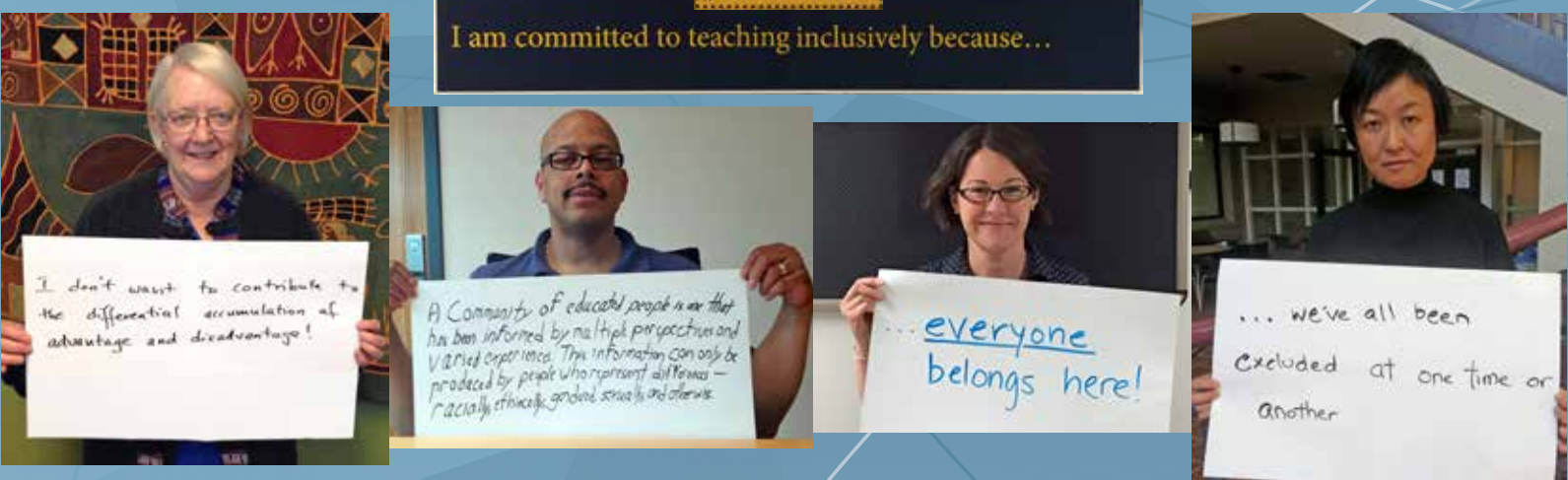




M | CRLT CENTER FOR RESEARCH ON LEARNING & TEACHING UNIVERSITY OF MICHIGAN

#CommitToTI
I am committed to teaching inclusively because...



2015 – 2016 Annual Report



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This report was compiled by Ryan Hudson, Matt Kaplan, Meg Bakewell, Amy Hamermesh, Jeri Hollister, Laura Gonzalez-Garcia, and Elaine Lande.

Executive Summary

Letter From Executive Director Matthew Kaplan

I was honored to be selected in July 2015 as the Executive Director of CRLT, the first, and one of the most highly respected teaching centers in the country. I have long held the view that a teaching center is most effective when it focuses on three key principles: First, centers are in the business of enabling change in teaching and learning practices at both institutional and individual levels. Second, a center's greatest institutional impact comes from partnering with academic leaders and faculty to advance their key initiatives. Finally, a center's value resides largely in its reputation for making a difference in the teaching practices of individual faculty and GSIs who turn to us for advice, inspiration, and support. As you will see in the pages that follow, CRLT's work in 2015-2016 put these principles into practice.



Institutionally, 2015-2016 saw ambitious plans for teaching and learning at the University of Michigan. Topping the list was a strategic planning process for the Diversity, Equity, and Inclusion (DE&I) initiative that engaged the entire campus in ongoing discussions about fostering inclusive learning environments. The expansion of this aspect of CRLT's portfolio is central to my vision for the center moving forward.

Besides DE&I, CRLT partnered strategically on other large-scale initiatives: (1) ongoing collaborations with the Transforming Learning for a Third Century (TLTC) initiative to promote engaged learning, (2) deepening connections with the Michigan Center for Interprofessional Education's growing network of health sciences faculty who are creating opportunities for learners to practice health care in truly interprofessional teams, not disciplinary silos, and (3) a re-envisioning of foundational courses campuswide with U-M's REBUILD committee.

As always, CRLT continued to support individual instructors from all of U-M's schools and colleges. Our grants and awards programs provided \$291,000 to 128 faculty. Over 2,700 faculty, GSIs, and instructional aides attended orientations, teaching academies, and workshops. CRLT staff provided approximately 1,800 individual consultations on teaching, and we collected midterm student feedback sessions from over 11,000 students.

None of this work would be possible without outstanding staff, and we are lucky to have a talented group dedicated to CRLT's mission. Replacing colleagues who have moved on to new challenges are new colleagues who bring fresh perspectives to our work. Former Director of Assessment Mary Wright now leads Brown University's teaching center. Her successor Malinda Matney (U-M PhD in higher and postsecondary education) oversaw U-M's student affairs research office for 15 years. New instructional consultants include Ronit Ajlen (U-M PhD in psychology), Tazin Daniels (Michigan State University PhD in anthropology), and Nicole Tuttle (University of Chicago PhD in chemistry). And, following a national search, Terisha Pinder-Grover (U-M PhD in mechanical engineering) was named the new Director of CRLT in Engineering. With more than a decade of faculty development experience, Terisha will do an excellent job helming that ship!

