The Teaching and Learning Center’s 2006 Faculty Institute on Teaching and Learning (FITL) held its seventh annual conference on May 30-31 in the Thomas Gosnell College of Science Building. FITL 2006 hosted a record number of 251 attendees who were treated to 29 presentations, panels and workshops from RIT faculty and staff and four guest teaching and learning experts from outside RIT.

Todd Zakrajsek, founding director of the Faculty Center for Innovative Teaching at Central Michigan University in Mt. Pleasant, got the conference off to a stimulating start on day one with two presentations: “Understanding Student Behavior and Creating Effective Learning Environments,” and “How Students Learn: Strategies for Teaching from the Psychology of Learning.”

Following Zakrajsek, noted author Maryellen Weimer, who is former director of the Instructional Development Program at Pennsylvania State University, a veteran professor of Speech Communications, and founder and editor of The Teaching Professor newsletter, gave an informative presentation titled “7 Principles for Teaching and Growing Over the Long Haul.”

The luncheon keynote was given by Tom Brown, managing principal of the education consulting firm Thomas Brown & Associates, LLC, and former Dean of Advising Services/Special Programs at Saint Mary’s College of California. His keynote focused on “Reconsidering Institutional Excellence and Individual Success.” Brown was introduced by RIT President Albert Simone, who thanked all those in attendance and gave a short presentation about the results of RIT’s relatively new alumni survey.

Outside of the conference agenda, Brown was interviewed (on the topic of American culture and change) by Assistant Provost of Teaching & Learning Services Lynn Wild. The interview was held in RIT’s TV production studio, managed by the Educational Technology Center’s Video Production Group (see “On American Culture and Change,” page 3).

On day two of the conference, more than 40 faculty and staff attended Gerard Puccio’s 2-hour presentation titled “Tapping Into Our Creative Thinking Skills to Manage Complex Problems.”

Puccio is the Department Chair of continued on page 8
At the start of his keynote speech at FITL 2006, Tom Brown noted that, in his frequent talks about higher education teaching and learning that he presents at colleges and universities across the country, he often cites RIT as “an example that promotes student learning and student success. RIT is continually seeking to actualize the strategic goals of supporting faculty to facilitate, enable, and support student learning.”

He added that recent literature and news articles about higher education have stressed that, in some higher education sectors, the focus on student learning has taken second place to other activities, such as winning athletic teams and/or managing hotels and research agendas. But this is not the case at RIT, where “the focus is on student learning and the work you do as teachers and scholars to support students in achieving their goals.”

Brown’s presentation focused on explaining and defining what it really means for an institution, along with its faculty, staff, and students, to achieve excellence and success. Citing numerous sources of information that he has gathered over the years, dating as far back as Emerson in the 19th Century and up through modern times, Brown illustrated how, today, the definition of excellence has become too narrow, as some institutions have started to measure their excellence by calculating their resources (endowment size, mean SAT scores, research dollars) and reputation (rankings and what others think). Instead, excellence needs to be “a measure of what you do for your students,”

“The New American University measures its academic quality by the education its graduates received rather than by the academic credentials of the incoming freshman class.”

- Tom Brown

Brown said, “Every institution was founded with a distinctive mission and a distinctive vision, but today most campuses seem content on reconfiguring themselves to fit an external, and frequently superficial, determination of what it means to be excellent, rather than pursuing their own distinct path.”

So, what’s the formula for achieving excellence? Brown quoted the relatively new president of Arizona State University Michael Crow, who defines the “New American University” as being “known more for the students we include than for those we exclude. The New American University measures its academic quality by the education its graduates received rather than by the

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On American Culture and Change

The following is a synthesized version of a more in-depth interview conducted by Assistant Provost Lynn Wild with Tom Brown on the broad topic of American culture and change.

Wild: Although we are doing much better today, Americans’ level of satisfaction has remained constant. Why is it that many Americans feel they are doing worse than their parents and that disaster is looming?

Brown: People are dissatisfied because they are caught in a treadmill of rising expectations. You want a better car; you want a larger house. The external voices are constantly telling you that you must have more. People are afraid that they are not going to get into the right college; they are afraid that they are not going to get the right job. People need to look inward for what it is they want to achieve in their lives, for what will give them happiness, as opposed to looking outward to voices that are constantly telling them that it really is not possible to be happy with what you have.

Wild: Younger people who are starting out have seen their parents sacrifice a lot and lose their jobs - there is no loyalty. Are today’s students less willing to do some of the things that their parents were willing to do when they were starting their careers?

Brown: Today, education is (increasingly becoming) an individual event (as opposed to what was, for many, a situation in which the older generation paid for the younger generation’s education and then the younger generation made it their duty to take care of their parents into their golden years). Students graduate with tens of thousands of dollars in college loans. For example, think about a student whose vision is to become an environmental attorney. By the time that student graduates from a private institution, he or she will owe 60 thousand dollars and another 100 thousand dollars by the time they finish law school. The only company that will offer a sufficient salary to pay back their loans, and allow them to get the house and car, is a company that is polluting the environment. So, a lot of young people need to be opened up to the tremendous possibilities that are out there. And part of that process means that if you find yourself in a job where you are saying “thank God it is Friday,” quit and go find yourself another job. Keep looking for a job until you find your work. The Buddha says our mission is to find our work and then give ourselves to it with our whole hearts and whole souls. That is what we want to encourage, not just for young people, but for all of us.

