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# 2012-2013 Annual Report

CETL

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Annual Report
July 2012 - June 2013
Submitted July 12, 2013

Promoting excellence in teaching to improve the learning environment at Kettering University

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# **Overview and Introductory Words from the Director**

As Director for the Center for Excellence in Teaching and Learning (CETL), it is my pleasure to present this annual report. Some highlights:

Ongoing Multidisciplinary Events The CETL Brown Bag lunch discussions continue every Tuesday in the CETL Collaboration Room. The winter theme of "Teaching Strategies for Critical Thinking" and spring theme of "Foundations of Excellence" have brought together like-minded faculty and staff for positive discussion. The collaboration with the Provost Office to promote the Distinguished Faculty Speaker Series continues to be popular. Titles and details are found in this report.

<u>Active Learning Through Instructional Design Workshop</u> A one-day workshop featuring Dr. Michael Prince was held on campus April 8, 2013. Three modules were scheduled in two-hour time blocks to coincide with our Kettering teaching schedule allowing over 30 faculty and staff the opportunity for professional development.

Quad Pod Collaborations The four Quad Pod campuses - Kettering, Baker College, University of Michigan-Flint, and Mott Community College – continue to collaborate for professional development. This Quad-POD consortium brought author, Ken Bain, to Flint on October 4-5, 2012 to discuss his book "What the Best College Teachers Do" following book club discussions on campus. A follow-up dinner event to answer the question "What Have We Done to Become the Best College Teachers" was held Thursday, January 31, 2013. Prof. Dan Ludwigsen and Terri Lynch-Caris presented and led a collegial discussion. The Quad Pod leaders are planning to host Jose Bowen, author of the book "Teaching Naked" in January 2014 with similar events for the four campuses.

First Year Experience (FYE) The new course FYE101 First Year Foundations will be offered for the first time in Summer 2013. The course was approved by the faculty members of the CETL Advisory Board serving as a department curriculum committee for multidisciplinary classes, University Curriculum Committee, Faculty Senate and university administration. The revamped syllabus is designed to promote discussion in small groups of first-year students with a partially flipped classroom and online resources. A faculty or full-time staff member will lead each class section with an upper-class peer mentor. The FYE Working Group was instrumental in the development of course learning outcomes and a textbook "Thriving in College and Beyond" was adopted. Shari Luck will serve as the course coordinator.

I welcome your input on this CETL 2012-13 annual report.

Respectfully submitted by,

Dr. Terri Lynch-Caris, CETL Director and Assoc. Prof. of Industrial Engineering

# **CETL History (repeated from 2011-12 annual report)**

CETL is the brainchild of the Kettering University Teaching Fellows, a group of faculty that began discussing the concept of a center in September of the year 2000. This esteemed group established the mission and name of the center, identified goals, proposed services

and actions to satisfy the goals, discussed staffing and future issues, and posted an internal job announcement for the Director. Cynthia Finelli was named the first director for the center and a CETL Advisory Board was selected to assist the Director in her duties. Since that time, the center has been directed by a series of faculty members who have continued the ideals of the founding Teaching Fellows.



<u>Mission Statement</u>: To provide resources and opportunities for faculty, staff and students to become better teachers and learners.

**<u>Vision Statement</u>**: Empowering learners by enhancing faculty prowess.

#### **History of CETL directorship**:

- Dr. Cynthia Finelli, Assoc. Professor of Electrical Engineering, became the first CETL Director in January 2001.
- Dr. Daryl Doyle, Prof. of Chemistry, became the Center's Director in July, 2003.
- Dr. Greg Hassold, Prof. of Physics, became CETL's Interim Director in July, 2005.
- Dr. Jacqueline El-Sayed, Prof. of Mechanical Engineering, started as the CETL Director in January 2006.
- Dr. Mark Palmer, Assoc. Professor of Manufacturing Engineering, served as Acting Director between July 1, 2008 and June 30, 2009.
- Dr. Terri Lynch-Caris, Assoc. Professor of Industrial & Manufacturing Engineering, became CETL's Interim Director on September 1, 2011 and was named the Director in December 2011.

The original CETL office was located in Room 1-336AB on the Kettering campus. This area will continue to serve as a conference center for the Kettering community. It serves as a library/archives work and storage room. It has also served as a temporary office for a university phone-a-thon calling campaign.

The CETL Collaboration Room opened in October 2011 in a former classroom (Rm. 3-103) directly across from the Faculty Senate Conference Room. CETL will continue to house a collection of journals, books, videos and other materials within the library and online as resources to the Kettering community. The CETL Director is a half-time position reporting to the Associate Vice President of Academic Affairs.



## **CETL Organization and Advisory Board**

<u>Organizational Structure</u>. CETL personnel reporting through Jackie El-Sayed:

- (1) Terri Lynch-Caris, CETL Director with a half-time faculty appointment
- (2) Shari Luck coordinating the First Year Experience (FYE)
- (3) CETL advisory board consisting of faculty and staff to provide vision and focus, carry out CETL projects and be actively involved in CETL
- (4) Shared administrative assistance (with ASC and CCUE) of Nannette Randolph
- (5) Rotating work-study students, carefully selected to enable project advancement

The primary objective of the CETL Advisory Board is to assist the CETL Director in improving the learning environment at Kettering University. CETL's Advisory Board members share an interest in Higher Education both inside and outside the Kettering campus. Members serve voluntarily. Interested constituents are encouraged to contact the director to fill rotating vacancies and changing needs of the university.

