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Johnson, S. (2006). The Neuroscience of the Mentor-Learner Relationship. *New directions for adult and continuing education: The neuroscience of adult learning*, (110), 63-69.

Article Critique of “The Neuroscience of the Mentor-Learner Relationship”

Summary

The current article was the eighth in a series of nine articles that comprise the August 2006 issue of *New Directions for Adult and Continuing Education*. The author, Sandra Johnson, serves as a mentor and as the director of Housing and Community Renewal at Empire State College in New York. She is also a clinical social worker and a faculty fellow with the Center for Human Development, Research Foundation of the State University of New York. In this article, the author describes how mentor relationships promote meaningful learner development. The mentor-learner situations that foster meaningful learning include trusting relationships, mentor attunement with learner emotions, and social interaction that leads to greater brain plasticity in learners.

Teacher-student and mentor-student relationships are quite different (Johnson, 2006). While professors usually seek to develop evidence that students have mastered course content, Johnson recommends mentoring relationships wherein students develop the means to ask deeper questions about their personal relationships with the world. An uncomfortable period of uncertainty often develops as learners are helped to question their basic assumptions about life. During these unsettled periods, good mentors provide emotional support and a vision of hope as a new sense of self is shaped and begins to emerge. According to Johnson,

“When a mentor is supportive, caring, and encouraging, and offers enthusiasm balanced with an optimal learning environment, learners are assisted in moving

their thinking activity into the higher brain regions (the frontal cortex), where reflective activity and abstract thinking take place” (2006, p. 64).

Social interaction and affective attunement are important ingredients of the trusting environments that students need if they are to create meaningful learning. Johnson offers suggestions by Stern (2004) for building these important characteristics. Mentors should (a) use of empathic interactions and language, (b) build consideration and respect for learning intentions, (c) strive to understand what the other person is thinking, and (d) reflect on how one wants to interact. When experienced in trusting relationships mentors can use social interaction and affective attunement to stimulate the neurotransmitters controlled by the limbic (emotional) systems (dopamine, serotonin, and norepinephrine) of learners to facilitate access to the higher brain, the frontal cortex. The process results in better brain plasticity and ultimately in more meaningful learning.

Implications for Education

As the debate about educational accountability continues, responsible educators will include the latest from neuroscience regarding brain growth and development to guide responsible action and practice. Neuroscience is suggesting that the higher brain (frontal cortex) is as important for meaningful learning as it is for content mastery. Furthermore, neuroscience also suggests that the best way to develop the brain meaningfully is through mentoring relationships that are trusting, social, and emotionally attuned. Based on the evidence; therefore, one recommendation might be to reduce class sizes so that teachers and professors can act more like mentors than purveyors of knowledge. The purveyor approach has proven ineffective in countless cases.

Personal Opinion

By definition, personally meaningful learning will take many different forms. Johnson suggests Perry's (1999) transitions in learner philosophy to represent personally meaningful learning. These transitions include (a) having complete faith in authorities, to (b) recognizing that authorities have different opinions, to (c) recognizing that truth is contextually dependent, to (d) shifting to a paradigm of contextual relativism through which the world is viewed differently, but just as legitimately, by each individual. As a society, we recognize educated people as those who are personally responsible, hard workers, honest, have dreams and goals, are compassionate, and possess an even temperament. Yet, these qualities are only taught through a hidden curriculum in our schools and businesses. One way to teach these important qualities and help students through Perry's learner transitions would be to nurture environments that implement the mentor approach described by Johnson (2006) in this article.

References:

Perry, W. G. (1998). *Forms of Ethical and Intellectual Development in the college years*. San Francisco, CA: Jossey-Bass.

Stern, D., N. (2004). *The present moment in psychotherapy and everyday life*. New York, NY: Norton.