



7-2015

# 2014-2015 Annual Report

CETL

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**Annual Report**  
**2014 – 2015 Academic Year**  
**Submitted July 31, 2015**  
Minor revision August 20, 2015

“We are all teachers all the time”

**CETL website:** <http://www.kettering.edu/cetl>



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### Cover photo:

CETL Director: Prof. Terri Lynch-Caris

FYE Coordinator: Ms. Shari Luck

CETL Administrative Assistant: Ms. Cindy Donner

ASC/CCUE/CETL Shared Administrative Assistant: Ms. Nannette Randolph

## 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 in the spirit of transparency and continuous improvement. This year CETL has offered 80 programs to over 1700 faculty, staff and students and 80% of our faculty members have attended at least one CETL event. Thanks to our Marketing Department for their assistance in formatting the “CETL At a Glance 2014-15” card. Special thanks to Cindy Donner for keeping track of CETL data and drafting this report.

Some highlights of 2014-15:

The CETL Collaboration Room continues to host informal and formal discussions between faculty and staff from across the campus. *Tuesday Teaching Talks* sustain the discussion with varying themes each term. The summer theme of “Focus on First Year Retention,” fall theme of “Teaching with Technology” and winter/spring theme of “Excellence in Collaboration” have brought together like-minded faculty and staff for positive discussion. Coffee, snacks and white board markers are readily available inside the CETL Collaboration Room.

The FYE101 First Year Foundations Course was offered for the second year with continuous improvement in the form of a new textbook and cohorts based on student interest. Regular assessment along with the collaboration of faculty/staff instructors and upper class peer mentors enable freshmen to smoothly transition from high school. Shari Luck continues to do an outstanding job of coordinating the course. In 2015-16AY Shari will no longer be part of CETL as she joins forces with the Culminating Undergraduate Experience to provide continuous student engagement from the beginning to the end of the curriculum.

Quad Pod Campuses of Kettering, Baker College, University of Michigan-Flint, and Mott Community College continue to collaborate for professional development. This year the Quad-POD consortium brought author, Dr. Rebecca Cox, to Flint on February 12-13, 2015 to discuss her book *The College Fear Factor*. The Quad Pod leaders meet regularly for continuing Professional Development.

Faculty Roles of Teaching, Scholarship and Service can be found throughout this Annual Report. Familiar names found as Distinguished Faculty Speakers, Teaching Award Winners and Workshop Leaders are the heart of the university. As I was preparing this report, we lost our beloved Chemistry Professor, Prof. Reg Bell and the campus went into grief-stricken silence. Reg is gone but never forgotten in the hearts of his students and colleagues. Prof. Bell defined student engagement and the campus will never be the same.

Looking ahead Many of the CETL on-campus professional development programs will continue with a vision to develop Educational Scholarship and improve the learning environment. Consider utilizing the many resources that CETL offers for professional development and consider becoming active in the American Society for Engineering Education.

In closing, I welcome your input on this CETL 2014-15 Annual Report.

Respectfully submitted by,  
***Dr. Terri Lynch-Caris, CETL Director and Prof. of Industrial Engineering***



## Overview: CETL Organization and Advisory Board

The CETL Organizational Structure for 2014-15AY, reporting through the Provost Office, consists of

- (1) Terri Lynch-Caris, CETL Director with a half-time faculty appointment
- (2) Shari Luck, First Year Experience (FYE) Coordinator
- (3) Cindy Donner, part time administrative assistant
- (4) Nannette Randolph, shared administrative assistant (with ASC and CCUE)
- (5) 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
- (6) 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 2014-15 (shown in photo):

- Prof. Karen Cayo, Department of Business
- Ms. Cindy Donner, CETL Administrative Assistant
- Prof. Jim Huggins, Computer Science Department
- Ms. Shari Luck, CETL First Year Experience
- Prof. Dan Ludwigsen, Physics Department
- Prof. Mark Palmer, IME Department
- Mr. Todd Steele, Graduate Studies Office
- Prof. Laura Sullivan, ME Department
- Prof. Mo Torfeh, ECE Department, KEEN/I2E representative
- Prof. Lihua Wang, Chemistry Department
- Mr. Dale Weighill, Executive Dean of Professional Development & Experiential Learning –  
Mott Community College
- A-Section students - Academic Council representative and Work Study Students
- B-Section students - Academic Council representative and Work Study Students



Six Advisory Board Meetings were held during the 2014-15 academic year:

### Summer 2014

August 1  
11 attendees

September 5

9 attendees

### Fall 2014

October 8  
11 attendees

December 5

11 attendees

### Winter 2015

March 12  
8 attendees

### Spring 2015

May 14  
11 attendees

## Distinguished Faculty Speaker 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. The Provost Office 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.