The Advisory Board for the Academic Year 2012-13 includes:

Karen Cayo, Member, Department of Business

Cindy Finelli, Member, UM Center for Research on Learning and Teaching

Jim Huggins, Member, Computer Science Department

Shari Luck, CETL First Year Experience

Dan Ludwigsen, Member, Physics Department

Mark Palmer, CETL Awards Chair through 2012, IME Department

Cristina Reed, Member, Office of Student Life – resigned effective January 2013

Todd Steele, Member, Graduate Studies Office

Laura Sullivan, CETL Assistant Director, ME Department

Mo Torfeh, ECE, joined the board in June 2013.

Lihua Wang, Member, Chemistry Department

A-Section students - Academic Council representative and Work Study Students

B-Section students - Academic Council representative and Work Study Students

Eight Advisory Board Meetings were held during the 2012-13 academic year:

<u>Summer 2012</u>	<u>Fall 2012</u>	<u>Winter 2013</u>	<u>Spring 2013</u>
July 9	October 11	January 17	April 25
September 13	December 6	March 14	June 6

**CETL website**: http://www.kettering.edu/offices-facilities/center-excellence-teaching-and-learning

# Quad-POD: "What the Best College Teachers Do"

The book, *What the Best College Teachers Do,* by Ken Bain, was distributed early in 2012 as a gift to all full-time Kettering faculty members (and others upon request). We are privileged to have interacted with Ken Bain during three events held October 4-5, 2012 on the Quad Pod campuses:



- Kettering campus faculty discussion Attended by approximately 70
  Kettering faculty members
- Quad-Pod Dinner at UM-Flint Attended by approximately 180 faculty and staff from Kettering, UM-Flint, Mott, Baker and guests
- Quad-Pod Leadership Breakfast at Mott Attended by 42 academic leaders from Kettering, UM-Flint, Baker and Mott

#### Kettering campus faculty discussion

Dr. Bain discussed the difference between three types of learning – surface, deep and strategic. We spent time discussing the things that foster surface learners (e.g. grades) before delving into the question: **How do we fascinate students?** Finally, we discussed the need to create a natural critical learning environment.

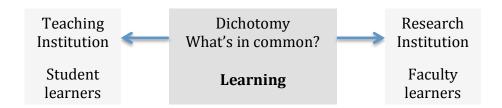
#### Quad-Pod dinner at UM-Flint

Dr. Bain stated that the one thing that excellent teachers should do is to **ask fascinating questions**. As professors, we must invite our students into something that is bigger than the class itself. He challenged us to re-write our syllabus into a Promise Syllabus format.

#### Quad-Pod Leadership Breakfast at Mott

Dr. Bain entertained questions from the audience of leaders to try to answer the question "Teaching Matters: What Do the Best College Leaders Do?"

The question on tying teaching and learning to tenure and promotion prompted a discussion on becoming "Learning Institutions" rather than categorizing ourselves as either a teaching or a research institution.



We must work to become Learning Universities

#### Other events surrounding Ken Bain's visit

#### Spring/Summer 2012 - Book Club

The book, *What the Best College Teachers Do*, by Ken Bain, was distributed early in 2012 as a gift to all full-time faculty members (and others upon request). A Book Club was formed to discuss this text during the Spring term of 2012. The group met in the CETL Collaboration Room every Friday.



term of 2012. The group met in the CETL Collaboration Room every Friday during lunch. The first meeting, on April 27, was led by Laura Sullivan, and subsequent meetings were led by other members of the Book Club. One chapter per week completed the book:

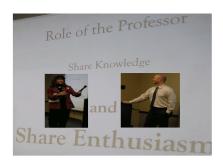
April 27	Introduction: Defining the Best	led by Laura Sullivan
May 4	What do they know about how we teach?	led by Bahram Roughani
May 11	How do they prepare to teach?	led by Kat Svinarich
May 18	What do they expect of their students?	led by Greg Schneider
June 1	How do they conduct class?	led by Larry Navarre
June 8	How do they treat their students?	led by Laura Sullivan
July 31	How do they evaluate their students?	led by Laura Sullivan, Kat
		Svinarich and Jen Aurandt

The goal for studying this book was that campus constituents might be better prepared for a visit that the author made to Flint on October 4-5, 2012.

# January 31, 2013 - What Have We Done to Become the Best College Teachers?

Based on the attendee's evaluations, the Quad-POD universities held a follow-up dinner to find ways to apply Bain's ideas to our classroom work. From 6:00 – 8:00 p.m. in the Michigan Rooms of UM – Flint, faculty representatives from each of the Quad Pod schools gave presentations followed by discussion. The four discussion topics from each of the four schools

- o Critique of Ken Bain's Ideas: Mott Community College
- o Fascinating Questions: Kettering University
- o Strategic v. Deep Learning: Baker College
- o Formative Feedback: University of Michigan Flint



Prof. Dan Ludwigsen, Associate Professor of Physics and Prof. Terri Lynch-Caris, Associate Professor of IME and CETL Director, represented Kettering. They presented their ideas and experiences of integrating "Fascinating Questions" into the classroom.

# **On-Campus Informal (Brown Bag) Lunch Discussions**

The purpose of these small group discussions is to provide topics that are of interest to faculty and classroom staff for the improvement of teaching and learning. The discussions are intended to be interactive and personalized toward the intersection of pedagogy, policies, and technology. The benefits of the discussion often extended beyond the actual topic.