A handwritten signature in black ink, appearing to read 'Matthew Kaplan'. The signature is fluid and cursive, with a large loop at the end.

Matthew Kaplan, Executive Director
Center for Research on Learning and Teaching

CRLT's Core Services

Mission Statement

The mission of the Center for Research on Learning and Teaching (CRLT) is to promote excellence and innovation in teaching in all nineteen schools and colleges at the University of Michigan. CRLT is dedicated to the support and advancement of evidence-based learning and teaching practices and the professional development of all members of the campus teaching community. CRLT partners with faculty, graduate students, postdocs, and administrators to develop and sustain a university culture that values and rewards teaching, respects and supports individual differences among learners, and creates learning environments in which diverse students and instructors can excel.

Support for Teaching

Serving all members of the teaching community, CRLT offers consultations on pedagogical and curricular issues, along with a range of grants programs to fund instructional innovation. CRLT also presents orientations and seminars for campuswide audiences, as well as workshops and retreats tailored to the needs of academic units. *2015-2016 highlights: writing and dissemination of five Occasional Papers on promoting and assessing TLTC goals, development of an IPE fellows program*

Digital Education

Through consultations, workshops, and web resources, we help instructors select and integrate into their teaching the technologies that best meet their goals for student learning. We collaborate with other offices to assess the value of emerging technologies for teaching and learning and to disseminate effective practices for teaching with technology. *2015-2016 highlights: evaluation of Canvas implementation, Canvas Large Course Institute, online Postdoctoral Short Course*

Diversity and Inclusion

CRLT advances a teaching culture that attends to diversity and fosters positive learning climates for students and instructors of all backgrounds and social identities. CRLT highlights inclusive teaching in our programs and consultations, and we offer customized workshops and resources on diversity-related topics for faculty, graduate students, and departments. *2015-2016 highlights: May Inclusive Teaching @ Michigan series of 17 workshops, collaboration with Faculty Liaisons for Inclusive Teaching*

Theatre

CRLT Players sessions use theatre to seed reflection about issues that negatively impact inclusive climate and to spark dialogue about strategies for addressing them. The Players perform for faculty, graduate students, and administrators. Their repertoire focuses on both classroom and institutional climate. *2015-2016 highlights: new sketch on responding to incidents that negatively affect campus climate, One Thousand Cuts*

Assessment and Research

CRLT focuses on projects that generate evidence useful to faculty and administrators for improving courses or curricula. Services range from consultations about effective methods to large-scale projects that involve data collection, analysis, and facilitation of faculty discussions about results. *2015-2016 highlights: evaluation of impact of smaller enrollment in Math 115/116, evaluation of the Stamps social engagement requirement*

CRLT Year at a Glance

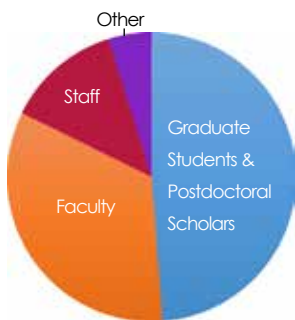
► SUMMARY of CRLT SERVICES

Total Services Provided	13,657
(Some individuals receive multiple services)	
Total Services for U-M Clients	12,617
Campuswide programs	6,182
Customized programs for departments, schools, & colleges	4,312
Consultations	1,797
Instructors receiving midterm student feedback (MSF) sessions	326
Total Services for External Clients	1,040
Presentation and workshop participants	169
Audience members at external theatre performances	482
Consultations and other services	389

► SERVICES by SCHOOL/COLLEGE

<i>School or College</i>	<i>Individuals Services</i>	
Architecture and Urban Planning	78	218
Art & Design	53	139
Business	78	154
Dentistry	50	320
Education	108	281
Engineering	970	2,131
Information	81	157
Kinesiology	31	130
Law	48	98
LSA	1,413	4,482
Medicine	241	557
Music, Theatre & Dance	91	182
Natural Resources and Environment	84	235
Nursing	82	200
Pharmacy	78	239
Public Health	160	312
Public Policy	49	80
Rackham	1	1
Social Work	95	256
Administration	90	446
Libraries (U-M)	63	171
Other	77	138
U-M Dearborn	17	27
U-M Flint	7	25
Individuals, Unit Unknown	63	-
Services, Unit Unknown	-	1,638
TOTAL:	4,108	12,617

► U-M Client Profiles



4,108 Unique Individuals

- Graduate Students & Postdoctoral Scholars ... 2,005
- Faculty 1,376
- Staff 529
- Other 198



Faculty by Rank

- Assistant Professor 359
- Lecturer 283
- Professor 221
- Associate Professor 199
- DDC (Deans, Directors, Department Chairs) 171
- Other 143

► CONSULTATION SERVICES

- 1,797** Consultations
- 326** Instructors receiving midterm student feedback sessions (MSFs)
- 11,422** Students served by MSFs
- 13** U-M offices advised
- 29** Committees with CRLT representatives

► FACULTY GRANTS & AWARDS

- 3** Award competitions
- 7** Grants competitions
- 128** Faculty recipients
- \$291,000** Distributed by CRLT

► ONLINE

- 700,386** Visits to CRLT website from
- 226** Countries
- 22** Blog posts
- 1,912** Twitter followers

GLOBAL REACH

-  58 U.S. educational institutions
-  10 other U.S. organizations
-  26 foreign institutions



► CRLT PLAYERS

- 36** Performances at U-M
- 10** External performances
- 14** Different sketches performed
- 3,036** Audience members

► PROGRAMS FOR GRADUATE STUDENTS/POSTDOCS

- 4** Preparing Future Faculty (PFF) programs
- 585** Participants in PFF programs
- 2** Teaching certificate programs
- 209** New enrollees in certificate programs
- 34** Graduate teaching consultants

► RESEARCH & PUBLICATIONS

- 18** Schools and colleges using CRLT assessment services
- 34** Investigating Student Learning grantees
- 5** CRLT action research projects
- 29** Publications and presentations



CRLT Community

CRLT Staff For biosketches of CRLT Regular Staff, visit www.crlt.umich.edu/about-crlt/staff-directory.