### Distinguished Faculty Speakers during 2014-15 Academic Year:

- Dr. Raghu Echempati, Professor of Mechanical Engineering - *Teaching and Learning Experiences as a Fulbright Specialist in Thailand* (9/11/14)
- Dr. James Zhang, Provost and Professor of Electrical Engineering - *A Linear Prediction Based Edge Detection Method with Entropy Thresholding* (10/30/14)
- Dr. James Gover, Professor Emeritus Electrical and Computer Engineering - *Why Electric and Plug Hybrid Vehicles Will Prevail: How to Accelerate Adoption* (11/6/14)
- Dr. Pat Atkinson, Professor of Mechanical Engineering - *Bioengineering Innovation: Kettering Students are the Medical Innovators of Tomorrow!* (12/4/14)
- Dr. Ruben Hayrapetyan, Professor of Mathematics - *Ill-posed problems or Journey Behind Calculus* (1/29/15)
- Dr. Janet Berlin-Fornari, Professor of Mechanical Engineering - *Don't Forget About Crash Safety When Preparing for the Family Vacation* (2/26/15)
- Dr. Ron Kumon, Assistant Professor of Physics - *In Search of Targeted Cancer Treatment: Magnetic Fluid Hyperthermia and Ultrasound Mediated Treatments* (3/19/15)
- Dr. Kevin Bai, Assistant Professor of Electrical Engineering - *Next-Generation Power Electronics Technologies in Vehicle Electrification* (4/16/15)
- Dr. Jonathan Wenzel, Assistant Professor of Chemical Engineering - *Giving Agricultural Byproducts a Second Chance by Producing Value-Added Products* (5/7/15)
- Dr. James Zhang, Provost and Professor of Electrical Engineering - *Empirical Mode Decomposition, Hilbert-Huang Transform, and their Applications* (5/28/15)
- Dr. James Gover, Professor Emeritus Electrical and Computer Engineering - *Evolution of Innovation Models: Implication for Engineering Education* (6/11/15)



Photo: Dr. Janet Berlin-Fornari,  
Professor of Mechanical Engineering



## Invited Guest Speakers

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



Photo: Dr. Doug Melton,  
KEEN Program Director

Dr. Doug Melton, KEEN Program Director – *Best Teaching Moments* (77 attendees on 7/31/14)

Prof. Melissa Marshall - *Talk Nerdy to Me* Workshop (19 attendees on 10/24/14)

Prof. Melissa Marshall - *Bullets Kill: Transforming Slide Design* Presentation (30 attendees on 10/24/14)

Dr. Rebecca Cox - *The College Fear Factor* Quad Pod Event (33 attendees on 2/12/15)

Dr. Jennifer Mott- *Team Based Learning* Workshop (21 attendees on 3/25/15)



Photo: Dr. Jennifer Mott and Kettering faculty  
at Team Based Learning Workshop

## Campus Wide Teaching and Learning Workshop

The first annual **CETL Teaching Workshop** was held September 24, 2014 with over 50 participants engaging in collaborative and informative sessions. The stated goal of the workshop was to take the first steps to become a Learning University. A learning organization is a group of people working together collectively to enhance their capacities to create results they really care about.

The half-day workshop began with a Breakfast of Champions with table discussions led by university leaders and corresponding to the Values stated by True Kettering:

Excellence – President Robert McMahan

Creativity – Dr. Christine Wallace

Integrity – Dr. Don Rockwell

Respect – Ms. Beth (Ewald) Wilcox

Collaboration – CETL

An introductory keynote presentation by the CETL Director described the goals for the workshop.



### Lightning Learning Sessions

The day began with Lightning Learning Sessions designed to create informal, interactive opportunities to learn about the different resources available to faculty at Kettering University. Each session was no longer than 5 minutes and all participants rotated through with a unique gift provided at each table. Candy, thumb drives and CETL swag added value to the experience. The lightning sessions included:

- Video Operations at Kettering University (B. Beck)
- Teaching with Technology (M. Palmer)
- Kettering Internal KEEN Grant Proposal (M. Torfeh)
- Service Learning (L. Sullivan)
- i2e Course of Study (M. Tavakoli)
- CCUE (M. Sanders)
- Professional Development Modules (C. Ethington)
- First Year Experience – FYE (S. Luck)
- Kettering Global Campus (C. Wallace)
- Blackboard: New Features for Fall 2014 (T. Rodgeron)
- Teaching Strategies for International Students (B. Alzahabi)
- Teaching Tips for a New Class (J. Huggins)

### Concurrent Learning Sessions

The 45 minute Workshop Sessions provided more in-depth presentations with ideas and tips for the classroom. Participants could choose two of the concurrent sessions.