Date and topic - Summer/Fall 2012	Attending
(7/17) Information Technology Advisory Committee (ITAC) – Academic Advisory Sub-Committee call for input by Viola Sprague, Dan Ludwigsen, Lihua Wang and Terri Lynch-Caris	12
(7/24) Cultural experiences from a 12-Day trip to India, Raghu Echempati	3
(7/31) Closing the Book on "What the Best College Teachers Do" and Open Discussion on Teaching Circles - Peer Assessment by Laura Sullivan, Kat Svinarich and Jen Aurandt	8
(8/7) ASEE Travel Grant Recipient Presentation by Vipul Laddha and Prof. Raghu Echempati of the ME Dept	5
(8/14) In-Class Activity Reports by Srinivas Chakravarthy	3
(8/21) Intellectual Property (IP) in Academia by Dr. Jamie McLaughlin	6
(8/28) Preparing for Fall CETL Events led by Terri Lynch-Caris	5
(9/11) Input requested to Teaching Circles on Teaching Strategies by Mark Palmer, Karen Cayo, and Denise	5
(10/2) Teaching Circles Faculty will meet to discuss Teaching Strategies, Instructional Technology and Peer Assessment	7
(10/9) How do we implement what we learned from Ken Bain? What do the Best College Teachers Do? – Open discussion.	6
(10/16) Re-Designing the First Year Experience (FYE) – Invitation to all faculty and staff involved in the student's first year at Kettering to be involved in FYE initiative - led by Shari Luck	24
(10/23) Using Peer Instruction as a Teaching Strategy by Dr. Ron Kumon	13
(10/30) Teaching Strategies for the Blended Classroom by Mark Palmer	6
(11/6) Problem-Based-Learning (PBL) by Prof. Raghu Echempati.	5
(11/13)Teaching Circles Faculty will meet to discuss Teaching Strategies, Instructional Technology and Peer Assessment	9
(11/27) IME100 Innovation Pilot discussion by Massoud Tavakoli	15
(12/4) Preparing for Winter CETL Events led by Terri Lynch-Caris	5
Total Faculty/Staff hours (July - Dec)	137

## Focus on Teaching Strategies (Winter Term)

A First Friday (1/11/13) event brought together 30 faculty and staff in the CETL Collaboration Room to celebrate Collaboration, Innovation and Success. A light lunch was funded by KEEN/EAU and conversation brought forward innovative teaching strategies that have evolved from the EAU workshops.

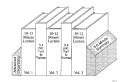
Brown Bag discussions continued on Tuesdays in the CETL Collaboration Room to describe and assess innovative teaching tools. Thus, the entire Winter 2013 term was devoted to **Intentional Teaching Strategies to Enhance Critical Thinking** or shortened to simply "Teaching Strategies." Dr. Massoud Tavakoli and Abdra Traore led the first three Brown Bags to promote sharing of Innovative Teaching Strategies resulting from the KEEN/EAU Workshops. Subsequent weeks promoted discussion on teaching strategies that have been tried in Kettering classrooms.

Brown Bag Date and topic - Winter 2013	Attending
(1/15) KEEN/EAU Sharing Innovative Teaching Strategies - Massoud	
Tavakoli, Part I. Share what you've already done and collect a summary	8
(1/22) KEEN/EAU Sharing Innovative Teaching Strategies - Abdra Traore	8
Part II. Map what has been done to KEEN outcomes	0
(1/29) KEEN/EAU Sharing Innovative Teaching Strategies – M. Tavakoli	7
Part III. Propose or "pitch" multidisciplinary innovation KETT courses	,
(2/5) Mid-Term Assessment in preparation for the second half of the term	7
(Student – Faculty Forum)	,
(2/12) Learning through Reflective Writing - Joy Arbor/Denise Stodola	5
(2/19) "Blended Learning – Using Online Tools to Enhance Face-to-Face	4
Classroom Learning" - Tom Creech	
(2/26) Flipping the Classroom - Karen Cayo, Kathy Schaefer	9
(3/5) Teaching Strategies for International Students - Basem Alzahabi	8
(3/12) Preparing for Spring CETL Events led by Terri Lynch-Caris	4
Total Faculty/Staff hours	<u>60</u>

**Guest Speaker**: On February 7, 2013, Mr. Jeff Stuart from The Purdue FIRST Program (PFP) addressed the Kettering campus community. The video recording of his talk is archived on the CETL Website. PFP is actively involved with K-12 robotics teams in the Lafayette, Indiana area. Kettering has established relationships with this organization to build our program in and around Flint. Mr. Stuart accepted an invitation to speak from Dr. Henry Kowalski and lunch was provided by the Provost.

## **Active Learning Through Instructional Design Workshop**

The winter season focusing on Teaching Strategies culminated with a one-day workshop led by Prof. Michael Prince "Active Learning through Instructional Design" on April 8, 2013. Over 30 faculty and staff from across the university attended this three-part workshop:



- 1. Starting with the End in Mind: Using Instructional Objectives to Improve Teaching and Learning
- 2. Introduction to Active Learning for Busy Skeptics
- 3. Beyond Grades: Using Assessment to Actually Improve Teaching and Learning

# **Focus on the Foundations of Excellence (Spring Term)**

The First Year Experience initiative began with the reorganization of Shari Luck to report through the CETL Office. The revamping of the *ORTN101 – Learning*, *Teamwork and Success* course prompted research, discussions and action to create the *FYE101- First Year Foundations* course. The FYE Working Group contributed a great deal of input to the process and the FYE Conference attendance was profoundly influential in designing the new course. The new FYE101 course will be offered in summer 2013 after approval by the CETL Advisory Board, University Curriculum Committee, Faculty Senate and university administration. The Brown Bag theme for the Spring Term "Foundations of Excellence" continued to influence and improve the FYE101 syllabus and course design.