Leadership Team

Matthew Kaplan
Sara Armstrong
Deborah Meizlish
Mary Wright

CRLT-Engin

Tershia Pinder-Grover
Carol Lagemann
Bill Lloyd
Steve McKenzie

CRLT Consultants

Ronit Ajlen
Meg Bakewell
Theresa Braunschneider
Tazin Daniels
Victoria Genetin
Michelle Majeed
Rachel Niemer
Gina Shereda
Erping Zhu

Theatre Program

Sara Armstrong
Courtney Riddle
Kathryn Pamula

Postdoctoral & Other Research Associates

Tracy Bartholomew
Sam Hallman
Stephanie Kusano
Elaine Lande

Administrative Staff

Lori Dickie
Ryan Hudson
Lorraine Robert

Project Staff

Pam Fisher
Laura Gonzalez-Garcia
Jeri Hollister
Melinda Thompson
Matthew Yettaw

Graduate Teaching Consultants See p. 20 for a description of the GTC program.



Christie Allen
Jess Beck
Thomas Bridges
Katherine Crocker
Anna Edmonds
Merideth Garcia

Julie Ghekas
Sophie Hunt
Grant Jackson
Lisa Jong
Caitlin Lawson

Hannah McMurray
Francesca Minonne
Stephanie Moore
Karen Nielsen
Ariana Orozco

Katy Peplin
Rebecca Pickus
Rohan Sud
Sarah Suhadolnik
Sarah Sutter

Engineering Teaching Consultants See p. 20 for a description of the ETC program.



Bill Arthur
Jonathan Beaumont
Emily Deschenes
Dev Goyal

Phillip Hargrove
Molly Kozminsky
Ramya Kumar

Mai Le
Lavinia Li
Sahithya Reddivari

Kathleen Ropella
Francisco Sotomayor
Steve Wilson

CRLT Faculty Advisory Board

The board advises the executive director on policies and activities that enable CRLT to fulfill its mission. Important issues include, but are not limited to, program and research objectives and priorities, grants competitions, resource procurement and allocation, national project participation, and intra-university relations. Board members play a key role as liaisons between the center and the rest of the university community. The advisory board typically meets 4-5 times during the academic year.



Sandro Cinti
Professor of Internal Medicine



Pamela Davis-Kean
Professor of Psychology



John Foster
Professor of Nuclear Engineering and
Radiological Sciences



Martha Jones
Arthur F. Thurnau Professor of
History, Afroamerican and African Studies,
and Law



Gavin LaRose
Lecturer IV in Mathematics



Anne Mondro
Associate Professor of Art and Design



Betty Overton
Clinical Professor of Education



Ivette Perfecto
George Willis Pack Professor of Ecology
and Natural Resources and Environment



Philip Richards
Clinical Professor of Dentistry



Luke Shaefer
Associate Professor of Social Work



Steven Skerlos
Arthur F. Thurnau Professor of
Mechanical Engineering



Gretchen Spreitzer
Keith E. and Valerie J. Alessi Professor
of Business Administration



John Wolfe
Arthur F. Thurnau Professor and
Associate Chair of Chemistry

New and Noteworthy

Inclusive Teaching @ Michigan Series



In May 2016, CRLT, in collaboration with IGR and the LSA Inclusive Pedagogies Committee, hosted a series of 17 workshops for building skills in inclusive teaching. The series drew high ratings from nearly 360 participants from all 19 schools and colleges. The sessions highlighted concrete pedagogical practices that instructors can adopt to deliberately cultivate a teaching-learning environment where all students are treated fairly, have equal access to learning, and feel welcome, valued, challenged, and supported in succeeding in their field of study. The series opened with a premiere performance of the new CRLT Players sketch, *A Thousand Cuts: Responding to Student Climate Concerns* (see p. 10). Subsequent workshops

“ I registered for six workshops and am very glad I did so!

Inclusive Teaching Participant ”

“ The timeframe was great; I can integrate these thoughts into my fall classes.

Inclusive Teaching Participant ”

addressed topics such as designing courses with diverse learners in mind, cultivating inclusive learning environments, and responding to challenges in the classroom.

A Framework for Professional Development Around Inclusive Teaching

In July 2014, in preparation for the university-wide diversity strategic planning initiative, the Vice Provost for Equity, Inclusion, and Academic Affairs set up a task force to design a faculty development program for inclusive teaching. The task force included representatives from CRLT, the School of Education, and The

Program on Intergroup Relations (IGR). Throughout the 2014-2015 academic school year, the task force mapped U-M's existing opportunities for faculty development and designed a flexible model for new faculty, with the intent of eventually scaling up efforts to support all faculty in achieving excellence through inclusive teaching. In August 2015, the model was piloted by adapting the LSA Teaching Academy to focus more intensely on issues of inclusion and equity in the classroom. CRLT staff also conducted focus groups with a wide range of faculty across the university in order to raise awareness of the proposed professional development framework and gather early feedback on its perceived strengths and challenges. At the same time, CRLT and the Office of the Vice Provost began disseminating the model to a group of Faculty Liaisons for Inclusive Teaching (representatives from each school and college), who would in turn be responsible for working with their own unit's leadership and faculty allies to adapt the model and implement their version of it locally. After an orientation in December 2015, CRLT consulted with the liaisons in March and April 2016 to help them develop plans for building capacity and to facilitate their learning from each other's efforts. The professional development framework was shared by task force members at national conferences, including the November 2015 annual meeting of the Professional and Organizational Network (PON) and the January 2016 annual meeting of the Association of American Colleges and Universities (AAC&U).