Wild: Can that be taught?

Brown: I think resilience can be taught. It has to be relearned. Part of it is really re-teaching kids about failure being part of learning.

Wild: Talk about your favorite line “compare and despair.”

Brown: It speaks to the whole issue of are we task-involved or are we ego-involved? The fear-based nature of a consumer capitalist society is that we are ego-based. We compare ourselves to an ideology, and we find ourselves lacking. So we compare and despair, as opposed to being task-involved. It is really about teaching students to strive for excellence, not perfection, and to recognize that excellence is individually defined.

At the same time, this has caused us to lose focus very quickly. We don’t recognize that success really does require commitment and hard work over time. There really are not any short cuts. The other part is recognizing that failure is a part of learning. Sometimes a journey of 1,000 miles starts with a flat tire and a blown radiator. The question is, when that happens, do we persist along that journey? And that really does require taking a long view - and that is hard.

Wild: What about America’s short attention span and the trade off between optimism and realism or unrealistic expectations? What about our quick fix mentality? It is great to have optimism, but how do we balance that?

Brown: A combination of confidence and optimism has allowed America to achieve great things in a relatively brief historical time frame.
On American Culture and Change

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Wild: We spend a lot of time in education working on people’s weaknesses versus building their strengths. And, as you have said, success can be relative, depending on where you start out.

Brown: Success is really determined by intrapersonal intelligence. How do I manage my own emotions? How do I motivate myself? How do I teach myself to be resilient? Then, it’s interpersonal intelligence: How do I learn how to interact with people who are different than me, in particular with people with whom I do not agree? This is a critical skill. Right now we live in a society where it is red or blue, black or white, with me or against me. So, how do we teach people to move toward each other rather than against each other or away from each other. That is a significant job - one that we are going to be working on the rest of our lives. We may plant the seed, but we are never going to sit in the shade of that tree or eat the fruit of the tree.

Wild: Have you seen a trend toward this dualistic thinking increasing?

Brown: There is a tendency to see the world holistically. The more we learn and grow, the more we come to recognize that things are not black and white; they are very often gray. They are not blue or red; they are very often purple.

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Creating Effective Learning Environments

Odd Zakrajsek’s presentations at FITL 2006 were both enlightening and entertaining. Zakrajsek has a great sense of humor that had the FITL audience smiling and laughing frequently. Plus, he had plenty to share about teaching and learning, with suggestions pertaining to how we process and share information.

“Our brains are wired in some really amazing ways,” said Zakrajsek, who is an experimental psychologist. “When we look at things, we really don’t know what reality is because it is our perception of what’s going on. When we are dealing with our students, we have to understand what they are bringing to the process and what is going on in their brains.”

Zakrajsek provided a number of tips for helping with the creation of effective learning environments that take into consideration how both students and faculty process and disseminate information:

- Don’t ask students if they have read the material, because all you will get is a bad sample.
- Incorporate collaborative discussions into your classroom because they are a great way to coalesce different points of view and expertise to formulate solutions to complex problems.
- Students have a terrible time taking notes unless they are taught how to take notes effectively.
- “Really good lecturers can keep up with moderately well done active learning environments. They...”

“When we look at things, we really don’t know what reality is because it is our perception of what’s going on. When we are dealing with our students, we have to understand what they are bringing to the process and what is going on in their brains.”

- Todd Zakrajsek
can keep up with students teaching themselves, but we have to be careful about how it is done.”

- Classes are typically comprised of introverts, who draw energy from within and like to process things before they speak, and extroverts, who get their energy from outside and will often begin sentences curious about how they might end.

- Use active learning techniques in which students can “get their minds involved in the material.”

- Always provide feedback. “It is ludicrous to teach without feedback.”

- Too much stimuli will shut down brains.

- Communicate high expectations. The more you expect from students, as long as it is within reach, the more you will get from them.

- Respect diversity. “Faculty and administrators are good at embracing diversity until the diversity encompasses something they don’t believe in.” For instance, people with Asperger’s Syndrome are part of a diverse group of learners that are very often misunderstood. In short, everyone processes information differently, and faculty need to be mindful of that.

“Students come to us with a wide variety of current personal situations, but also with a lot of individual past personal experiences,” Zakrajsek said. “All of this impacts the learning process. It is what makes each person unique, but the uniqueness is also what makes teaching so challenging and rewarding.”

Seven Principles for Teaching & Growing Over the Long Haul

Maryellen Weimer has been teaching for more than 30 years and has authored numerous scholarly books and articles about teaching and learning. She began her FITL 2006 presentation with a remark about the enthusiasm and idealism of young faculty juxtaposed with the convictions of seasoned faculty. She recalled, as a novice teacher, how she optimistically bought into most of the new teaching and learning philosophies brought up at administrative meetings. Then, to her dismay, “I always would get disgusted with those old curmudgeons on the faculty community group who would roll their eyes and say ‘Oh, we did that about eight years ago and it did not work.’ Now, as much as I hate to admit it, I am in the old curmudgeon group.”