Brown Bag Date and topic - Spring 2013	Attending
(4/9) "New Graduation Science Standards" presented by James	
Emmerling, Director, Genesee Area Mathematics and Science Center,	9
Genesee Intermediate School District, hosted by Prof. Bahram Raghani.	
(4/16) "How shall we design a good statistical project in a foundational	
class?" Notes from the International Year of Statistics Project by Prof.	5
Boyan Dimitrov and Prof. Leszek Gawarecki	
(4/23) The First Year Experience (FYE) – "Reinventing the Orientation	20
Class" by Shari Luck and Terri Lynch-Caris	20
(5/7) The First Year Experience (FYE) – "Theme Development for the First	13
Year Seminar (FYS) " by Shari Luck	13
(5/14) "Reflective Learning and the Integration of Co-op Experiences" by	13
Dr. Jackie El-Sayed and Joan Sullivan	13
(6/4) Preparing for Summer/Fall Term CETL Events by Terri Lynch-Caris	7
(6/5) Introduction to New Blackboard features by Tracey Rodgerson	12
(6/7) Introduction to New Blackboard features by Tracey Rodgerson	12
Total Faculty/Staff hours	<u>79</u>

## **Distinguished Faculty Speaker Series**

The Provost has institutionalized this popular faculty speaker series by requesting that a faculty representative from each department prepare and deliver a talk regarding their research. Educational Innovators have been added to the lineup. The Provost Office provides lunch to the first 100 people to arrive at each presentation and the Crib-a-thon continues to be full for each session. Most distinguished speakers agreed to be video-recorded with an archive on the CETL website.



- Dr. Montserrat Rabago-Smith, Chemistry, "Research in the Frontier of Chemistry and Biology" (8/9/12)
- Dr. Jeff Hargrove, ME Dept, "Current Understandings and Research in Treating Chronic Central Pain" (9/6/12)
- Dr. Jonathan Wenzel, Chemical Eng., "Green Production of Chemicals using High Pressure Fluids in Pilot Plants." (10/18/12)
- Dr. Basem Alzahabi, International Programs and ME, "The Anatomy of the Syrian Revolution" (11/1/12)
- Dr. Michael Callahan, Liberal Studies, "Learning About Cheating or: How I Became an Ethics Teacher and So Did You"(11/15/12)
- Dr. Lihua Wang, Chemistry, "Metals in Medicine" (11/29/12)
- Dr. Homayun Navaz, ME, "Research Interest in Strategic Defense" (1/31/13)
- Dr. Massoud Tavakoli, ME & KEEN/EAU, "Entrepreneurship Across the University...Why?" (2/28/13)
- Dr. Huseyin Hiziroglu, ECE, "Electrical Breakdown of Dielectric Materials" (4/30/13)
- Dr. Laura Sullivan, ME, "Humanitarian Aid Engineering: Problem Solving Without a Textbook" (5/9/13)
- Dr. Bahram Roughani, Physics, **Educational Innovator**, "Innovations in Higher Education: A Voyage and Reflection" (5/28/13)
- Dr. Lucy King, IME, "Stay Ahead of the Game" (5/30/13)
- Dr. W.L. Scheller, IME, "Working Together: Interdisciplinary and Faculty/Student Relationships at Kettering University" (6/11/13)

Distinguished Faculty Speakers during 2011-12 Academic Year with video archives on the CETL website:

Dr. William (Bill) Riffe, IME Dept., "The Many Hats of a Professor" (12/2/11)

Dr. Ezekiel Gebissa, Liberal Studies Dept., "Turning East: Reflections on China's Rise." (2/9/12)

Dr. Kevin Bai, ECE Dept., "Power Electronics Solution for Hybrid Electric Vehicles and Renewable Energy." (2/23/12)

Dr. Steven Nartker, Chem/Biochem/ChemEng, and Dr. Jennifer Aurandt, Chem/Biochem, "Biogas Production and Separation." (3/8/12)

Dr. Pat Atkinson, ME Dept, "Bioengineering and You." (4/26/12)

Dr. Cornel Rablau, Physics Dept, "Photonics and Nanotechnology: Enabling Technologies of the 21st Century." (5/3/12)

Dr. Boyan Dimitrov, Math Dept, "Longer Life Through Math?" (5/10/12)

Prof. Larry Navarre, Dept of Busn, "Supply Chain Mgmt: The Beer Game" (5/31/12)

Dr. Doug Melton, ECE/KEEN, "If Opportunity Doesn't Knock, Build a Door" (6/7/12)

## **Awards, Grants and Teaching Support**

**Nominations for 2013 teaching awards:** Dr. Michael Callahan is leading the Teaching Awards Committee and soliciting nominations for the 2013 teaching awards until June 1, 2013.

<u>2012 Teaching Awards</u> During Spring 2012, seventeen (17) faculty members were nominated for consideration of these teaching awards. Dr. Mark Palmer led the Awards Committee to select the winners. His successful "Arguing Up" method resulted in his Chairing an Awards Committee for the TMS Research Society.