Supporting the TLTC Initiative

In collaboration with the office of the Vice Provost for Global Engagement and Interdisciplinary Academic Affairs, CRLT provided substantial infrastructure for work being carried out under the aegis of the Transforming Learning for a Third Century (TLTC) Initiative. In 2015-2016, CRLT published five Occasional Papers focused on how faculty can foster and assess each of the core TLTC learning outcomes in their classes and programs: 1) creativity, 2) intercultural engagement, 3) social/civic responsibility and ethical reasoning, 4) communication, collaboration and team-

work, and 5) self-agency, and the ability to innovate and take risks.

In conjunction with the Occasional Papers, CRLT staff developed an Engaged Learning at Michigan website that launched in May 2016. In addition to documenting the history of the TLTC initiative, the website includes a database of funded projects, a showcase of assessment in selected TLTC projects, as well as introductory assessment tutorials (crlt.umich.edu/engaged-learning).

To create communities of practice across the disciplines, CRLT hosted five lunch gatherings on topics related to engaged learning. Participants included TLTC grant winners, as well as faculty and staff who work on engaged learning. Three of the lunches concentrated specifically on how to foster and assess the TLTC learning goals, while the other two focused on pedagogical challenges and opportunities associated with TLTC high-impact practices, such as the programmatic challenges associated with partnering with organizations outside the university. In addition to the lunch series, the May 2016 Provost's Seminar on Teaching disseminated engaged learning practices. The project leads for each of the 12 Transformation grants and CRLT staff co-facilitated sessions that introduced the broader U-M faculty community to the innovative teaching practices funded by the TLTC initiative.



Supporting the Michigan Center for Interprofessional Education

Nine schools and colleges from all three University of Michigan campuses embarked in 2015 on an ambitious five-year initiative to transform the way faculty teach more than 4,000 health professions students. Based on national trends in the health professions, Interprofessional Education (IPE) offers learners opportunities to collaborate in the kinds of interdisciplinary teams that already characterize the best health research and practice. The Michigan Center for Inter-

professional Education is the coordinating body for three workgroups that will foreground collaborative education in the health professions by cultivating 1) a core interprofessional curriculum, 2) faculty capacity for teaching in innovative learning environments, and 3) interprofessional education scholarship. The project was funded by a Transforming Learning for a Third Century (TLTC) Transformation Grant.



CRLT has collaborated with the IPE Center since its inception and continued to support multiple facets of IPE in the 2015-2016 academic year. At the curricular level, CRLT staff organized and facilitated two retreats during which faculty began planning four IPE courses to run in 2016-2017: a MOOC-like introduction to interprofessional education experiences and face-to-face courses on ethics, motivational interviewing, and the initial clinical experience. To build faculty capacity for IPE efforts, CRLT organized an Interprofessional Leadership Fellows Program, an 18-month faculty learning community that brought together 16 faculty from across the health professional schools and colleges. Participants discussed key IPE readings and frameworks for change and began developing interdisciplinary team projects. (See also p. 17)

Additional related events that CRLT helped plan and/or facilitate included the first expansion of Medical Education Day into Health Professions Education Day in September 2015, a November 2015 workshop that helped faculty teaching the "Team-Based Clinical Decision Making" course sharpen their skills for leading large group discussions and for managing conflict in the classroom, and a May 2016 retreat for the IPE Executive Committee.

REBUILD Wrap Up and Re-Visioning: The Foundational Course Initiative

As the NSF-funded REBUILD program entered its third and final year, CRLT staff worked with the REBUILD committee to create a shared vision for the next generation of STEM education at U-M. In winter 2016, REBUILD and CRLT launched the planning process by conducting campuswide focus groups with key faculty and administrators in the STEM community to articulate shared goals and identify common needs and resources. These efforts led to a vision for a broader initiative beyond STEM, focused instead on the redesign of foundational courses across the disciplines. These courses often have large enrollments and are essential to a discipline – serving as prerequisites in a major or fulfilling key requirements for non-majors. Transformation is an opportunity to infuse this special category of courses with evidence-based, high-impact teaching methods that foster a positive learning environment for all students. This ongoing discussion will continue with the organization of a fall 2016 Provost's Seminar, *Transformed: Foundational Courses for a Third Century*, which will convene STEM and non-STEM faculty to contribute to a proposal seeking institutional support for course redesign efforts in foundational courses across the university.

Sketch on Student Climate Concerns: A Thousand Cuts

In response to a nationwide increase in student activism and the launch of U-M's Diversity, Equity, and Inclusion strategic planning process, the CRLT Players developed *A Thousand Cuts: Responding to Student Climate Concerns*. In this performance, participants think together about the many forces that shape campus climate and work toward developing or refining a skill set that will allow them to respond productively and

“It's compelling to see these behaviors acted out, rather than just discussing hypotheticals.”

