

# Active Learning for Critical Thinking

## ACTIVE LEARNING NEWS APRIL 2008

### What's up with the QEP?

UT Arlington's QEP ("Quality Enhancement Plan") is up and running!

During the fall semester of 2007, ten of the QEP's twelve pilot projects were implemented: Business, Engineering, Honors, Liberal Arts, Science and Nursing. Each project's Principal Investigators (PIs), Teaching Assistants (TAs) and Project Managers (PMs) gathered on August 21, 2007 for a final training session. Data collection went live on the first day of classes: August 27 and continues through the spring semester 2010.

For each project (save that conducted in conjunction with the University Library), both student-level and course-level data are being collected. Chief among these measures are student scores on the UT Arlington Critical Thinking Test, or "CTT," a tool developed in-house to assess students' ability to analyze, apply, synthesize and evaluate.

A grand total of 1773 students participated in the Fall 2007 QEP Pilot Projects. This number includes those in multiple sections of ENGL 1301, in which the QEP is a "one-shot" exercise about using sources appropriately. These students aside, there were 959 participants in the other QEP-flagged courses.

A preliminary report on the QEP, issued on February 27, 2008, contains descriptive statistics of the entire sample of students participating in the project during the fall of 2007, as well as more detailed analyses of three courses, each of which were taught in control-vs.-experimental (i.e., active learning) sections: History 1311, Operations Management 3306, and Engineering 1104. Results are mixed, often showing a variety of apparent effects (and interactions) for active learning and attendance. In short, however, it is too early to make any definitive statements about the effectiveness of active learning interventions at this time: the data are too few in number and, as part of this small 'n', present far too many confounding factors. We believe that many of these issues will resolve themselves as we continue to collect data over the next two years.

As the first semester of a three-year project, the fall 2007 represents an important initial milestone for UT Arlington's QEP: a successful launch of an ambitious, multi-faceted inquiry into the relationship between

teaching innovation and the development of higher ordering thinking among our students.

The long term aim of the QEP is likewise ambitious: to foster cultural change in terms of teaching and learning. Like all cultural change, the goals of the QEP will be attained slowly and in ways that have yet to be fully understood by all of the stakeholders. Instructors must develop increasing comfort with and confidence in the pedagogical innovations that they have elected to implement. Students must develop increasing comfort with and confidence in a faculty that ask more of them in the classroom. The Administration must develop increasing comfort with and confidence in a process that is inherently risky, yielding various levels of success. In the end, we press forward, understanding that we will adjust as we go and learning what we can in the process.

### Faculty Development Opportunities

An integral component of UT Arlington's Active Learning initiative is Faculty Development. These opportunities come in the form of funding (see page 2 for details), Teaching Circles, and other special events dedicated to providing faculty members with practical advice about how they might update, improve, or otherwise re-invigorate their teaching.

#### Ongoing

##### Teaching Circles

**Teaching Circles** are an opportunity for faculty to get together in an informal setting and discuss issues related to teaching and learning. Each circle consists of a small group of 5 to 10 faculty who share a common interest. For 2007-08, there have been six circle options. Two have addressed the topic of Active Learning (with facilitators Sandra Westmoreland of Biology and David Silva of the Provost's Office); another has participants discussing assessment and grading (facilitated by Lana Rings, Modern Languages).

If you are interested in joining a Teaching Circle for 2008-09, be on the lookout for an announcement that will be disseminated at the beginning of the fall semester.

*Many thanks to Assistant Provost Linda Wilson and her staff for organizing these circles.*



## Past Event

### *Virginia Anderson on Grading and Assessment*

On September 20, 2007, UT Arlington hosted Dr. Virginia Anderson of Towson University, who spoke to us about identifying the kinds of learning that we want to take place in the classroom, constructing exams and assignments that will test those kinds of learning, setting standards and developing explicit criteria for grading assignments, and other topics relating to how we assess students.

If you missed Dr. Anderson's workshop and would like either to view a DVD of the event or receive a packet with handouts, contact [David Silva](#).

## Coming Soon

### *Panel Discussion on Active Learning*

On the afternoon of Wednesday, April 23, we will be hosting an informal panel discussion about Active Learning as it has been taking place here on the UT Arlington Campus. Look for details in your electronic in-box next week.

### **On the Schedule for Fall 2008**

#### *Mark Taylor and "Gen NeXt"*

On September 25 and 26, we will be hosting a series of workshops by Mark Taylor, who will speak on the topic "Generation NeXt Comes to College: Understanding, Teaching and Serving Today's Postmodern Students."

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## *Innovative Teaching Mini-Grants Awarded for 2008-09*

As part of UT Arlington's Active Learning Initiative, the following individuals / teams were awarded funds to support active learning to promote higher order thinking in undergraduate or graduate level courses. Grant resources will be used to obtain course-related training and travel, support enhanced curriculum development and evaluation, or purchase specialized equipment that serves to enhance student learning.

In addition, two proposals (marked with an asterisk) received additional funding from the Dean of Graduate Studies to support Active Learning projects in graduate-level courses.

Many thanks to the Faculty Development Standing Committee of the University-Wide Committee on Active Learning and Higher Order Thinking for their efforts in reviewing the grant applications, and to Graduate Dean Phil Cohen, Associate Graduate Dean Joe Jackson, and the staff of the Graduate School for their contributions

Cheryl Anderson, School of Nursing

"Simulation Use and Course Performance: A Pilot Study"

Maureen Courtney, School of Nursing

"Video Simulation Cases to Promote More Effective Student Nurse Practitioner Performance"\*

Mary Lynn Crow, Department of Curriculum and Instruction

"The Use of Videotaped Active Learning Instructional Strategies using Education Graduate Students and K-12 Learners"

Carolyn Guertin, Department of English

"Real-Time Digital Education: Online Active Learning Modules"\*

Linda Haynes & Mindi Anderson, School of Nursing

"Innovation in Nursing Education, Disaster Preparedness: As Common as CPR at UT Arlington"

Jared Kenworthy & Daniel Kimball, Department of Psychology

"Research design, execution, analysis, and presentation: Promoting critical thinking and hands-on research skills in upper-level psychology laboratory courses"

Ritu Khanduri, Department of Sociology and Anthropology & Brent E. Sasley, Department of Political Science

"Fostering Semester-Long Team Dynamics: Team-Based Learning as Active Learning"

Susanna Khavul, Department of Management

"Entrepreneurship and Innovation Management: Active Learning across Campus Boundaries"

John McDermott & G. Truett James, School of Architecture

"Proto-type Interactive Student Based Design Self-assessment Software"

Nilakshi Veerabathina, Department of Physics

"Active Learning through Scientific Devices"



## Active Learning Web Portal

For more information and resources about Active Learning, visit

<http://activelearning.uta.edu>