelligence
- Multiple intelligences defined
- MI as applied to the classroom
 - Examples from Learning Assistant program
 - Brainstorming your ideas



Intelligence: What is it?

- Intelligence is a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill, or test taking smarts. Rather it reflects a broader and deeper capability for comprehending our surroundings – “catching on,” “making sense” of things, or “figuring out” what to do. (Gottfredson, 1997)



Evolution of Intelligence Theories

- Spearman's (1904) *g* theory
- Thorndike (1920): abstract, mechanical, social
- Thurstone (1938): word fluency, verbal comprehension, spatial visualization, number facility, associative memory, reasoning, and perceptual speed
- Guilford (1967): 3 major dimensions (contents, products, and operations) yield 150 categories of intelligence



Crystallized vs. Fluid Intelligence

- Horn & Cattell (1966)
- Fluid (*Gf*)—the innate ability to learn and adapt
- Crystallized (*Gc*)—abilities and/or knowledge gained from experience



Gardner's MI Theory

- Individuals possess several relatively autonomous intelligences—frames
- Derived from studying various sources: studies of prodigies, gifted individuals, brain-damaged patients, idiots savants, normal children, normal adults, experts in different lines of work, and individuals from diverse cultures
- Intelligences operate in harmony



The Eight MIs to Date

- Linguistic
- Logical-Mathematical
- Spatial
- Musical
- Bodily-Kinesthetic
- Interpersonal
- Intrapersonal
- Naturalistic



MI in the Classroom

- Not all MIs are applicable to all classes or situations
- Common uses
- Be creative
- Listen to your students
- Do not confuse senses with MIs

Brainstorm MI

- Split into groups
- Agree on a topic that your students find difficult
- Try to apply multiple MIs to the topic

Some References

- Gardner, H. (1983, 1993, 2011) Frames of mind: the theory of multiple intelligences.
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