The following CETL Awards were presented at the Kettering University Celebration of Excellence on October 4, 2012:

## **Outstanding Teaching Awards (3):**

Prof. Greg Schneider-Bateman

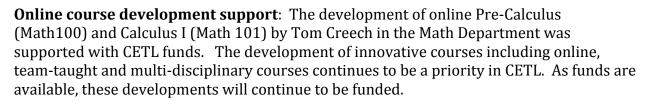
Prof. Pete Gheresus,

Prof. Nancy Stock

**Faculty Distinguished Citizenship**: Prof. Pete Gheresus **Tutt Award for Innovation in Teaching:** Prof. Boyan Dimitrov **Educational Scholar Award (2)**:

Prof. Kevin Bai

Team of Prof. L. Wang, Prof. M. Rabago-Smith, and Prof. R. McAllister



**Multidisciplinary course teaching support**: The multidisciplinary course, where multiple departments come together with different perspectives, is important to our student's learning and yet difficult to sustain within departmental budgets. Thus, the CETL budget includes funding for:

- (1) *IME540: Environmentally Conscious Design*. This course was developed with grant funds and became a burden for any single department to sustain. Thus, the course was renamed KETT540 to be sustained under CETL direction.
- (2) FYE101: First Year Foundations. This course will include one full time faculty or staff member as the leader along with a student peer mentor. Each will receive a stipend from the CETL budget.
- (3) Additional multidisciplinary courses will be encouraged based on interest and funding in future years. A CETL Working Group has been established to develop a process for applying, reviewing and awarding funding for the development of additional multidisciplinary courses.

# First Year Experience (FYE)

In the summer of 2012, CETL assumed responsibility for The First Year Experience. Shari Luck, Coordinator of the First Year Experience and Instructor, became a key part of CETL and has been a key contributor to CETL's success.



Shari Luck will report through CETL to focus on FYE

The goal for this reorganization was to build upon the highly successful ORTN101 class to include all facets of the freshman experience. The first short-term change was the addition of reflection within the current ORTN101 class. Shari worked closely with the Department of Liberal Studies (Joy Arbor, Karen Wilkinson) to develop and pilot reflective learning questions within ORTN101.

Shari has worked with the library on the LibGuide implementation for Freshman that will extend resources to academic majors.

A second change in the FYE was to pilot an innovation design section within IME100 in collaboration with KEEN/EAU led by Dr. Massoud Tavakoli. A first status report will be shared as part of the CETL Brown Bag lunch discussions and a formal assessment of the pilot orientation class will occur after the completion of the winter/spring of 2012 course series. International students also had a pilot version of a targeted orientation class. The many lessons learned are primarily anecdotal in nature and will be summarized for reflection and continuous improvement.

An FYE Working Group (formerly known as the FYE Advisory Board) was initiated through a CETL Brown Bag lunch discussion with a record number of participants. Twenty-four faculty and staff packed the CETL Collaboration Room to discuss the role of the FYE. Shari will lead this group forward to positive change.

The new course *FYE101-First Year Foundations* will be piloted on July 1, 2013 with an understanding that the FYE will be constantly renewing, reflecting, assessing and adapting to meet the needs of our first year students. The new course, *FYE101 First Year Foundations*, has been approved and the previous course, *ORTN101 Learning Teamwork and Success*, will be deleted from the catalog. The new syllabus includes learning objectives, a discussion-based instructional model and a common syllabus for use by all instructors.



# **Teaching Circles**

CETL began a new initiative to grow and advance best practices in teaching and learning through small group Teaching Circles. Currently, eight faculty members have been leading this charge to develop, pilot, assess, implement and sustain a program to promote best practices in:

Kathryn Svrinarich Lihua Wang Karen Cayo	<u>Peer Assessment</u>	Instructional Technology	Teaching Strategies
Terri Lynch-Caris Denise Stodola		9 ( )	Mark Palmer (chair) Karen Cayo Denise Stodola

The timeline for instituting improvements in these focus areas was established as follows:

Each group met at least four times to set goals, to benchmark current practices elsewhere, and to develop a concept to pilot during the summer. (done)
Each group will introduce the concept to students and faculty. Initial ideas will be piloted and feedback gathered via surveys, forums, and informal conversation. (done – primarily through Brown Bag Lunch Discussions)
Each group will develop a final plan for implementation with ongoing assessment. Ideally, the final plan will include a reward system for implementation.

Winter 2013 –	Best practices for each of the three areas will be implemented across
	the university.

	Peer Assessment	Instructional Technology	Teaching
			<u>Strategies</u>
Status	Process under review	Acquisition process	Discussion
	by CETL Advisory	institutionalized through	continues as part
	Board for student	ITAC and Academic	of Winter term
	feedback and	Advisory Subcommittee	Brown Bag
	discussion		discussions

# Information Technology Advisory Committee – Academic Affairs Sub-Committee

The Vice President of Instructional, Administrative, and Information Technology, Viola Sprague, is leading the Information Technology Advisory Committee (ITAC) with representation from all campus constituents and an online portal for proposals from across the university. Three sub-committees were formed: Academic Affairs, Infrastructure and Operations and Student Initiatives. The Director of CETL chairs the Academic Affairs Advisory Sub-Committee.

The Instructional Technology Teaching Circle began discussing the appropriate process for introducing instructional technology into the university. This process allowed the Academic Affairs Advisory Sub-Committee to receive and review project requests from the ITAC and prioritize the projects based on Importance, Urgency and Ease of Implementation.

