Perspectives on adult learning have changed dramatically over the decades. Defining intelligence has expanded in many different ways, from a traditional, basic view of gaining knowledge and skills to an enhanced view of developing a process of critical self-reflection leading to transformation.

Traditional academic study rewards teaching and learning based on the traditional notion of intelligence - I.Q. testing which scores linguistic and mathematical abilities. The teaching method therefore is based on straightforward lectures, textbooks, written exams, formulas and more.

For Dr. Howard Gardner, professor of education at Harvard University, intelligence has been too narrowly defined -- he believes that intelligence is not a single construct--there are multiple intelligences (MI). In 1983, Dr. Gardner developed his pioneering work in expanding the concept of intelligence. His work proposes that the traditional view of intelligence, based on I.Q. testing, is far too limiting. Instead, Dr. Gardner's model identifies eight different intelligences to account for a broader range of human potential in learning. These intelligences are:

- **Linguistic**: The ability to use language effectively both orally and in writing.
- **Logical/Mathematical**: The ability to use numbers effectively and reason well.
- **Visual/Spatial**: The ability to recognize form, space, color, line, and shape and to graphically represent visual and spatial ideas.
- **Bodily/Kinesthetic**: The ability to use the body to express ideas and feelings and to solve problems.
- **Musical**: The ability to recognize rhythm, pitch, and melody.
- **Naturalist**: The ability to recognize and classify plants, minerals, and animals.
- **Interpersonal**: The ability to understand another person's feelings, motivations, and intentions and to respond effectively.
- **Intrapersonal**: The ability to know about and understand oneself and recognize one's similarities to and differences from others.

Most academic institutions focus most of their attention on linguistic and logical-mathematical intelligence, ignoring other important areas of competence. Generally, we esteem the highly articulate or logical people of our culture. However, Dr. Gardner says that we should also place equal attention on individuals who show gifts in the other intelligences: the artists, architects, musicians, naturalists, designers, dancers, therapists, entrepreneurs, and others who enrich the world in which we live.

Unfortunately, students who have these gifts don't receive much reinforcement for them in the academic arena. Many of these learners, in fact, are often viewed as "underachievers," when in fact their unique ways of thinking and learning aren't addressed by a heavily linguistic or logical-mathematical classroom.

MI then, as a pedagogical approach, provides eight different possible pathways for learning and teaching. This offers several other ways that material can be presented, and assessed, to facilitate effective and most often outstanding learning outcomes. One example offered by Thomas Armstrong is:

“If you’re teaching or learning about the law of supply and demand in economics, you might read about it (linguistic), study mathematical formulas that express it (logical-mathematical), examine a graphic chart..."
that illustrates the principle (spatial), observe the law in the natural world (naturalist) or in the human world of commerce (interpersonal); examine the law in terms of your own body [e.g. when you supply your body with lots of food, the hunger demand goes down; when there's very little supply, your stomach's demand for food goes way up and you get hungry] (bodily-kinesthetic and intrapersonal); and/or write a song (or find an existing song) that demonstrates the law (perhaps Dylan's "Too Much of Nothing?")." (Armstrong)

Armstrong goes on to say that educators can be trained to present their curriculums in a wide variety of ways using music, cooperative learning, art activities, role play, multimedia, field trips, inner reflection, and much more.

In order for that to happen, educators need to rethink their own training and academic experiences as students and their priorities in the classroom as educators. Effective use of MI in the classroom involves tremendous risk for educators focused on content, traditional exams, grades, lectures - all of these activities present a teacher-centered pedagogy. Creating a "student-centered" approach asks for professors to change their view of the roles of both instructor and student.

Engaging Students for Greater Achievement

As previous “New Chalk Talk”s have discussed, a student-centered focus asks instructors to change their teaching methods and strategies: to move away from "the traditional lecture delivered to passive students, to let go of power and control and have their students become more involved in their own learning" (New Chalk Talk, Dec 14 2003, Vol. 3,issue 1).

Using an MI approach, instructors become FACILITATORS empowering and encouraging students to pursue their studies in the most effective ways possible rather than lecture-driven experts controlling the dissemination of knowledge; students become intelligent learners able to understand and direct their own learning and development to achieve outstanding academic success.

Allowing for a variety of differences in styles of learning from students rather than requiring all students to conform to and to match with the instructor's method of teaching can bring about outstanding learning outcomes for the greater number of students. For faculty able and willing to take the risk, combined with flexibility and openness, the resulting outcomes for student achievement can be truly transformational.

Of course, initially some educators may think that this learning philosophy works fine with young children but that older students need to abandon these childish learning activities. Yet, in fact Gardner’s work has demonstrated groundbreaking effects for adult learning and development. Consider the following excerpts from a report on adult ESL curriculums:

"Teachers who use MI theory to inform their curriculum development find that they gain a deeper understanding of students' learning preferences and a greater appreciation of their strengths. Students are likely to become more engaged in learning as they use learning modes that match their intelligence strengths. In addition, students' regular reflection on their learning broadens their definitions of effective and acceptable teaching and learning practices. Students' increased engagement and success in learning stimulates teachers to raise their expectations, initiating a powerful expectation-response cycle that can lead to greater achievement levels for all." (Christison & Kennedy)

Sources:


Share with us your experiences by contributing to the New Chalk Talk series, or by simply sending comments/suggestions to aellozy@aucegypt.edu