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2016-2017 CETL Annual Report

CETL

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ANNUAL REPORT

2016-2017

"We are all teachers all the time"

CETL website: my.kettering.edu/cetl



2017 Teaching Workshop with Dr. Rich Felder

Annual Report

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Introduction

This year the Center for Excellence in Teaching and Learning (CETL), has offered 70 programs that have been attended by 1,178 faculty, staff and students and 69% our faculty members have attended at least one CETL event.

Overview: CETL Organization and Advisory Board

The CETL Organizational Structure for 2016-17AY, reporting through the Provost Office, consists of

- (1) Terri Lynch-Caris, CETL Director (July-Sept 2016)
- (2) Cindy Donner, part time administrative specialist
- (3) CETL advisory board consisting of faculty, staff and student representatives to provide vision and focus, carry out CETL projects and be actively involved in CETL
- (4) Rotating work-study students, carefully selected to enable project advancement

The primary objective of the CETL Advisory Board is to assist 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 fill rotating vacancies and the changing needs of the university.

The CETL Advisory Board for the Academic Year 2016-17

Prof. Jim Huggins, Computer Science Department

Ms. Shari Luck, First Year Experience

Prof. Ed Masha, Math Department

Prof. Laura Miller-Purrenhage, Liberal Studies

Prof. Diane Peters, ME Department

Prof. Gillian Ryan, Physics Department

Prof. Mo Torfeh, ECE Department

Prof. Matthew Sanders, IME Department

Prof. Lihua Wang, Chemistry Department

Ms. Sandy Alberto, University of Michigan-Flint

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



Distinguished Faculty Speaker and Dean's Talk Series

The Distinguished Faculty Speaker Series is one of the most popular CETL events. Faculty representatives from various academic departments deliver a talk to the campus regarding their technical or educational research. CETL provides lunch and the room continues to be full for each session. Most distinguished speakers agree to be video-recorded with an archive on the CETL website. With the new College structure at Kettering University CETL introduced a Dean's Talk for the Deans to have an opportunity to share with the faculty, staff and student the vision of their college.

Distinguished Faculty Speakers and Dean's Talk during 2016-17 Academic Year:

- Dr. Monstserrat Rabago-Smith, Professor of BioOrganic Chemistry Faculty Learning Communities The Power of Collaboration (11/17/16)
- Dr. Craig Hoff, Dean of the College of Engineering The Future of Engineering (and the College of Engineering) (2/9/17)
- Dr. Justin Young, Professor of Industrial and Manufacturing Engineering *Touchless Interfaces:*Challenges for the Future of Human-Machine Interaction (2/23/16)
- Dr. Scott Reeve, Dean of the Graduate School and Sponsored Research *Overview of the Graduate School* (3/9/16)
- Dr. Javad Baqersad, Professor of Mechanical Engineering Digital Image Correlation State of the Art Measurement Technique (3/16/17)
- Dr. Michael Smith, Dean of the School of Management, Oh the Changes That They Will See!

 Developing the Business Leaders of the Future (4/20/17)
- Dr. Laura Vosejpka, Dean of the College of Sciences and Liberal Arts From Florence to Flint: The Rebirth of the Arts and Sciences at Kettering (6/8/17)



Faculty Resources

In order to provide an environment of teaching and learning excellence, experts are often called upon to share wisdom and insights. In addition to our Distinguished Faculty Speakers and Deans, the following speakers presented on behalf of CETL. These events are attended by faculty, staff and students for shared learning.

Kettering Global – led by Dr. Christine Wallace, Vice President of the Kettering Global Campus and the Kettering Global Team

Creative Media Studios-What CMS can do for you! (4/6/17) Teaching Online – How is it different from F2F? (5/4/17) Bloom's Taxonomy – Writing Course Outcomes and Objectives! (6/1/17)

Marketing, Communication & Enrollment Engagement with Faculty – led by Kip Darcy, VP of Marketing, Communications & Enrollment:

Faculty: Key Influencers in the University Selection Process (10/6/16)

Marketing, Communications and Enrollment Engagement with Faculty (2/16/17)

Marketing, Communications and Enrollment Engagement with Faculty (4/13/17)

Intellectual Property in Academia – led by Jamie McLaughlin, Professor of ECE and University Counsel (11/10/16)

Overview of the Center for Integrated Learning Experiences – led by Dr. Janet Brelin-Fornari, Director of the Center for Integrated Learning Experiences (4/27/17)

28 faculty
members have
attended 10 or
more CETL
sponsored events
this year

Campus Wide Teaching and Learning Workshop and Book Club

For this year's **CETL Teaching Workshop**, author and Professor Emeritus of Chemical Engineering at North Carolina State University, Richard M. Felder came to Kettering University for an all day workshop. Dr. Felder has authored or co-authored over 150 education—related papers and presented over 600 teaching and faculty development workshops.