Faculty Participant

compassionately to individuals who have negative experiences of climate inside and outside of the classroom.

” In addition to depicting ways that campus

climate issues can undermine students' ability to succeed academically, the sketch also invites instructors to be critically reflective about their

“It's useful to hear and practice using the language of inclusive teaching. The session leader was really a role model in that way.”

Faculty Participant

own listening practices. Advisors from LSA's Newnan Academic Advising Center served as a pilot audience for the piece before it premiered as the kick-off event for the inaugural Inclusive Teaching @ Michigan series in May 2016. At least ten performances for faculty and GSI audiences during the 2016-17 academic year have been requested.

Faculty Communities for Inclusive Teaching (FCIT)



With funding from the Vice Provost for Equity, Inclusion, and Academic Affairs, CRLT awarded small grants in winter 2015 to seed faculty-led communities that proposed to learn together about inclusive teaching. The program leverages existing expertise and interest to build faculty leadership and capacity for creating a positive campus climate. Ten groups of faculty from the inaugural cohort disseminated their efforts at a November 2015 poster fair and strolling lunch, and a second cohort will do the same in November 2016. Participants report that the institutional endorsement, support, and accountability structure have helped them implement valuable projects they might otherwise have put off. The program has secured

“Though this is the smallest grant I have ever received, it has had the greatest impact.”

Faculty Participant

listed on p. 40.

Canvas Large Course Institute

As the deadline approached for the final transition from from CTools to Canvas as U-M's Learning Management System, staff from CRLT and partner organizations on campus heard from numerous faculty who teach large courses that they were concerned about their ability to make the transition. As a result, a Canvas Large Course Institute was convened in May 2016 by CRLT, in collaboration with Information and Technology Services (ITS), LSA Instructional Support Services (ISS), the Language Resource Center (LRC), the Computer-Aided Engineering Network (CAEN), and the U-M Library.

“ I have a better understanding of Canvas in general now, as well as some ways to scale it for a large class.

Canvas LCI Participant ”

Three half-day sessions were timed to leverage events already planned for the week-long Enriching Scholarship Conference. Additionally, participants received personalized support through individual consultations and drop-in hours. The institute reached 54 faculty, GSIs, and teaching team staff members representing 43 individual courses that collectively enroll over 10,000 students each year. It provided information and resources for making decisions about setting up and organizing courses in Canvas, as well as selecting and activating tools that serve each instructor's pedagogical goals. A pre- and post-evaluation indicated that the Institute had a significant impact on participants' confidence in their ability to use Canvas: On a 5-point scale (1 = not confident at all and 5 = extremely confident), mean scores moved from 2.47 at the beginning of the institute to 4.12 at its end (M = 1.65, p < .001).

Online Course for Postdocs

In collaboration with Rackham and the Office of Academic Innovations (AI), CRLT developed and piloted *High Impact Practices for STEM Education* in fall 2015, an online version of the eight-week *Postdoctoral Short-Course on College Teaching in Science and Engineering* (PSC) that has been offered face-to-face since 2009. The new, asynchronous version expands the



reach of the course to include postdocs from institutions beyond U-M. As a first step, postdoctoral scholars from local peer institutions were recruited through the Professorial Advancement Initiative, a mentoring network designed to prepare and train underrepresented minority scholars for the transition to tenure track faculty positions. In summer 2016, the course will be promoted to institutions that make up the Big 10 Academic Alliance. (For a full description of the course, see pp. 18-19).

International Faculty Development



Since 2006, CRLT has supported U-M's China initiative with programming for academic administrators from top Chinese research universities. In late August 2016, CRLT hosted a three-week China Fellows Program for six visiting scholars from teaching centers at Chongqing University, Harbin Institute of Technology, Nanjing University, Renmin University of China, and Shanghai Jiao Tong University. The backbone of the program consisted of 18 seminars offered by CRLT staff and U-M faculty and administrators. In addition, fellows attended CRLT faculty and GSI orientations, observed classes taught by outstanding U-M faculty, visited the teaching center at Wayne State University, and made presentations about their plans for implementing what they learned at their own teaching centers.

Support *for* Teaching

Consultations

CRLT professional staff and graduate teaching consultants (GTCs) provide consultation services to faculty, graduate students, and administrators. Short consultations often involve requests for materials, information, and advice about campus resources for teaching and learning. Topics for more intensive consultations include curricular and instructional matters such as course design, integrating innovative approaches to teaching and learning, interpretation of student ratings, and improvement of teaching and learning in a class or discipline. CRLT staff conducted nearly 1,800 individual consultations, some brief and some extensive, with U-M clients during the 2015-2016 academic year.

Midterm Student Feedback

CRLT collects student feedback for faculty and GSIs who wish to assess and improve their teaching during the term. A CRLT consultant observes the class and then confers with the students about what is going well and what changes would improve their learning. The consultant later meets with the instructor to report findings and discuss strategies for change. Faculty in charge of large, multi-section courses also use this service to gain an overview of the course. Section leaders receive confidential individual feedback and the supervising faculty member receives a report of overall trends in the course that can be used to facilitate and inform curricular improvement. During the 2015-2016 academic year, CRLT staff conducted midterm student feedback sessions for 326 faculty and GSIs across campus. These sessions provided an opportunity for 11,422 undergraduate and graduate students to share feedback in the middle of the term, a time when adjustments to teaching practices can directly benefit their learning experience.

What people
are saying about
Consultations and
Midterm Student
Feedback

“The process is affirming and supportive, yet provides suggestions for changes that I find valuable each time.”