#### **Initial Membership of Academic Affairs Advisory Sub-Committee:**

Faculty (5 to 3)	Dept Heads (5 to 1)	Staff (2 to 1)
Faculty Senate Moderator-	Todd Steele	Brian Beck
Elect (Ada Cheng)		
Dan Ludwigsen	W.L. Scheller (end sp13)	Carol Brooks
Lihua Wang	Paul Zang	Tracey Rodgerson
Jon Wenzel	Bahram Roughani (end Sp13)	Mike Mosher
Mark Palmer	Stacey Seeley (end Sp13)	

This committee will meet once per term to review all academic computing requests and produce prioritized recommendations to ITAC. Membership on the committee will be reduced and realigned as the ITAC matures. The ITAC committee structure and responsibilities will continue to be refined at the discretion of the Vice President of Instructional, Administrative, and Information Technology.

The prioritized list of ITAC projects and the current call for proposals can be found:

http://www.kettering.edu/content/information-technology-advisory-committee

## **Educational Scholarship**

The advancement of scholarly research in the area of technical disciplines must remain a top priority at the university. It is also imperative that the field of educational scholarship be prioritized and focused. Thus, CETL supports faculty with interests in education and the CETL director must model the value of such research through publications and scholarly speaking opportunities.

#### Recently Published:

Ludwigsen, Dan, Terri Lynch-Caris, Lihua Wang, Eric Ethington, "Using a Systematic Approach to Build an Institutional Process for Instructional Technology" 7<sup>th</sup> International Technology, Education and Development (INTED2013) Conference in Valencia, Spain, March 4-5, 2013.

Murray, Susan., Lynch-Caris, Terri, "Educating the Professional Engineer of 2020" American Society of Engineering Education (ASEE) Annual Conference, Industrial Engineering Division, June 2013, Paper #6598.

Lynch-Caris, Terri., Mark Palmer, "Enjoyable Instructional Technology Can Enhance Learning" American Society of Engineering Education (ASEE) Annual Conference, Industrial Engineering Division, June 2013, Paper #6920.

Bohn, Alex and Terri Lynch-Caris, "Getting Into The Game: Increasing Project Management Skills via Role-Playing Simulations," Industrial Engineer Magazine, Volume 45, Number 1, January 2013.

Kleinke, Darrell, Jonathan Weaver & Terri Lynch-Caris, "Biomimicry: Tools and Techniques," Book published by Innovation in Action Inc., available through itunes for ipad download, Oct 2012.

Jennifer Aurandt, Andy Borchers, Terri Lynch-Caris, Jackie El-Sayed, Craig Hoff, "Bringing Environmental Sustainability to Undergraduate Engineering Education: Experiences in an Inter-Disciplinary Course," Journal of Science, Technology, Engineering and Math (JSTEM) Education, Article #1552 Volume 13, Issue 2, 2012.

Lynch-Caris, Terri, Jonathan Weaver, Darrell Kleinke, "Biomimicry Innovation as a Tool for Design" American Society for Engineering Education (ASEE), Paper No. 3473, Presentation at ASEE Conference in San Antonio, TX, June 2012.

Invited Talk: T.M. Lynch-Caris and Dan Ludwigsen, "What Have We Done to Become the Best College Teachers? Ask Fascinating Questions." Invited talk at Quad Pod Consortium Dinner held at University of Michigan - Flint, January 31, 2013

Poster presentation: Luck, Shari and Terri Lynch-Caris, "First Year Experience (FYE)....Building a Strong Foundation Through the Center for Excellence in Teaching and Learning," Kettering University Homecoming Weekend, Breakfast with the Faculty Poster Presentation, May 18, 2013

# **Assessment of CETL Programs**

Continuous improvement of CETL programs is important and ongoing. A standard evaluation form was instituted during the 2012-13 academic year for brown bags discussions, Distinguished Faculty Speakers and some CETL special events. Additionally, a cross-campus survey was administered at the beginning of the 2012-13 academic year to assess programming from the previous year. Summarized Results are given below.

#	Brown Bag Summary Attendance = 276 (July '12-June '13)	# of respondents	% of respondents	Response
1.	Value: This event was valuable.	78 3 2	94% 4% 2%	Agree No Opinion Disagree
2.	<b>Engagement</b> : I was satisfied with the information and what I learned during this event.	75 4 4	90% 5% 5%	Agree No Opinion Disagree
3.	<b>Content:</b> The material covered is useful for academic/ professional growth.	78 4 1	94% 5% 1%	Agree No Opinion Disagree
4.	<b>Benefit</b> : I would like to attend this or a similar event again.	78 4 1	94% 5% 1%	Agree No Opinion Disagree
5.	<b>Quality</b> : I would recommend this event to colleagues.	68 13 2	82% 16% 2%	Agree No Opinion Disagree

#	Distinguished Faculty Speaker Summary	# of respondents	% of respondents	Response
	Approx. Attendance=900			
	(July'12-June '13)			
1.	<b>Value</b> : This event was valuable.	214	95%	Agree
		9	4%	No Opinion
		2	1%	Disagree
2.	<b>Engagement</b> : I was satisfied with the	190	84%	Agree
	information and what I learned during	22	10%	No Opinion
	this event.	13	6%	Disagree
3.	<b>Content:</b> The material covered is useful	208	92%	Agree
	for academic/ professional growth.	15	7%	No Opinion
	for deadenine, professional growen.	2	1%	Disagree
4.	<b>Benefit</b> : I would like to attend this or a	206	91%	Agree
	similar event again.	13	6%	No Opinion
		6	3%	Disagree
5.	Quality: I would recommend this event	212	94%	Agree
	to colleagues.	11	5%	No Opinion
	to concugues.	1	1%	Disagree