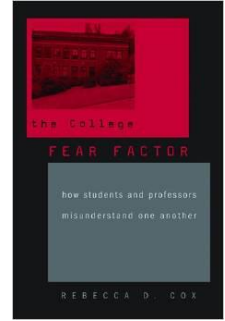
- Collaborative Course Development for Online Classes (C. Wallace)
- Multi-Disciplinary Classroom Initiative (S. Luck, L. Wang, M. Sanders, C. Ethington)
- Teaching Circle - Teaching with Technology (M. Palmer)
- Teaching Circle - i2e KEEN (M. Torfeh, M. Tavakoli)
- Collaboration between CETL & the Faculty Senate (R. Stanley, D. Stodola, J. Huggins, T. Lynch)
- Blackboard: New Tools for Improving Content Creation (T. Rodgeron)



## Quad-POD: *The College Fear Factor*

The book, *The College Fear Factor*, by Dr. Rebecca Cox, was promoted and available to all faculty members. We are privileged to have interacted with Rebecca Cox during multiple events held January 22-23, 2014 on the Quad Pod campuses:

- Kettering campus workshop: *Beyond the College Fear Factor* - Attended by over 30 Kettering faculty members
- Quad-Pod Dinner at UM-Flint - Attended by approximately 77 faculty and staff from Kettering, UM-Flint, Mott, Baker and guests
- Dr. Cox held individual campus workshops on the campuses of UM-Flint, Mott and Baker

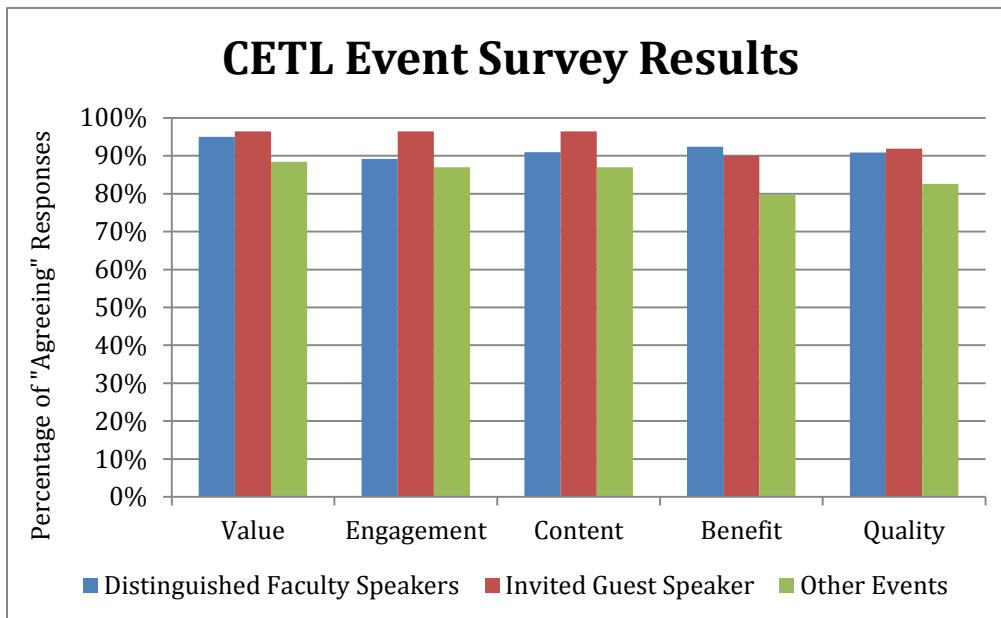


Kettering campus workshop Dr. Cox was well received by thirty-three (33) faculty members at the on-campus workshop. She provided an engaging presentation with an exercise that stumped the brilliant faculty in attendance in order to show how our students feel when they walk into the classroom.

Quad-Pod dinner at UM-Flint The dinner at UM-Flint was attended by faculty and staff from Kettering University, UM-Flint, Baker College and Mott Community College. The evening began with a skit by the theater students from UM-Flint setting the scenario of how students perceive their classroom experience.

## CETL Event Assessment

Every 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. Complete details on individual events can be found in the appendix. 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.