“It's very helpful to get feedback from the students, and I appreciate the opportunity to discuss this feedback with the consultant.”

“The consultant makes a great summary that is useful for parsing the major areas of strength and areas for improvement. Effort from the instructor is minimal but the information payoff was great in my opinion.”

“Probably the most valuable service for teachers here at U of M!”

Orientations

New Faculty Orientation

In conjunction with the provost and executive vice president for academic affairs, CRLT organized and facilitated the campuswide New Faculty Orientation. In September 2015, 191 faculty members attended this event. The president and interim vice president for research welcomed the new faculty, and the CRLT Players presented *7 into 15: Welcome to Teaching at U-M*, which focuses on issues of diversity, inclusion, and faculty worklife. Participants heard from the provost at lunch along with a panel of three faculty who discussed what it's like to work at U-M. In addition, new faculty attended one of the following five concurrent sessions focused on teaching:

- Leveraging Group Work and Teams to Enhance Student Learning
- Leveraging Student Diversities in Discussion
- Research-Based Practices for College Teaching
- Teaching Critical Thinking in the Clinic
- Using Digital Tools to Engage Students and Enhance Teaching

The New Faculty Orientation also included an information fair that featured exhibits and representatives from 45 U-M offices and programs.

GSI Teaching Orientations

CRLT organized and facilitated university-wide Graduate Student Instructor Teaching Orientations at the beginning of the fall 2015 and winter 2016 terms. This past year, 445 GSIs attended the fall program, and the winter program was attended by a total of 211 GSIs, 88 of whom were from engineering. During these orientations, GSIs saw a production of the CRLT Players sketch *TBD: Welcome to Teaching*, and attended a session on "Inclusive Teaching in the First Weeks and Beyond" with GSIs from related disciplines. In addition, each GSI was given the opportunity to practice a 5-minute lesson and receive feedback from peers and an experienced instructor or CRLT



staff member. New GSIs also engaged in discussions about the role of GSIs at the University of Michigan, collected resources related to this role, consulted experienced GSIs, and participated in workshops designed to address key issues. The fall orientation included the following workshops:

- Dealing with Controversy During Classroom Discussion
- Evaluating Student Writing
- Facilitating Discussions in the Humanities
- Facilitating Discussions in the Social Sciences
- Facilitating Group Work to Maximize Learning
- Grading in Quantitative Courses and the Sciences
- Identity and Authority in the Classroom
- Leading Problem-Solving Sessions
- One-to-One Teaching in Music, Art, Dance, and Architecture
- Teaching Effectively with Technology: CTools, Canvas, and the Google Suite

CRLT also organized a customized teaching orientation program for 144 new GSIs in the college of engineering in fall 2015. After the initial day of training, GSIs completed their ongoing professional development by participating in an advanced practice teaching session or writing a reflection on either a seminar focused on pedagogy or a classroom observation with midsemester student feedback (MSF). In addition, CRLT offered a separate orientation for undergraduate instructional aides (IAs) in engineering each semester, serving a total of 240 attendees.

ELI-CRLT Courses

In collaboration with the English Language Institute (ELI), CRLT co-sponsors two intensive courses for graduate students whose undergraduate education was in a language other than English and who plan to have GSI appointments in LSA. One course is offered in August to incoming U-M graduate students who have recently arrived in the country; the other is a ten-week, winter-term course for those who are already graduate students. Both address language proficiency, pedagogical strategies, and cultural awareness. In August 2015, 27 international graduate students participated in the course, and during winter 2016, 14 more students participated.

Seminars

Campuswide Seminar Series

CRLT offers seminars and programs for faculty, graduate students, and postdocs. These programs bring instructors together to share ideas across disciplines. They also help instructors develop and improve their teaching skills, expand their repertoire of teaching methods, and gain new perspectives on teaching at U-M. CRLT professional staff, faculty members from other units of the university, and guest presenters from other universities conduct CRLT seminars. In 2015-2016, 745 faculty, graduate students, and postdocs attended seminars, including the following programs:

- Advanced Practices for Inclusive Teaching** (3 times over fall and winter)
- Campus Climate in Your Classroom
- Canvas Faculty Learning Community: Getting to Know Canvas* (3 sessions, fall and winter)
- Canvas for GSIs: Pedagogies and Practicalities** (fall and winter)
- Facilitating Discussions in the Social Sciences and Humanities** (fall and winter)
- Faculty Panel: How Do We Teach About Privilege? *
- Four-Session Training for Diversity and Inclusive Teaching**
- Getting Started With Community Engagement in Your Course*
- Research-Based Practices for College Teaching: An Online Workshop
- Sharing Our Work: Key Insights From Faculty Communities for Inclusive Teaching (poster session)
- Teaching With Technology: How Can I Include All Students?
- Tools First: How Can Emerging Digital Scholarship Tools Inspire Your Teaching? (fall and winter)
- Using Canvas to Support Effective Teaching* (fall and winter)
- Using Technology to Check Student Understanding and Provide Feedback: An Online Workshop
- Writing and Grading Exams: An Online Workshop (summer and fall)

CRLT in Engineering Seminar Series

During the fall 2015 and winter 2016 terms 623 faculty, graduate students, and postdocs attended the following programs and seminars offered by CRLT in Engineering:

- Active Learning Laboratory: Advanced Practice Teaching ** (2 sessions per term)
- Conveying Messages With Graphs: A Presentation by Jean-luc Doumont
- CRLT Players Performance: Distress Signals**
- Frameworks for Groups: Making Teamwork Work**
- It's Time for Action: Generating an Active Learning Plan**
- Perspectives on Teaching: A Panel Featuring Peter Chen (EECS), Krzysztof Fidkowski (AERO), Mai Le (EECS), and Margaret Wooldridge (ME)
- Preventing and Addressing Disruptive Behavior in the Classroom*
- Seven (Simple) Strategies to Improve Your Teaching**
- Spicing Up Teaching to Improve Student Learning**
- Teaching for Student Retention in Engineering: What Can GSIs Do? **
- Teaching Lessons From the Fortune 500: Strategies for the Engineering Classroom*
- Tenth Annual Research and Scholarship in Engineering Education Poster Fair

* faculty only, ** graduate students and postdocs only

Programs for Faculty

Programs for New Faculty

LSA and Health Sciences Teaching Academies: New faculty in LSA and the health sciences schools and colleges (dentistry, kinesiology, medicine, nursing, pharmacy, public health, and social work) are introduced to teaching at U-M through intensive, two-day orientations at the end of August. Designed by CRLT in consultation with deans, the teaching academies include opportunities for participants to discuss course planning with senior faculty in related disciplines, to learn about methods for familiarizing themselves with course management and other instructional technologies, and to deliver a practice lesson and receive feedback on their teaching from colleagues.

Additional topics at the LSA Teaching Academy address pedagogies for teaching undergraduate students and strategies for teaching and mentoring graduate students. As part of the implementation of the Framework for Professional Development Around Inclusive Teaching, the LSA Teaching Academy included expanded content focused on issues of inclusion and equity in the classroom (see p. 8 for more details).



“ Thank you for making teaching feel accessible and possible, instead of magical or chimerical. There are strategies that we can all use to reach our students every day.

*LSA Teaching Academy
Faculty Participant*

The Health Sciences Teaching Academy focuses on teaching small groups and fostering critical thinking through clinical teaching, as well as in traditional classrooms.

In their first term of teaching, members of both academies may work individually with a CRLT consultant who observes their teaching or conducts a midterm student feedback session. (See p. 12 for more information about MSFs.) Follow-up gatherings throughout the academic year further develop networks of support within each academy’s new cohort of faculty. In 2015-2016, 43 assistant professors took part in the LSA Teaching Academy, and the Health Sciences Teaching Academy served 31 faculty on the tenure and clinical tracks.

Ross Teaching Academy: Since 2013, CRLT has collaborated with the dean’s office on a teaching academy focused on the specific needs of new faculty in the Ross School of Business. In 2015-2016, 20 faculty participated in the Academy.

College of Engineering Programs: Immediately following the campuswide new faculty orientation (p. 13), CRLT in Engineering provided additional programming for 14 faculty new to the college. Participants engaged in a panel discussion about teaching with experienced faculty and a separate panel with U-M engineering undergraduate students. Subsequent programs covered starting a research group, mentoring graduate students, inclusive teaching methods, and strategies for new faculty success.

Provost's Campus Leadership Program (PCLP)

On behalf of the provost, CRLT coordinates an academic leadership program with two parts: a day-long orientation for new department chairs and associate deans, and ongoing professional development for all chairs and associate deans with periodic roundtable sessions. Roundtable topics in 2015-2016 included sexual harassment and Title IX, real-time dilemmas, the chair's role in hiring, and supporting students facing mental health issues.

The programs were well attended, with 90% of new department chairs and 86% of new associate deans and directors participating in at least one of the leadership events.

Faculty Grants and Awards



In 2015-2016, CRLT administered the Provost's Teaching Innovation Prize (TIP), designed to recognize outstanding pedagogical practices, as well as seven grants competitions for faculty to improve teaching and learning at the University of Michigan. The Office of the Provost and Executive Vice President for Academic Affairs funded three competitions: the Gilbert Whitaker Fund for the Improvement of Teaching, the Faculty Communities for Inclusive Teaching (FCIT) initiative, and the Lecturers' Professional Development Fund. The Office of the Vice Provost for Global and Engaged Education funded the Investigating Student Learning (ISL) Grant and the Transforming Learning for the Third Century - Networks for Engaged Teaching (TLTC-NET) Grant. CRLT directly funded two competitions: the Faculty Development Fund (FDF) and the Instructional Development Fund (IDF). A total of 128 faculty received grants or awards totaling almost \$291,000. (See Appendix A for lists of grantees.)

After reviewing CRLT staff comments, CRLT's faculty advisory board members selected grantees for the Faculty Development Fund. The Advisory Board recommended awardees to the provost for the Gilbert Whitaker Fund for the Improvement of Teaching. A panel of experienced lecturers made recommendations to the provost on proposals for the Lecturers' Professional Development Fund. CRLT staff selected grant recipients for the Instructional Development Fund. For the Provost's Teaching Innovation Prize, a panel of award-winning faculty selected recipients. A panel of previous grantees selected grant recipients for the Investigating Student Learning Grant.

CRLT also coordinated two additional teaching competitions for the provost's office: the Arthur F. Thurnau Professorship, the university's highest award for contributions to undergraduate education, as well as one external award for which U-M runs an internal competition to select its nominee, the Michigan Distinguished Professor of the Year. In April 2016, the latter award was received by U-M's nominee, Arthur F. Thurnau Professor of Chemistry Brian Coppola.