Dr. Felder and his wife and colleague, Dr. Rebecca Brent authored *Teaching and Learning STEM: A Practical Guide*. This book was distributed to all Kettering faculty in July in preparation for the Teaching Workshop.

Kettering Librarian, Dawn Swanson, led the Book Club for faculty and staff:

Part One: Designing Courses (7/12/16) Part Two: Teaching Courses (8/2/16)

Part Three: Facilitating skill development (10/13/16)

The all-day Teaching Workshop was held September 21, 2016 with over 50 participants engaging in collaborative and informative sessions. **Design, Deliver and Assess Your**

Courses was the focus of the workshop. The participants received a workbook and action items to take back with them to their classroom.



Prof. Ravi Warrier and Prof. Cheryl Samaniego

Dr. Rich Felder

Follow up talks by some of the Kettering attendees were held during the Winter term:

Starting a Course off Right, led by Gillian Ryan, Professor of Physics

Prerequiste Material: How to Handle Things Forgotten or Never Learned, led by Diane Peters, Professor of Mechanical Engineering

Active Learning, led by Lihua Wang, Professor of BioInorganic Chemistry

Quad-POD, a collaboration between Kettering University, University of Michigan-Flint, Baker College and Mott Community College



Faculty Learning Community (FLC)

Thirteen Kettering faculty members participated in the FLC along with 27 other faculty from the three other higher education institutions in Flint. The faculty members were split into six interdisciplinary subcommittees to discuss teaching methodologies and student engagement. The FLC's met on a regular basis throughout the year and they shared their outcomes at the Celebration Dinner

The Kettering University faculty members who participated in the FLC were:

Michelle Ammerman, Applied Biology

Jennifer Bastiaan, Mechanical Engineering

Susanta Das, Mechanical Engineering

Leszek Gawarecki, Mathematics

Mary Gebhart, Liberal Studies

Farnaz Ghazi-Nezami, Industrial & Manufacturing Engineering

Ron Kumon, Physics

Laura Mebert, Liberal Studies

Diane Peters, Mechanical Engineering

Rebecca Reck, Mechanical Engineering

Cheryl Samaniego, Applied Biology

Denise Stodola, Liberal Studies

Lihua Wang, Chemistry

In addition to the individual FLC meetings, the following events were held with all of the members of the six Faculty Learning Communities.

FLC kickoff (9/30/16) at Mott Community College

Quad Pod report out (2/2/17) at Brick Street Restaurant

Celebration dinner (5/11/17) at Brick Street Restaurant

Quad-POD (continued)

Kathleen Rowell Workshop

The Quad Pod was honored to bring Dr. Kathleen Rowell to Flint for two days for a dinner presentation on **The Importance of Teacher Empathy** on February 16th and a Workshop titled: **The Mayhem of Teaching** on February 17th. Dr. Rowell had a warmth and understanding of the relationship between faculty members and their students that she was able to convey through stories and real life examples.

The Quad-Pod Dinner at Mott Community College was attended by approximately 55 faculty and staff from Kettering, UM-Flint, Mott, and Baker College. Sixty-two faculty and staff from Kettering, UM-Flint, Mott, Baker College participated in the workshop.



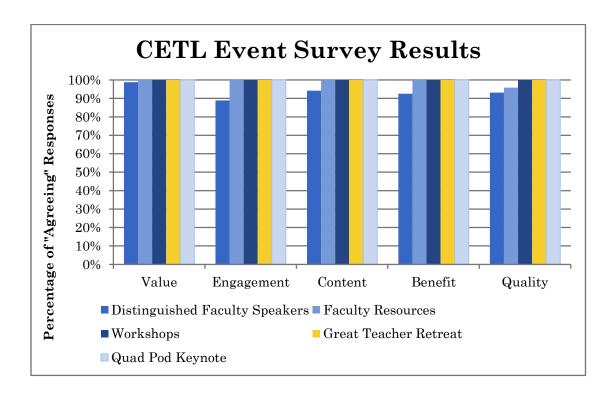
The Mayhem of Teaching workshop



Quad Pod Members with Dr. Kathleen Rowell, L to R, Cindy Donner, Kettering University, Sandy Alberto, UofM Flint, Tracy Wacker, UofM Flint, Dr. Kathleen Rowell, Lesa Louch, Baker College, Mara Fuller, Mott Community College

CETL Event Assessment

Each larger event includes the opportunity for participants to fill out a CETL Event Survey to provide feedback on the level of value, engagement, content, benefit and quality of the event. The summarized form of these surveys is shown in the bar graph.