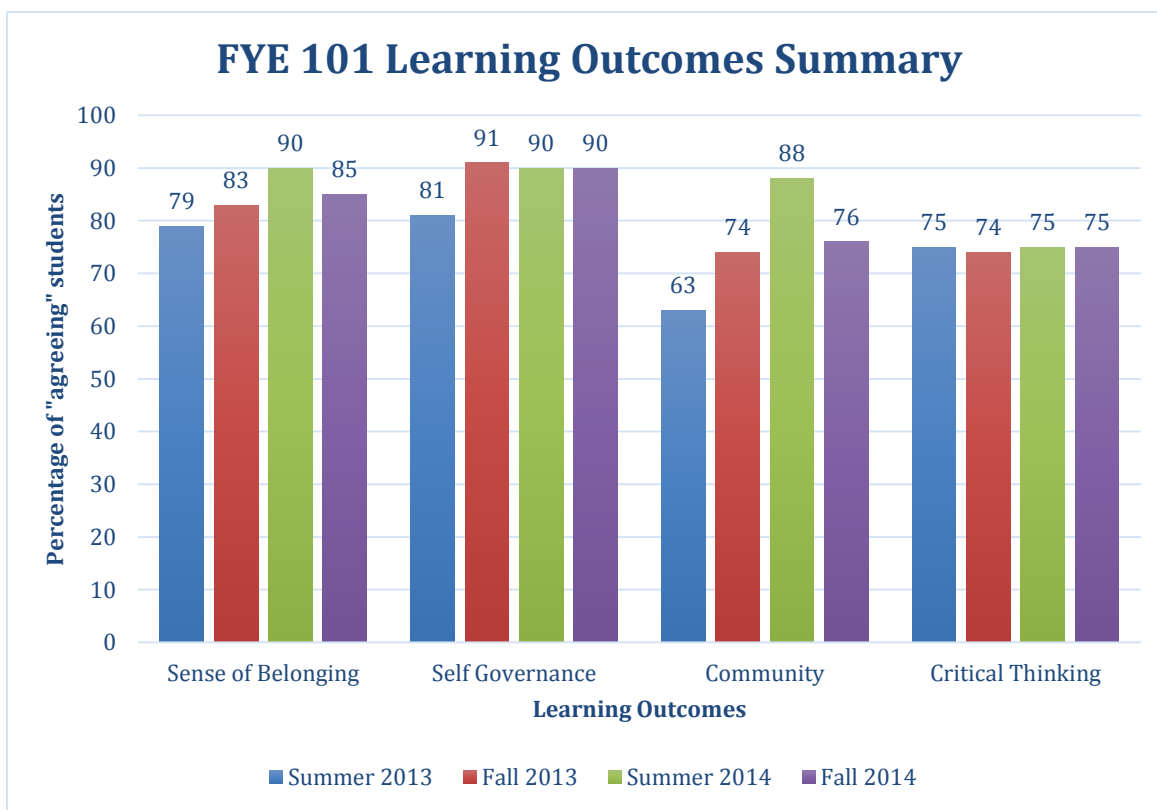
## First Year Foundations Course (FYE101) - Overview and Assessment

FYE exists to provide incoming students with a sense of belonging to Kettering University. *FYE101 – First Year Foundations* replaced the previous orientation course *ORTN101 – Learning, Teamwork and Success*. FYE101 was offered for the first time in summer/fall 2013 with the faculty members on the CETL Advisory Board serving as a Multi-Disciplinary Curriculum Committee to initiate the course approval process. FYE Coordinator, Shari Luck, reports to the CETL Director and the CETL/FYE relationship inspires excellent teaching through course design to increase student retention.



Photo: Ms. Shari Luck reports through CETL to focus on FYE

In the FYE101 instructional model, classes meet for one hour per week with less than 15 students per section facilitated by a full-time faculty/staff member and an upper-class peer mentor. A flipped classroom teaching style, common syllabus and regular interaction provide first year students with the support needed for a successful transition from high school. Stipends are paid from the CETL budget.



Thanks to all of the FYE101 Instructors and Peer Mentors for providing a sense of belonging to our new students.



Photo: FYE101 Peer Mentors with Ms. Shari Luck

## New Faculty Orientation

Ten new faculty members were welcomed to campus in the 2014-15 Academic Year. Orientation events included two intensive days before classes started. The agenda focused on the different departments and services on campus. Follow-on events were hosted throughout the year:

New Faculty Orientation ending with Convocation (July 9 -10, 2014)

Commercialization 101: Presented by Office of Sponsored Research (July 21, 2014)

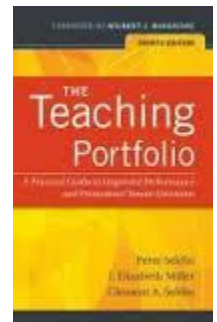
Partners in Learning: Presented by Co-op Office (August 4, 2014)

