What the Best College Teachers Do

A Presentation by **Dr. Ken Bain**

August 29, 2006 Carroll College/Wisconsin Association of Independent Colleges and Universities

Dr. Bain is Vice Provost for Instruction
Director, Teaching and Learning Resource Center
Montclair State University
http://www5.montclair.edu/pages/teachingcenter/bain.html

Synopsis and observations by Dr. Thomas A. Lifvendahl

Project and Interests

Ken Bain is primarily an historian who became interested in teaching methods used by outstanding teachers. A central theme of his research (Bain, 2004) was the question of how his study participants (16 professors) perceived human learning. What he "discovered" through his interviews was confirmed by the literature on learning that supports the observation that humans learn by constructing a perception of reality based on their individual reflections of learned experience. They use this sensory based experience to create "mental models" which are constantly tested against daily inputs. Bain contends that higher education, in its present form, is an "un-natural act" that fails to fully engage the student in rigorously testing student belief systems.

The evidence he cites is research that many college courses don't really change student beliefs. For example, in studying history students' views of the past are used to influence how they think about the present. Bain pointed out that this is <u>not natural</u>. The average student thinks about the past *by trying to understand the present*. We piece together understanding from a wide range of facts and use this amalgam to declare personal "truth". Thus, truth becomes FIXED in one's mind.

The instructor is then faced with the fact that learners create high expectations about new information introduced in class. Students question if this data will conform to what has been previously learned. A central activity then of classroom learning is breaking these fixed beliefs or challenging them sufficiently so that one creates a need on the learners' part to "care about" the new information sufficiently to tolerate giving up the old "truth". When one forces students to break away from the old "truth" Bain suggests that there is also a concomitant need to support students as they restructure their old mental model around the new way of thinking. The job of the instructor is to:

- 1. Remind students what they have learned as a result of participating in a class.
- 2. Delve into the reasons why they learned "it".
- 3. Clarify what remains unclear.

Critical Question

What is it we expect students to do? Bain contends that we want to make experts out of our students. He pointed out that there are two kinds of expertise.

These are:

- 1. Routine Experts who demonstrate the ability to utilize knowledge of one's discipline in rote fashion.
- 2. Adaptive Experts who demonstrate the ability to "recognize when rules and principles that generally govern their performance do not apply to problems or situations" and they invent new procedures for solving problems by apply already mastered procedures in new ways. (Crawford, Characterizing...p. 5).

This observation led Bain to observe that the "routine" of higher education is to inculcate students with information sufficient to provide them with the "expertise" to complete the Capstone. He also pointed out that the Capstone is designed to transform students into experts in their field. Bain believes that this single road, set by tradition and supported by practice, needs to be challenged. He argued that there must be a <u>dual path</u> to learning that increasingly diverges. One path ensures that routine knowledge (required to be certified as an expert in a given field is transmitted) while the second path encourages students to meet the demands of "adaptive expertise" defined previously. He suggested that to do this requires that we need consider alternative forms of evaluation and assessment.

Evaluation

A key technique that can be employed to stimulate learning is the conscious effort by the instructor to increase student involvement in course development. Bain seeks to have instructors force students to address the question of: How do you make sure that the student will believe that the work they produce will be considered (graded) openly and honestly?

Bain noted that anytime one creates alternative evaluation formats beyond the traditional A-B-etc. there is the potential that one is also creating a "stereotype threat – the risk of confirming, as self-characteristic, a negative stereotype about one's group". (Steele, 1995) Bain pointed out that when instructors seek to move their students to the level of adaptive experts instructors create environments of uncertainty that can stifle student learning unless the instructor supports students as they investigate new evaluative criteria.

Syllabus Creation

Bain believes that there are alternative methods for creating syllabi that instructors can use to improve student involvement in their own learning. Citing an article in the Chronicle of Higher Education (Lang, 2006) Bain promoted the concept that "people will learn best and most deeply when they have a strong sense of control over their own education rather than feeling manipulated by someone else's demands."

The Lang article in turn cites the work of Suzanne Hudd.

In her introductory sociology courses, Hudd said, she begins the semester by handing the students a skeletal syllabus, which contains only the topics for each week, and the course readings. In that first class, she discusses with her students all of the components necessary for creating a set of assignments for a course — explaining different types of assignments, due dates, weighting, etc. — and then assigns them the task of developing a set of assignments for the course for the next class.

In the second class period, the students work first in small groups and then as a class to determine the work they'll be doing for the course. She distributes a draft of their new, collaboratively constructed syllabus in the third class, allows one more chance for final revisions, and then the syllabus is set and printed for the semester.

Radical as that exercise sounds, Hudd reports that "the vast majority of the assignments [that the students propose] are fairly traditional." Students generally don't argue to have their grades determined by, for example, by making collages or rock videos.

Students in the courses where she conducts that exercise typically earn slightly higher grades than in her other courses, a difference she attributes to the fact that "students who have collaborated in constructing their assignments become more personally invested in the course content and the evaluation of their performance."

More philosophically, she argues, "As a result of this exercise, students learn at the outset that their opinions matter, and thus they are more immediately immersed in the learning process."

Dr. Bain concluded his presentation with an overview of five (5) key questions that should drive course/syllabi development. These are:

- 1. What is the key question that drives your course (example: MGT 306 could be "Why are you in school"?)
- 2. Has there been a deliberate "buy-in" by the student to fully participate in the course.
- 3. Have you created an "active learning environment" driven by critical questions that require the student to "chunk" information through group dialogue (think about the problem, share it with other people, cross reference it with other groups "squaring", and finally share the findings with the whole group) in order to…
- 4. Provide a tentative answer. This usually leads to...

5. The development of another question that continues the iterative process.

Conclusions

Dr. Ken Bain provided a thoughtful and insightful program that challenged one's thinking about teaching and curriculum design. Key questions that need to be further addressed by non-traditional adult compressed educational programs like Cardinal Stritch's College of Business (COB) include but are not limited to:

- ✓ Should the "promising syllabus" concept be adapted systematically into COB curriculum formatting and limited time frame (16 week traditional vs. 5-6 week "new-traditional" format)?
- ✓ How knowledgeable about the interactive process must adjunct and full time instructors be in order to maximize benefits into COB?

References

- Bain, K. (April, 2004). What the best college teachers do. Boston, MA: Harvard University Press. ISBN 0-674-01325-5
- Crawford, V.M. et. al. (April, 2005). Report on a laboratory study of teacher reasoning: Characterizing adaptive expertise in science teaching. SRI International: Paper presented to the American Educational Research Association Annual Conference, Montréal, Canada.
- Hudd, S. S. (April, 2003). *Syllabus under construction: Involving students in the creations of class assignments*. Teaching Sociology, v. 31, 2. p. 195 retrieved from Wilson Educational Abstracts.
- Lang, J.M. (September 1, 2006). The promising syllabus: Perhaps reading my syllabi on the first day of class seems boring because my syllabi are boring. http://chronicle.com/weekly/v53/i02/02c00201.htm
- Steele, C. M.; Aronson, J. (Nov 1995). *Stereotype threat and the intellectual test performance of African Americans*. Journal of Personality and Social Psychology. 69(5), Nov 1995, 797-811.