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In light of her curmudgeon status, Wiemer said her next book will cover “how you can keep fresh and invigorated over a career of teaching in higher education.” She added that faculty typically underestimate how much emotional energy their jobs entail over the long haul. So, to answer this growing concern, Wiemer has come up with seven principles that faculty can carry with them across a career-long journey:

1. Improvement is not a dirty word. “Just because you need to
Can you train people to think creatively, and does it really make a difference? These two questions were posed at the outset of Gerard Puccio’s FITL 2006 workshop on creative thinking.

Puccio leads the International Center for Studies in Creativity at Buffalo State College, comprised of a group of educators who have been finding answers to such questions since it was founded in 1967. ICSC currently offers a master’s of science degree and a graduate-level certificate program in creativity.

How to Enhance Your Creative Thinking Abilities

“We all have creative thinking skills to varying degrees, and there are a good number of measures that assess our creative thinking in terms of production or originality, or our ability to make associations. And the reason why our center exists is that wherever you are in terms of your ability, we can teach thinking strategies and tools to enhance that ability.”

- Gerard Puccio

Puccio’s workshop explored the definition of complex problems and why creative thinking is important for solving complex problems. He also gave the audience some creative-problem-solving tools geared toward
enhancing everyone’s ability to think and work more creatively.

Complex problems, as defined by Professor of Industrial/Organizational Psychology Michael Mumford, have three characteristics: They are ill defined, novel, and ambiguous. In other words, as Puccio explained, a complex problem typically involves sorting through a lot of information to determine what is relevant; plus, your previous knowledge has not prepared you to immediately solve the problem; and there are multiple correct answers. So, “in a sense, we have to generate a menu of options and use our critical thinking to come up with the best pathway to pursue.”

Puccio further explained that the literature on creative problem solving boils down the creative process to four fundamental stages:

1. Clarifying the Problem: For example, in industry, the challenge is to meet the consumer's needs. So, you must clarify or discover what those needs are, which requires a creative-thinking process.

2. Generating Ideas: The process does not end with brainstorming and other idea-generating techniques. Don't limit yourself to this stage alone.

3. Developing Solutions: Ideas must be expanded, evaluated and critiqued in order to become workable.

4. Implementing Plans: Creativity also comes into play when taking action. For example, sometimes we need the creative process to sell our ideas. Or, have you ever had a great idea that was not accepted with open arms, only to find yourself coming up with creative ways to get your idea accepted?

These four stages correspond to four creative styles - Clarifiers, Ideators, Developers, and Implementers. Clarifiers take a methodical approach to solving problems; Ideators take an intuitive approach to innovation; Developers enjoy planning the steps to implementing an idea; and Implementers like to focus on workable ideas and solutions. These styles can be measured through a tool called “FOUR-SIGHT™,” which is based on a series of questions that Puccio had workshop participants answer online, previous to attending. The tool tabulated individual score results that gave attendees an indication of how they move through the creative process. For example, a much higher percentage than normal of RIT professionals who completed the questionnaire were identified as being high scorers in all four styles, meaning they were "Integrators" who typically take an even approach to creative problem solving with no peaks or valleys. Others could be strong or weak in any of the four styles, resulting in a wide variety of style combinations. Someone with a high Clarifier and high Implementer score, for instance, would be identified as an “Accelerator,” meaning they enjoy identifying problems and eliminating them.

Overall, Puccio’s workshop was a fun and enlightening experience centered around the notion that we all have the ability to modify what can be considered our personal, self-imposed constraints that may come into play when we seek more creativity in our lives and work. “We all have creative thinking skills to varying degrees,” Puccio explained, “and there are a good number of measures that assess our creative thinking in terms of production or originality, or our ability to make associations. And the reason why our Center exists is that wherever you are in terms of your ability, we can teach thinking strategies and tools to enhance that ability.”
the Buffalo State College International Center for Studies in Creativity.

Overall, more than 45 RIT faculty and staff gave insightful presentations covering a wide range of topics, including professional development, intellectual property and student affairs to print-on-demand self publishing, software management, online education technologies, and much more.

Each year, FITL, which is sponsored by the Provost’s Office, provides a collegial and welcoming environment where faculty, librarians, instructional support staff, advisors and administrators can learn about and share research, best practices, ideas, and strategies for teaching, learning, and advising.

“Now in its 7th year, FITL is an event we know many faculty and staff depend on for learning, making new connections and spending time with colleagues,” said Wild. “This year we were delighted to see many new faces among our familiar attendees. We always welcome and invite ideas and suggestions for topics, speakers and presenters.”

**PowerPoint slides from a number of the FITL 2006 presentations are available at** [http://www2.rit.edu/fitl/presentations_2006.php](http://www2.rit.edu/fitl/presentations_2006.php)

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**Excellence and Success**

The Teaching and Learning Center’s mission is to promote and support student learning through faculty development and teaching excellence. The TLC acts as a clearinghouse for information about college teaching and student learning, an advocate for effective teaching, and a provider of programs and services.

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