Value: This event was valuable.

Engagement: I was satisfied with the information and what I learned during this event.

Content: The material covered is useful for academic/ professional growth.

Benefit: I would like to attend this or a similar event again.

Quality: I would recommend this event to colleagues.



Five new faculty members were welcomed to campus in the 2016-17 Academic Year. Orientation events included one on one training with the CETL Director and follow-on events that were hosted throughout the year. The agenda focused on the different departments and services on campus. The training included tours of campus, presentations and a binder of reference material.

Follow-on Talks held throughout Fall and Winter Terms included:

First Year Experience (FYE) and Thesis:

Presented by Shari Luck and Michelle Gebhardt (July 19, 2016)

Teaching Portfolios: Presented by Center for Excellence in Teaching and Learning (August 30, 2016) Office of Sponsored Research and Graduate Studies:

Presented by Scott Reeve and Tom Creech (October 25, 2016)

Cooperative Education: Presented by Venetia Petteway (November 15, 2016)

International Programs: Presented by Prof. Basem Alzahabi (December 6, 2016)

First Term Celebration Reception with Associate Provost, Dr. Kathryn Svinarich and

Department Heads (December 14, 2016)

New Faculty Members for 2016-17:

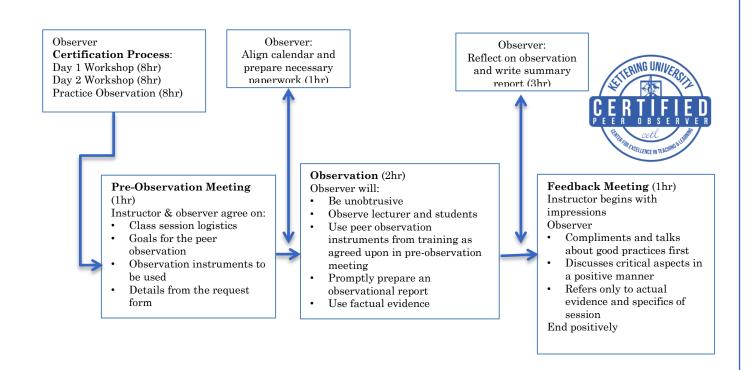
Christopher Dewberry, Assistant Professor, Chemistry/Biochemistry Stephen Grandchamp, Visiting Assistant Professor, Liberal Studies Julia Kiernan, Assistant Professor, Liberal Studies HeeSeok Nam, Assistant Professor, Mathematics Michael Obsniuk, Lecturer, Physics

Peer Observation Process

A Peer Observation program is available through CETL. The goal of this program is to support all faculty in their progress toward excellence in teaching and learning through the use of inclass peer observations by CETL Certified Observers. Faculty members who have peer observations conducted will obtain a greater knowledge of specific ways to improve their classroom teaching skills. Any reports and observations made by a CETL Observer will be shared confidentially only with the requesting faculty member.

The following faculty members have completed the training and requirements to become a CETL Certified Peer Observer.

Theresa Atkinson Eric Bumbalough Ada Cheng Boyan Dimitrov Leszek Gawarecki Jim Huggins Denise Stodola



Teaching Circles

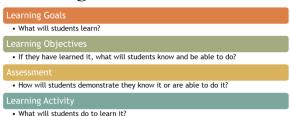
The focus of a teaching circle is to consistently bring together like-minded faculty and staff for a common goal. Teaching circles explore new teaching techniques to find innovative methods of improving the learning environment. The goal of the teaching circle is to expose and promote innovative teaching practices for faculty members and to explore how these opportunities can be implemented and sustained.

The **FYE 101 Teaching Circle** meets regularly with faculty/staff instructors and peer mentors for engagement and continuous improvement. In addition to instructor/peer mentor training, the teaching circle discussions are open to the campus community to promote interest in first year student success. Teaching Circle led by Shari Luck

The goal of the **Inclusion in the Classroom Teaching Circle** is to make Kettering University a better place for underrepresented students, and to educate the Kettering community on cultural diversity competencies in the classroom. The Inclusion in the classroom Teaching Circle will be a continuous, dynamic learning cycle. Teaching Circle led by Prof. Eric Bumbalough, Carol Brooks and Susan LaFeldt

The Integrated Course Design Teaching Circle focuses on the use of learning objectives or goals in our classes, and explore best practices to align learning experiences, evaluation, and assessment with those learning goals. Teaching Circle led by Prof. Gillian Ryan