	Ken Bain talks to Kettering faculty about "What the Best College Teachers Do" Summary Attendance=70 (10/4/12)	# of respondents	% of respondents	Response
1.	Value: This event was valuable.	34	100%	Agree No Opinion
		0		Disagree
2.	<b>Engagement</b> : I was satisfied with the	33	97%	Agree
	information and what I learned during	0	0%	No Opinion
	this event.	1	3%	Disagree
3.	<b>Content:</b> The material covered is useful	32	94%	Agree
	for academic/ professional growth.	2	6%	No Opinion
	for deddenine, professional growen.	0	0%	Disagree
4.	<b>Benefit</b> : I would like to attend this or a	31	91%	Agree
	similar event again.	3	9%	No Opinion
	Similar Cyclic again.	0	0%	Disagree
5.	Quality: I would recommend this event	31	91%	Agree
	to colleagues.	3	9%	No Opinion
	to concagaco.	0	0%	Disagree

	Introduction to Instructional Design	# of	% of	Response
	- Dr. Michael Prince	respondents	respondents	
	Attendance = $29 (4/8/13)$			
1.	Value: This event was valuable.	19	100%	Agree
		0		No Opinion
		0		Disagree
2.	<b>Engagement</b> : I was satisfied with the	17	90%	Agree
	information and what I learned during	2	10%	No Opinion
	this event.	0	0%	Disagree
3.	<b>Content:</b> The material covered is useful	17	90%	Agree
٥.		1	5%	No Opinion
	for academic/ professional growth.	1	5%	Disagree
4.	<b>Benefit</b> : I would like to attend this or a	19	100%	Agree
	similar event again.	0		No Opinion
	Siliniai event again.	0		Disagree
5.	Quality: I would recommend this event	19	100%	Agree
	to colleagues.	0		No Opinion
	to concubues.	0		Disagree

Survey Respondents also provided answers to the following questions allowing each individual event to be assessed, expanded and improved.

- 6. What aspects of the event did you find most **useful**?
- 7. What might you do differently as a **result** of attending this event?
- 8. Do you have any **suggestions** for how we could make this event more useful.
- 9. What additional **comments** would you like to share? Please use the back of this sheet as necessary.



#### **CETL Survey Summary - Spring/Summer 2012**

# Special thanks for Dr. Laura Sullivan for developing and administering this survey

#### Introduction

In May, 2012 CETL began to assemble an online assessment survey for the purpose of collecting faculty feedback regarding CETL programming for the academic year 2011-12. Program assessment tools from other Teaching and Learning Centers were reviewed, and a survey was developed to query faculty regarding the impact of CETL programs on:

- teaching interest in student learning
- faculty-student interaction inside the classroom
- teaching
- faculty-student interaction outside of the classroom
- faculty-faculty peer collaboration

Benchmarking and construction of the survey was completed in late June, and administered to faculty via SurveyMonkey.com from July 9 through July 31, 2012. The URL link to the SurveyMonkey survey was sent to all academic departments via email and twelve (12) faculty members responded to the survey (roughly 10% of the target respondents.)

Three sub-sections of the survey focused on three categories of CETL programs, including

- 1. **Online Educational Resource Office** presentations, which provided participants with keys to using Blackboard tools and online communication with students
- 2. **Brown Bag** lunch discussions, which informed faculty and allowed for conversations across disciplines.
- 3. **Discipline specific and Resource specific discussions,** which allowed faculty and staff experts to share ideas and provide advice, and where all could collect a set of "lessons learned" via informal discussion. This category included Distinguished Faculty presentations.

For each program, the survey presented faculty members with a statement indicating that a particular program had enhanced any of the categories listed above. Faculty members were asked to indicate which CETL programs demonstrated impact on the interactions between faculty and students, on teaching, and on collaborations among faculty members. Figure One illustrates one page of the survey, where faculty members were asked to indicate the value of presentations by the Online Educational Resource Office.

#### Section One. Online Educational Resource Office Presentations

Faculty survey participants were asked to review a list of topics that had been delivered by the Online Educational Resource Office and hosted by CETL during the 2011-12 academic year and to indicate which of these presentation topics resulted in a positive effect for teaching and learning (see Table 1). Faculty agreed with statements reflecting that online (Blackboard) resources were helpful in enhancing interactions with students outside of class. Agreement with the idea that online resources were beneficial to teaching was also strong. When presented with the statement that online resources enhanced interactions with students in the classroom, however, faculty agreement was weak. This may demonstrate the perception among faculty that online resources are intended to supplement instruction, but not to be used in the classroom. Faculty agreement that online resources enhance out-of-classroom interactions and not in-classroom interactions suggests the same limited view regarding the application and value of online resources.

	interactions with students in class	teaching	interactions with students outside class	collaboratio
Blackboard: Posting assignments				
Blackboard: Rubrics				
Blackboard: Grade center				
Blackboard: Discussion forums				
Blackboard: Group assignments				
Blackboard: Journals				
Lecture video capture				
Online chats				
Facebook and other social media				

Figure 1. Example of presentation of questions within the CETL survey

Of the online resources available, more than two-thirds of the faculty agreed with statements that posting assignments and the grade center enhanced interactions with students outside of the classroom. While many of the online resource offerings enhanced interactions with the students and teaching, they did not appear to enhance collaborations with faculty.

