攀 INNOVATION ABSTRACTS

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Unlocking the Motivation, the Desire, and the Joy to Learn!

It all began when I wondered what it would be like to teach a college-level class that would begin by helping students identify the different ways that they are "smart" and providing students learning choices and options utilizing different "intelligences."

The Multiple Intelligences (MI) Pilot Study

Fascinated with Gardner's theory of multiple intelligences, I offered an introductory psychology class incorporating his theory—originally developed with children in mind—for college students. The different intelligences include being "smart" in the following ways: words, numbers and computers, body and movement, music and rhythm, people, and self. During the first class session, I administered a multiple intelligences pictorial inventory to help students identify dominant or preferred intelligences, which intelligences "led their parade" and which ones followed. In addition, the syllabus indicated, "Just as choices and options are part of real life, you will be presented with various learning options from which to select and succeed in learning the content of this class. These choices are based on your different intelligences."

By the looks on students' faces, I am sure they were thinking, "Is this guy for real? He's going to give us options? What about all those things I'm used to? Where do I go to drop this class? I want my money back. Must be some weird psychologist going off the deep end!"

As I shared my philosophy of the teaching/learning process with the students, I indicated I was not interested in "how SMART you are; I'm interested in HOW you're smart." I reviewed my fairly traditional syllabus—an outline of what was to be covered, tests, homework assignments, and the evaluation/grading policy. The major difference in this class was that students had choices as to how they could learn the content of the class: article reviews, paper/pencil tests, book reports, computer simulations, collages, sculptures, creative dance, acting, poetry, and musical/rhythmic application. All of this sounded like a novel idea to some students but scary to most! I assured them we would be taking risks together.

Options Grounded in Academic Content

The learning options incorporated reading and understanding of key terms, concepts, and ideas of the material being covered. In class discussions, students took the lead in explaining what and how they were learning the material. The learning options became a bonus. Once students understood the material in the traditional way, they could elect to be as creative as they wanted! Upon completion of the learning option or "homework" assignment, students submitted an indepth, written, reflective evaluation of what they had accomplished.

Results and Implications of the Study

The two-year MI pilot study (10 classes; 131 students) is over. Analysis of the quantitative and qualitative data has revealed some intriguing results:

1. Assessment of Different Intelligences

Twenty-seven percent of the students identified themselves as bodily/kinesthetic/movement learners. They need opportunities to move and act things out. They respond to a classroom that provides manipulatives-movement, hands-on-learning experiences. They want to "do" psychology. In the 18-21 age group, 30% selected this mode as their top choice; in the 22-30 age group, 32%; in the 30+ age group, 12%. Twenty-four percent of the students identified themselves as interpersonal learners. They enjoy being around other people, prefer social activities, and learn best by relating and participating in cooperative learning groups. In the 18-21 group, 19% selected this mode as their top choice; in the 22-30 group, 29%; in the 30+ group, 29%. Eight percent of the students identified themselves as verbal/linguistic learners. They enjoy dealing with words and language—written and spoken. They enjoy reading and writing, have highly developed auditory skills, like to play word games, and are often able to spell words accurately and easily. In the 18-21 age group, 5% selected this mode as their top choice; in the 22-30 group, 3%; in the 30+ group, 19%. Eight percent of the students identified themselves as logical/mathematical/reasoning learners. They learn by abstracting, reasoning, categorizing, working with numbers and computers, and doing



activities in sequential order. They like mathematics, like to experiment and test things they do not understand. They feel most comfortable "coloring within the lines." In the 18-21 age group, 7% selected this mode as their top choice; in the 22-30 age group, 7%; in the 30+age group, 15%.

2. Final grades

A = 57% B = 24% C = 14% D = 4% F = 0%

3. Time Spent Outside of Class Reading/Studying/ Learning/Working on/or Thinking About the Material

Students spent an average of 11.4 hours a week on course-related activities outside of class.

4. Learner Motivation and the Joy of Learning

Learning theorists advocate students considering their learning and thinking more consciously (or metacognitively). The written component of self-reflection that I had built into the curriculum produced some invaluable, illuminating, and transformational insights for me. Inviting students to comment on their own learning challenges them to think about what they completed and why, and to justify why they selected a particular learning option. A most revealing comment came from an 18-year-old male student:

"My motivation to learn psychology was greatly increased by having the options that I did. I could finally learn my way. I actually found myself looking forward to doing school work. I must have something wrong with me, that's not supposed to happen. As I was going through the chapter reading new terms, pictures of things that reminded me of them would be popping into my head. I actually didn't dread doing the projects like I do in other classes."

Some Final Thoughts

College students will take risks with different ways of learning when they are invited and encouraged to do so. If they are provided creative choices and options in applying HOW they are smart, their motivation, level of creativity, and desire will go beyond teacher and learner expectations.

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