International Programs: Presented by the Office of International Programs (Sept 4, 2014)

Teaching Portfolios: Presented by Center for Excellence in Teaching and Learning (Jan 16, 2015)

### New Faculty Members:

- Prof. James Cohen – Biology
- Prof. Matt Causley – Math
- Prof. Farnaz Ghazi-Nezami – IME
- Prof. Satendra Guru – ME
- Prof. Whitney Hardin – LS
- Prof. Laura Jordan Mebert – LS
- Prof. Veronica Moorman – Chem/Biochem
- Prof. Ronald Tackett – Physics
- Prof. Allan Taylor – ECE
- Prof. Xuan Zhou – ECE



### Plus other recent faculty:

- Prof. Gillian Ryan – Physics
- Prof. Yunsheng Wang - CS



## 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. A total of twenty-one (21) FYE101 Teaching Circle meetings were held in 2014-15.

**The Innovation to Entrepreneurship (i2e) Teaching Circle** shares information about KEEN Topical grant opportunities for bringing i2e into the classroom. Faculty members share their ideas and experiences for continuous improvement. Support and encouragement of the KEEN ideals was encouraged through the application of grant funds.

The Innovation to Entrepreneurship initiative is led by Profs. Massoud Tavakoli and Mo Torfeh.

Date	Speaker	attendees
8/21/14	Dr. Christine Wallace	20
9/2/14	i2e KEEN Symposium	15
10/20/14	Dr. Michael Callahan	23
2/10/15	i2e Internal Grant Recipients	23
3/5/15	i2e Internal Grant Recipients	20
4/14/15	i2e Internal Grant Recipients	20
5/26/15	Dr. Robert McMahan	48
6/2/15	i2e Internal Grant Recipients	18
6/4/15	i2e Special Event – Dr. Michelle Ammerman	20
	<b>TOTAL</b>	<b>207</b>



Photo: Prof. Mo Torfeh leads the i2e Teaching Circle faculty discussion

The **Teaching with Technology Teaching Circle** has recently been formed and 18 members attended the first meeting in April. The Teaching with Technology Teaching Circle is led by Prof. Mark Palmer.

## 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 topic. For the Winter 2015 Term and Spring 2015 Term, CETL extended an invitation to each Academic Department to lead a discussion of their choice. Seven departments stepped up to lead the discussion.



<b>Tuesday Talks - Date and topic -</b>	Attending
Co-op Experiential Education Working Group (8/11/14)	9
Blackboard: Creating Content – led by Tracey Rodgerson (10/21/14)	14
Blackboard: Creating Content – led by Tracey Rodgerson (10/22/14)	5
Blackboard: Creating Groups – led by Tracey Rodgerson (11/5/14)	11
Blackboard: Creating Groups – led by Tracey Rodgerson (11/6/15)	1
Blackboard: Grade Center – led by Tracey Rodgerson (12/9/15)	7
Blackboard: Grade Center – led by Tracey Rodgerson (12/11/15)	5
“Flip the Tuesday Teaching Talk: An Interactive Appreciative Inquiry Exercise led by Prof. Laura Sullivan – Mechanical Engineering Department (1/20/15)	10
“Solving Open Ended Problems in the Classroom” led by Prof. Jonathan Wenzel – Chemical Engineering Department (1/27/15)	10
“Mathematics and Statistics Education in STEM Programs” led by Prof. Leszek Gawarecki – Math Department (2/3/15)	13
Blackboard Training: Creating & Grading Assignments in Blackboard led by Tracey Rodgerson (2/4/15)	8
“Do We Really Want to Know our Audience in Introductory Physics Courses?” led by Prof. Dan Ludwigsen – Physics Department (2/17/15)	11
“Order from Chaos: Assessment & Evaluation of Design in a Team Environment” led by Prof. John Geske – Computer Science Department (3/17/15)	6
Changing and Automating Services in the Registrar’s Office – led by Mike Mosher (5/5/15)	8
“Writing Across the Curriculum” Led by Prof. Denise Stodola – Liberal Studies Department (5/12/15)	13
“Refining a Class Using Reflection Papers and Rubrics” led by Prof. Karen Cayo and Prof. Ken Williams – Business Department (6/9/15)	8
<b>Total Faculty/Staff Hours (July '14- June'15)</b>	<b>139</b>

## Collaborative Events

### Student/Faculty Forums

The Academic Council works collaboratively with CETL to bring students and faculty together for honest discussion and provide an opportunity for students and faculty to ask questions. Forums have been held during past years on topics related to improved teaching, using technology in the classroom and ethical decisions. The main focus of the forum held on July 24, 2014 was *Building Ethics into the Culture of the University*. A major accomplishment from the initiative of a core group of students resulted from forums and many follow-up discussions on ethics. A Student Ethics Club was formally approved as a KSG Club in the Spring of 2015 under the leadership of student, Lisa Mitchell. The first elected president of the A-Section club was Denis Volobuev. A-Section will work collaboratively to inspire a similar student group in B-Section and agree on an honor code. This group of students will influence the development of an ethics module within FYE101 First Year Foundations Course.

