

Multiple Intelligences and Learning Styles

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Overview

Cognitive style refers to the ways in which we typically process information. For example, some people tend to look at problems globally, processing information in a simultaneous manner. In contrast, analytical learners pay attention to details, desiring information in a step by step manner. Likewise, some students learn best in an analytic and non-affective manner, while others prefer a relational mode of learning. A related term - learning style – is often used to explain individual differences in learning, particularly within particular learning environments. For example, Barsch's learning preferences – visual, auditory and kinesthetic – are commonly used to support a variety of teaching strategies in the adult education classroom. Unfortunately, the delineation between visual, auditory and kinesthetic learners has been applied to adult learning in a rigid manner, leading people to believe that they must claim one of the three labels in order to learn better. In a more moderated fashion, Hiemstra and Sisco (1990) suggest that we use learning instrument tools and typologies solely as starting points for consideration of the variety of ways in which people learn.

Howard Gardner (1993, 1999) suggests that people have multiple intelligences that they draw upon to learn. Unlike the "type" theories, MI theory maintains that people can develop competency in each area. These include linguistic, logical-mathematical, musical, body-kinesthetic, spatial, interpersonal, intrapersonal, and naturalistic. Although there is a lack of strong empirical evidence for Gardner's theory, his work has found great acceptance in education.

Implications for Teaching

Research tells us that stimulating different pathways in the brain engages the memory of new material and therefore activates learning. The brain's ability to operate simultaneously on many levels can be capitalized upon in the classroom by involving different senses in the learning experience. Thus, multiple sensory experiences should be used to encode information with vision, hearing, movement, etc. Hill (2000) states that we remember better when we are exposed to stimulation that engages multiple brain functions. She suggests that multiple sensory

experiences, including imagery instruction, should be used. Hill found that when students were asked to think of images of the material they were studying, they had better recall.

Another consideration for educators concerns the cultural foundations of learning styles. For example, the Euro-American style tends to be field-independent, analytical, and nonaffective. In contrast, other cultures may promote learning styles that are contextually-based, relational, holistic, and affective.

Additional Resources

Chen, J., Moran, S., & Gardner, H. (Eds.). (2009). *Multiple intelligences around the world*. San Francisco: Jossey-Bass.

Gardner, H. (1999). *Intelligence reframed: Multiple intelligences for the 21st century*. New York: Basic Books.

Gardner, H. (1993). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.

Hiemstra, R. and Sisco, B. (1990). *Individualizing instruction: making learning personal, empowering, and successful*. San Francisco: Jossey-Bass.

Kolb, D. (1984). *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.

Merriam, S. B., & Associates. (2007). *Non-Western Perspectives on Learning and Knowing*. Malabar, FL: Krieger.

Merriam, S., Caffarella, R., & Baumgartner, L. (2008). *Learning in adulthood: A comprehensive guide, 3rd edition*. San Francisco: Jossey-Bass.

Merriam, S., Courtenay, B., and Cervero, R. (Eds.).(2006). *Global Issues and Adult Education: Perspectives from Latin America, Southern Africa and the United States*. San Francisco: Jossey-Bass.