Facebook and other social media were not identified as resources that enhanced teaching/learning or student-faculty interactions. Faculty perceptions regarding social media may be a barrier to their adoption of these resources. Further interviewing of faculty would help in understanding faculty reticence with social media. A review of the use of social media to enhance learning would also be valuable for motivating faculty adoption of such a resource.

Table 1 Faculty perceptions regarding the value of presentations from the Online Educational Resource Office

Faculty reported that these online resources enhanced the following interactions/interests								
Fraction of respondents Fewer than 1/3 Between 1/3 and 2/3 More than 2/3	interactions with students outside class	teaching	interest in student learning	interactions with students in class	collaborations with faculty			
Blackboard: Group assignr	nents							
Blackboard: Discussion for	ums							
Blackboard: Posting assignments								
Blackboard: Grade center								
Lecture video capture								
Blackboard: Journals								
Blackboard: Rubrics								
Online chats								
Facebook and other social media								

While some online resources were perceived to add value to student/faculty interactions, the same was not true for peer collaboration. There seems to be a clear perception that Blackboard's value is confined to the professor-student relationship. When asked to consider the effect that online resources had on collaborations, few faculty (less than one third) reported that online resources added value. In response to this perception, it may be helpful to provide training to help faculty members identify the usefulness of online resources in collaboration with colleagues.

#### **Section Two. Brown Bag Lunches Discussions**

Faculty survey participants were asked to indicate whether or not they agreed with various statements regarding whether these lunch discussions enhanced teaching and learning. The Brown Bag discussion topics, and the extent of faculty agreement with the value of these topics to enhanced teaching are presented in Table 2. Survey respondents agreed that "Service Learning," and "Interactive Teaching Technologies" were of benefit to almost all aspects of teaching/learning. The topics "Learning Styles," "Working With Distressed Students," and "Assessment of Experiential Learning," were viewed to enhance fewer aspects of teaching/learning, but still faculty agreed more than they disagreed regarding the overall value of these topics. Faculty members did not tend to agree that the topics, "Faculty Input in CETL," "Research Funding Opportunities," were likely to enhance their teaching or their interactions with students, but faculty did recognize the value of these topics to collaboration and research. This seems

Table 2 Perceived value of Brown Bag lunch discussions

Faculty reported that their participation in Brown Bag lunch discussions enhanced their								
Fraction of respondents Fewer than 1/3 Between 1/3 and 2/3 More than 2/3		interactions with students in class	Teaching	interactions with students outside class	collaborations with faculty	interest in student learning		
Service learning								
Interactive teaching technologies								
Learning Styles								
Working with distressed stu	dents							
Assessment of experiential learning								
Faculty input in CETL								
Research funding opportunities								
Utilizing Starfish								
Self-publishing a book								

appropriate; as both of these topics focus more directly on interactions that faculty can have with one another. "Using Starfish," and "Self-Publishing a Book," were not identified as having enhanced teaching or collaboration among faculty.

Comparison of the potential benefit to enhancing each aspect of teaching/learning (interactions outside the classroom vs. inside the classroom, etc,) revealed that the collection of Brown Bag lunch topics offered relatively equal benefit to each aspect of teaching and learning.

#### **Section Three. CETL Special Topics**

The final section of this online survey invited faculty to review a list of CETL events addressing specific topics. Once again, faculty members were asked to indicate the extent to which they agreed that these topics enhanced teaching/learning (see Table 3). Faculty tended to agree with statements reflecting the value of these topics to teaching, and to interactions with students in and outside class. Faculty members were most likely to agree that "Successful Teaching Strategies," and "Instructional Technologies," topics were of value to all aspects of student-faculty and faculty-faculty interactions. Faculty agreed that the topics, "FERPA" and "Ulliance Student Assistance Program" enhanced student interactions, but these topics were not judged to add value to teaching/learning or faculty collaborations. CETL meetings that focused on Teaching Awards and Travel Grants were not seen to enhance teaching/learning – these meetings were more business oriented so it is not surprising that these meetings were judged as not beneficial to teaching and learning.

Table 3 Extent to which certain CETL topics enhanced interactions between students and faculty

Faculty reported that these CETL topics enhanced their									
Fraction of respondents Fewer than 1/3 Between 1/3 and 2/3 More than 2/3		Teaching	interactions with students outside class	interactions with students in class	interest in student learning	collaboration s with faculty			
Successful Teaching Strategies									
Instructional Technolo	ogies								
Blended Course Desig	n								
FERPA									
Ulliance Student Assistance Program									
Teaching Awards									
Travel Grants									

In summary, those faculty who responded to this survey agreed that CETL programming for 2011-12 enhanced teaching and interactions between students and faculty both inside and outside the classroom. Different programs and topics have impacted the learning environment in various degrees. As CETL moves forward, Teaching Circles priorities have been identified in the areas of Peer Observation and Instructional Technologies – two approaches to enhancing faculty-student interactions in the classroom while improving teaching and learning. A Teaching Circle has also been established to look specifically at teaching strategies with the hope that it will result in programming to enhance the interest that faculty have in both excellent teaching and enhanced student learning.

In summary, CETL will strive to offer those topics that enhance the learning environment at Kettering using feedback from survey data and additional assessment from participants and campus stakeholders.