### ITAC Meetings

The purpose of the Information Technology Advisory Committee (ITAC) is to have active participation from all Kettering constituents on prioritization recommendations for Information Technology (IT) efforts, clear communications of IT efforts, and strategic alignment of IT efforts with Kettering's mission. The CETL Director leads the Academic Advisory Committee. Four meetings were held during this academic year: 7/31/14, 11/20/14 , 2/2/15, 3/2/15.

### University Advancement Grant Writing Process

Representatives from University Advancement were available during the lunch hour from April 20-24, 2015. Ken Zahrt and Eve Vitale met with interested faculty members to discuss the support offered by University Advancement in the grant writing process and the positive results from faculty collaborations. The Faculty Project Support Request form can be found on the Kettering website.



#### FACULTY PROJECT SUPPORT REQUEST

**Instructions:**

1. Complete the following as thoroughly as possible.
2. Present this information to your Department Head for approval and signature.
3. Send to University Advancement via inter-org mail – Attn: Ken Zahrt, Corporate and Foundation Giving, Fourth Floor, Campus Center – or via email to kzahrt1@kettering.edu. If you have any questions, please call ext. 9527.

Upon receipt a member of our Advancement team will contact you to discuss next steps.



## Teaching Awards 2014

Five (5) faculty members were honored with CETL Teaching Awards and presented at the Kettering University Celebration of Excellence on September 18, 2014. A complete description of the award criteria can be found on the CETL website. Dr. Michael Callahan, Professor of Liberal Studies, led the Teaching Awards Committee to solicit nominations for the 2014 teaching awards. A total of 34 nominations were received for 23 different faculty members before the deadline of June 1, 2014.

### Outstanding Teaching Awards:

Prof. Corneliu Rablau  
Prof. Thomas Ngniatedema  
Prof. Hua “Kevin” Bai

**Tutt Award for Innovation in Teaching:** Prof. Jonathan Wenzel

**Faculty Distinguished Citizenship Award:** Prof. Girma Tewolde



Photo: Prof. Jonathan Wenzel with President Robert McMahan at the Celebration of Excellence

## Faculty Support

Innovative Faculty/Staff Members have proposed and received financial support for transformative learning experiences.

### Online Course Development Financial Support from 2014-15 Budget

- Prof. Raghu Echempati (MECH212) with peer assessment by Prof. Mohamed El-Sayed
- Ms. Caroline Ethington and Ms. Karen Westrick (PD1) with peer assessment by Ms. Shari Luck
- Prof. Mark Gellis (LIT315) with peer assessment by Prof. Denise Stodola
- Prof. Greg Hassold (PHYS114) with peer assessment by Prof. Dan Ludwigsen
- Prof. Denise Stodola (HUMN391) with peer assessment by Prof. Mark Gellis
- Prof. Lihua Wang (CHEM237) with peer assessment by Prof. Stacy Seeley
- Prof. Nancy Stock (MATH101) with peer assessment by Gina Rablau

### Travel Grant Financial Support

- Prof. Farnaz Ghazi-Nezami (Jointly funded with Provost Office)
- Prof. Jim Huggins (Jointly funded with Provost Office)
- Prof. Mo Torfeh

## KETT540: Environmentally Conscious Design

This unique multi-disciplinary course was originally developed with grant funds from the National Science Foundation. After the grant period ended, it became a burden for any single department to sustain. Thus, the course was renamed from IME540 to KETT540 to be sustained under CETL direction.



This team-taught, multi-disciplinary perspective is important to our student's learning and yet difficult to sustain within a single department. Thus, the CETL budget includes funding for sustained course administration and the course is delivered online once per year in alternate winter and spring terms.