Align Goals, Objectives, & Learning Activities



Writing Across the Curriculum Teaching Circle

The Teaching Circle on Writing focuses on the use of writing across the curriculum, as well as the best practices in writing pedagogy. Teaching Circle led by Prof. Denise Stodola

Teaching Circles (continued)

Date	Teaching Circle	Topic	attendees
	FYE		
8/4/16		FYE 101 First Year Foundations	15
8/25/16		Discussion of the Use of Technology in First	14
		Year classes	
11/1/16		FYE 101	15
3/7/17		FYE Think Tank	9
	Writing Across the Curriculum		
10/11/16		Writing a Writing Assignment	10
11/3/16		Bring your own Writing Assignment	6
1/26/17		Article discussion: We Know What Works in	11
		Teaching Composition	
2/21/17		Bring Examples from Your Classroom	6
4/18/17		Rubrics for Writing Assignments	13
5/18/17		Feedback on Writing Assignments	2
	Inclusion in the Classroom		_
10/18/16		Whistling Vivaldi: How Stereotypes Affect	17
10/10/10		Us and What We Can Do (Issues of Our	1.
		Time) Book Club: Part 1	
11/8/16		Whistling Vivaldi: How Stereotypes Affect	14
		Us and What We Can Do (Issues of Our	
11/00/10		Time) Book Club: Part 2	11
11/29/16		Whistling Vivaldi: How Stereotypes Affect Us and What We Can Do (Issues of Our	11
		Time) Book Club: Part 3	
1/19/17		First Generation Students	17
2/2/17		What is Higher Functioning Autism	11
2,2,1		Spectrum Disorder/Asperger Syndrome?	
		Understanding and Working with the	
	Extreme Systematic Thinker.		
3/14/17		You can't make me! What you do and do not	20
		have control over regarding your students.	
4/11/17		You can't make me! What you do and do not	17
		have control over regarding your students. (continued)	
5/11/17		Setting the Stage: Best Practices for	13
0/11/11		LGBTQ+ Inclusive Classrooms	10
	Integrated Course Design		
4/25/17			18
5/23/17			11
6/6/17			9
•		TOTAL	259



Tuesday Teaching Talks

Known as "Tuesday Teaching Talks," 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 opic.

Tuesday Teaching Talks - Topic and date	Attending
FYE and CUE/Thesis - led by Shari Luck and Michelle Gebhardt (7/19/16) ***	12
Better Serving Underrepresented Students – led by Eric Bumbalough (7/26/16)	29
Comparison of Survey Software for Research Data – led by Elizabeth Gross (8/9/16)	14
Responding to Student Writing – led by Denise Stodola (8/16/17)	16
ASEE Showcase – led by Terri Lynch-Caris (8/18/16)	12
Blackboard Training: Creating, Managing & Grading with Rubrics – led by Tracey Rodgerson (8/23/16)	10
Teaching Portfolios – led by Terri Lynch-Caris (8/30/16) ***	10
Peer Review of ASEE Abstracts Prior to Submission – led by Rebecca Reck (10/4/16)	15
Office of Sponsored Research and Graduate Studies – led by Scott Reeve and Tom Creech (10/25/16) ***	24
Cooperative Education – led by Venetia Petteway (11/15/16) ***	12
Platforms for Electronic Laboratory Notebooks & Collaborative Online Reading – led by Ron Kumon (11/22/16)	25
Blackboard Training – led by Tracey Rodgerson (12/1/16)	12
International Programs – led by Basem Alzahabi (12/6/16)) ***	18
Starting a Course off Right – led by Gillian Ryan (1/24/17)	19
Resources in the Library – led by Jamie Niehof and Dawn Winans (1/31/17)	16
Prerequiste Material: How to Handle Things Forgotten or Never Learned – led by Diane Peters (2/7/17)	22
Active Learning – led by Lihua Wang (2/14/17)	15
Blackboard Training – led by Tracey Rodgerson (2/28/17)	12
UCAA/Digital Commons – led by Kathryn Svinarich and Jamie Niehof (5/2/17)	25
First Year Experience – led by Shari Luck (5/9/17)	6
Blackboard Case Study: A guide to save time and do more in your class – led by Hadi Rahmat-Khah (5/16/17)	13
CATME software program – led by Rebecca Reck (5/30/17)	11
Total Faculty/Staff Hours (July '16- June'17)	348

*** Part of New Faculty Orientation – all faculty members invited

of Faculty
attended at
least one CETL
event

Great Teacher Retreat



On March 2-3, 2017, twenty-three faculty members gathered at Waldenwoods Conference Center for the Great Teacher Retreat put on by The Center for Excellence in Teaching and Learning. The Great Teacher movement had its origins in the late 1960's in Illinois and since then has taken root throughout the U.S., Canada and Japan. The main objective is to provide a comfortable setting and a process to facilitate serious review of the successes and challenges of teaching.