### Course Learning Objectives:

1. Provide a critical analysis of the historical, ethical, social, philosophical, and regulatory issues underlying the environmental impact of goods and services. (Dr. D. Stodola)
2. Evaluate life cycle analyses of products and/or processes and propose strategies for addressing environmental impact while still meeting design and economic requirements. (Dr. C. Hoff)
3. Conduct a material selection with a goal of reducing the environmental impact of a product and/or process while simultaneously reducing material costs. (Dr. J. Aurandt)
4. Use appropriate tools to evaluate the environmental impact of a manufacturing process and recommend actions for reducing this impact and minimize production costs. (Dr. J. White-Newsome)
5. Propose design changes to a product to enhance recycling, reuse and/or remanufacturing capability with consideration of the economics of these activities. (Dr. T. Lynch-Caris)
6. Identify and apply best practices in promoting the environment in a corporate setting. (Dr. A. Borchers)

## American Society of Engineering Education (ASEE)

CETL supports faculty with interests in educational scholarship and the CETL Director serves as the campus representative to ASEE. There are twenty-nine (29) ASEE members on campus with seven (7) new members joining through the Dean's Program. Six (6) Kettering faculty and staff attended the ASEE national conference in Seattle, WA on June 14-17, 2015 with presentations and leadership:

Dr. Raghu Echempati  
Dr. Farnaz Ghazi Nezami  
Dr. Dan Ludwigsen  
Dr. Terri Lynch-Caris  
Dr. L.B. McCune  
Dr. Diane Peters



Faculty are encouraged to become active in ASEE for professional development and dissemination of educational scholarship. There were many additional scholarly publications presented by Kettering faculty and all are encouraged to share their work with the campus through CETL events.

## Appendix: Individual Assessment Results

The following survey results are a mixture of students, faculty, staff and guests in attendance at each event.

<b>Distinguished Faculty Speaker Assessment Summary*</b> <b>Approx. Attendance=736</b> <b>(July '14-June '15)</b>	<b># of respondents</b>	<b>% of respondents</b>	<b>Response</b>
<b>Value:</b> This event was valuable.	376 18 2	94.9% 4.5% .5%	Agree No Opinion Disagree
<b>Engagement:</b> I was satisfied with the information and what I learned during this event.	353 36 7	89.1% 9.1% 1.8%	Agree No Opinion Disagree
<b>Content:</b> The material covered is useful for academic/ professional growth.	360 31 5	90.9% 7.8% 1.3%	Agree No Opinion Disagree
<b>Benefit:</b> I would like to attend this or a similar event again.	365 23 7	92.4% 5.8% 1.8%	Agree No Opinion Disagree
<b>Quality:</b> I would recommend this event to colleagues.	358 31 5	90.9% 7.9% 1.3%	Agree No Opinion Disagree

<b>Date</b>	<b>Invited Guest Speaker and Description</b>	<b># of attendees</b>  <b># of respondents</b>	<b>Survey Topics</b>	<b>Survey Summary</b>  <b>% Agree</b>
July 31, 2014	Dr. Doug Melton, KEEN Program Director – <i>Best Teaching Moments</i>	77/44	Value Engagement Content Benefit Quality	95.43% 97.73% 100% 86.36% 93.18%
October 24, 2014	Melissa Marshall - <i>Talk Nerdy to Me</i> Workshop	19		Survey not administered
October 24, 2014	Melissa Marshall - <i>Bullets Kill: Transforming Slide Design</i>	30/30	Value Engagement Content Benefit Quality	100% 100% 100% 96.77% 100%
February 12, 2015	Dr. Rebecca Cox - <i>The College Fear Factor</i> (Quad Pod Event)	33/18	Value Engagement Content Benefit Quality	88.89% 88.89% 77.78% 83.33% 77.78%
March 25, 2015	Dr. Jennifer Mott - <i>Team Based Learning</i> Workshop	21/18	Value Engagement Content Benefit Quality	100% 94.44% 100% 94.44% 88.89%

## Appendix: Individual Assessment Results (continued)

<b>"The Ethics of Cribs" Attendance = 66 (July 24, 2014)</b>	<b># of respondents</b>	<b>% of respondents</b>	<b>Response</b>
<b>Value:</b> This event was valuable.	30	83.33%	Agree
	3	8.33%	No Opinion
	3	8.33%	Disagree
<b>Engagement:</b> I was satisfied with the information and what I learned during this event.	29	80.54%	Agree
	7	19.44%	No Opinion
	0	0.00%	Disagree
<b>Content:</b> The material covered is useful for academic/ professional growth.	30	83.33%	Agree
	3	8.33%	No Opinion
	3	8.33%	Disagree
<b>Benefit:</b> I would like to attend this or a similar event again.	25	69.44%	Agree
	8	22.22%	No Opinion
	3	8.33%	Disagree
<b>Quality:</b> I would recommend this event to colleagues.	27	75.00%	Agree
	7	19.44%	No Opinion
	2	5.56%	Disagree

<b>/Date/ FYE 101 Instructor's Meetings and Training</b>	<b>Attending</b>
7/22/14 FYE 101 Instructor's Meeting	9
7/29/14 FYE 101 Instructor's Meeting	7
8/5/14 FYE 101 Instructor's Meeting	9
8/12/14 FYE 101 Instructor's Meeting	9
8/19/14 FYE 101 Instructor's Meeting	9
8/25/14 FYE 101 Fall Instructor Training	12
8/26/14 FYE 101 Instructor's Meeting	8
9/9/14 FYE 101 Instructor's Meeting	11
9/16/14 FYE 101 Instructor's Meeting	9
9/23/14 FYE 101 Instructor's Meeting	10
10/6/14 FYE 101 Instructor and Peer Mentor Training	9
10/14/14 FYE 101 Instructor's Meeting	12
10/28/14 FYE 101 Instructor's Meeting	9
11/10/14 FYE 101 Peer Mentor Meeting	17
11/11/14 FYE 101 Instructor's Meeting	13
12/2/14 FYE 101 Instructor's Meeting	13
3/3/14 FYE 101 Instructor's Meeting	12
3/24/15 FYE 101 Peer Mentor Meeting	14
5/19/15 FYE 101 Instructor's Meeting	8
6/12/15 Summer Instructor Training	10
6/15/15 Fall Peer Mentor Training	14
<b>Total Faculty/Staff hours (July '14 -June '15)</b>	<b>224</b>

## 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.



**Mission Statement:** To provide resources and opportunities for faculty, staff and students to become better teachers and learners.

**Vision Statement:** 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, Professor of Industrial & Manufacturing Engineering, became CETL's Interim Director on September 1, 2011 and was named the Director in December 2011.

The CETL Collaboration Room opened in October 2011 in a former classroom (Rm. 3-103) directly across from the Faculty Senate Conference Room. 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 is an open, inviting space to promote faculty and staff collaboration over coffee and snacks. A collection of journals, books, videos and other materials related to teaching and learning are housed within the library. Online resources will be continually updated on the CETL website.

The CETL Director is a half-time position reporting through the Office of the Provost. In 2012, the CETL organization grew to include First Year Experience (FYE) with a full-time FYE Coordinator. In fall 2013, a part-time administrative assistant was hired. CETL exists with a great deal of volunteer support from faculty, staff and students.

*"We are all teachers all the time"*

## Appendix: Distinguished Faculty Speaker Series

History with video archives on CETL website

Photo: Prof. Steven Nartker,  
Assistant Professor of  
Chemical Engineering



### Distinguished Faculty Speakers during 2011-12 Academic Year

Dr. Bill Riffe, IME Dept: The Many Hats of a Professor: Things I Learned at Kettering with lunch provided by KSG (12/2)

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 Dept-Chem Eng Program and Jennifer Auranndt, Chem/Biochem Dept: 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 Business: Supply Chain Mgt: The Beer Game (5/31/12)

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

### Distinguished Faculty Speakers during 2012-13 Academic Year:

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. Hodayun Tavaz, 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 Hizioglu, 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 2013-14 Academic Year:

Dr. Massoud Tavakoli, ME & KEEN/EAU, "KEEN Innovation to Entrepreneurship Scholar Program" (8/15/13)

Dr. Raghu Echempati, Mechanical Engineering, "Statics Concepts Inventory: Experiences and Outcomes from the NSF-CCLI Awards" (10/29/13)

Dr. Yaomin Dong, Mechanical Engineering, "Engaging Engineering Students by Improving their Spatial Visualization Skills" (11/7/13)

Dr. Richard Stanley, Mechanical Engineering, "Flipping the Dynamics Classroom" (12/5/13)

Dr. Chuck White, Manufacturing Engineering, Graduate Faculty, Industrial Engineering, "Engineering Licensure: From Point A to P.E." (12/12/13)

Dr. James Gover, Emeritus Electrical and Computer Engineering, "Innovation, R&D and Entrepreneurs" (2/6/14)

Dr. Gianfranco DiGiuseppe, Mechanical Engineering, "Solid Oxide Fuel Cells: A Technology Overview and Applications" (2/27/14)

Dr. Matthew Sanders, Professor of Industrial Engineering, "CCUE: Engaging in the Students' Transition to Professional Status" (3/13/14)

Dr. Juan Pimentel, Professor of Computer Engineering, "The Internet of Things: Issues and Opportunities" (4/24/14)

Dr. Thomas Ngniatedema, Assistant Professor of Business, "Selective Strategies in Customized Goods and Services" (5/8/14)

Dr. Robert Simpson, Provost, "Stomping Through the Swamp" (6/5/14)