The faculty members that attended were from all academic departments at Kettering, represented a mix of full professors, associates, assistants, lecturers and department heads, with a male/female gender balance. All participants were asked to complete homework before they arrived. During the retreat the faculty members worked in groups to talk about teaching in alignment with the Principles of Effective Teaching to promote self-reflection through interdisciplinary conversation. There was also some free time to enjoy the conference center and build relationships between faculty members.

"I liked the authentic nature of the discussion topics and time for reflecting on teaching practice."

Response from survey



CETL Teaching Awards 2016

Five (5) faculty members were honored with CETL Teaching Awards and presented at the Kettering University Celebration of Excellence on October 20, 2016. A complete description of the award criteria can be found on the CETL website. Dr. Joy Arbor, Professor of Liberal Studies, led the Teaching Awards Committee to solicit and review nominations for the 2016 teaching awards.

Twenty-eight different faculty members were nominated before the deadline of June 1, 2016 and the committee reviewed all applications before deciding on the winners.

Outstanding Teaching Awards:

Professor Lisandro Hernández de la Peña Professor Veronica Moorman Professor David Vineyard

Faculty Distinguished Citizenship Award:

Prof. Laura Sullivan

Tutt Award for Innovation in Teaching Award:

Professor Lisandro Hernández de la Peña

Educational Scholar Award:

Professor Yaomin Dong

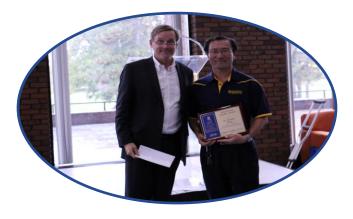


Photo: Prof. Yaomin Dong with Kettering University President Dr. Robert K. McMahan



Photo: Prof. Lisandro Hernández de la Peña with Kettering University President Dr. Robert K. McMahan



Photo: Prof. David Vineyard with Kettering University President Dr. Robert K. McMahan

American Society of Engineering Education (ASEE)

CETL supports faculty with interests in educational scholarship. There are twenty-eight (28) ASEE members on campus. Four (4) Kettering faculty and staff presented at the ASEE national conference in Columbus, OH on June 25-28:

Dr. Elizabeth Gross

Dr. Diane Peters

Dr. Rebecca Reck

Dr. Nozar Tabrizi



The following papers were submitted by Kettering University faculty at the ASEE conference:

Gross, Elizabeth, Peters, Diane L., Daly, Shanna R., Mann, Stacy Lynn, Perceived Self-Efficacy of Master's in Engineering Students Regarding Software Proficiency and Engineering Acumen

Lucietto, Anne M., **Peters, Diane** L., Engineering Technology Graduate Students: Roles Professional Societies Have in Their Formation

Peters, Diane L., Goldstein, Molly H, Lax, Joanne, From Industry to Graduate School: How Returners (Re)Learn How to Write

Murray, Jaclyn K., Daly, Shanna R., Mosyjowski, Erika, **Peters, Diane L.** Practitioner Experience Meets Graduate Academic Research: How Intersections Guide the Work of Returning Engineering Ph.D. Students

Reck, Rebecca Marie, Using Google Apps to Collect and Organize My Tenure Portfolio

Tabrizi, Nozar, First Course in VHDL Modeling and FPGA Synthesis of Digital Systems

Mosyjowski, Erika, Daly, Shanna R., **Peters, Diane** L., Challenges and Benefits of Applied Experience as an Engineering Returner in a Ph.D. Program

Appendix: CETL History

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.

Vision Statement: Empowering learners by enhancing faculty prowess.

<u>History of CETL directorship</u>:

- 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, 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 from 2001-2011. The area continued to serve as a conference center for the Kettering community, served as a library/archives work and storage room and a temporary office for a university phone-a-thon calling campaign. In 2014 it became a permanent office for the FIRST Robotics Community Center.

The CETL Collaboration Room is located on the Third Floor of the Academic Building. The CETL Collaboration Room is an open, inviting space to promote faculty and staff collaboration over coffee and snacks. Library resources include a collection of journals, books, videos and other materials related to teaching and learning with a LibGuides interface. Online resources are continually updated on the CETL website. CETL exists with a great deal of volunteer support from faculty, staff and students.

"We are all teachers all the time"