Provost's Seminars on Teaching

Since 1996, CRLT has worked with the Office of the Provost to organize semi-annual Provost's Seminars on Teaching. The seminars promote lively and substantive dialogues about a wide range of teaching and learning issues relevant to the entire campus. In December 2015, 38 faculty attended the provost's seminar *Humanities Classrooms, Digital Environments, Critical Questions*. In May 2016, 171 faculty members attended *Thinking Long-Term: Next Steps for Engaged Learning at Michigan & Beyond*. This event featured a keynote address by Vice Provost Randy Bass from Georgetown University, and a panel discussion led by Vice Provost James Holloway that included Dr. Bass, Dr. Richard Kiely (Cornell University), and Dr. Brooke Pulitzer (Harvard University). (See also the TLTC Initiative section on p. 9.)

Faculty Learning Communities (FLCs)

Interprofessional Leadership Fellows Program: Launched in January 2016, this program brings together health science professionals with a strong interest in becoming change agents for interprofessional education and practice efforts on campus and beyond. It is funded by the Michigan Center for Interprofessional Education with support from the provost's Transforming Learning for the Third Century Initiative and from deans of the health science schools. The inaugural cohort included 16 faculty from dentistry, kinesiology, medicine, nursing, pharmacy, public health, and social work (Ann Arbor), as well as Flint's School of Health Professions and Studies. During the 18-month program, Fellows attend an off-site, "Train-the-Trainer" faculty development program created through a 2014 Josiah Macy, Jr. Foundation grant. Fellows also take part in monthly gatherings of a faculty learning community organized by CRLT, during which they develop projects, learn about frameworks for change, discuss literature related to nationwide IPE efforts, and prepare to become mentors for future cohorts. Projects include developing



an acute care simulation, creating a toolkit that helps instructors convert existing courses into IPE courses, assessing the impact of a service learning project on teamwork and communication, and expanding a clinical experience beyond medicine to include students from other health professional programs.

Large Course Initiatives:

CRLT sponsored learning communities for faculty who teach large enrollment courses in LSA and in the College of Engineering. In LSA, eight faculty participated in the Large Course Initiative (LCI) during winter term. Over the course of four meetings, faculty read and discussed research on student learning and explored a range of instructional approaches useful in large courses. In addition, they visited the classrooms of colleagues who use innovative approaches to engage students in their large courses. To support implementation of the lessons learned, six of the faculty received small grants from LSA to revise their courses. CRLT staff will present a poster on the structure and impact of the LCI at the annual meeting of the Professional and Organizational Development Network in Louisville in November 2016.

“Determined to incorporate the most vivid of your insights about active learning vs. passive, I reworked my lecture course substantially for winter term, making it far more interactive. It was more fun for me and apparently for the students too.”

LCI Faculty Participant

The seventh iteration of the Teaching Circle for Large Engineering Classes was offered in winter 2016. To date, 48 faculty have participated, and sessions were co-facilitated by CRLT-Engin staff and senior faculty who teach

“ [I learned] more about how students actually learn and how that affects the way I share and present information or challenges.”

College of Engineering Faculty

large courses. Topics included rapport building, active learning, student motivation, and instructional technology. Research articles were integrated with local data to help participants identify useful strategies for their own classes. In addition to meeting regularly, participants observed colleagues' classes and got hands-on experience with technologies particularly useful for large classes.

Programs for Graduate Students and Postdoctoral Scholars

U-M Graduate Teacher Certificate Program

In collaboration with the Rackham School of Graduate Studies, CRLT runs a U-M Graduate Teacher Certificate Program designed to promote the professional development of graduate students as college-level instructors. This program also offers graduate students an advantage in the academic job market by helping them document their preparation for their junior faculty teaching roles. Graduate students who wish to participate submit required documents and track their progress toward completion of the program on a web-based interface designed by CRLT. Program requirements include participation in a teaching orientation and ongoing seminars on teaching, classroom teaching experience, a teaching mentorship, and the submission of a statement of teaching philosophy.

Participation continued to increase during the 2015-2016 academic year. Specifically, 194 more graduate students enrolled, bringing the total number of participants to 1,316. This year 60 students completed the certificate requirements. Since the program's inception, CRLT and Rackham have awarded a total of 427 certificates.

GTC+Digital Media Teacher Certificate Program

Launched in May 2014, the GTC+ program (co-sponsored by Rackham and the Institute for the Humanities) builds on the Rackham-CRLT Graduate Teacher Certificate by offering structured opportunities to think critically



about technology tools and digital environments and the ways they shape teaching and learning. After taking an introductory online module, participants complete five workshops, three of which must go beyond technical training to pedagogical applications of technologies or digital media. They then organize or take part in two networking experiences related to teaching with digital media. An ePortfolio houses course design projects, artifacts of teaching practice, and participants' reflections on their work integrating digital media into their teaching.

Although designed with particular needs of humanities graduate students in mind, enrollment is open to all graduate students. To date, 48 graduate students representing 37 departments in eight schools have enrolled in the program, and four students have completed the requirements and received the certificate.

Preparing Future Faculty (PFF) Programs

In 2015-2016, CRLT offered four programs in collaboration with Rackham.

The eighth iteration of the eight-session *Postdoctoral Short-Course on College Teaching in Science and Engineering* was conducted in winter 2016 for 22 postdoctoral scholars. The course was taught in a flipped format, emphasizing advance preparation using video podcasts and readings so that time during sessions was devoted to active learning and reflection. Each participant delivered two short lessons to colleagues who offered them constructive feedback, developed a lesson plan for an inquiry-based lab exercise, wrote a first draft of a teaching philosophy, and designed a syllabus for a course to be taught in the future.

“ I feel more confident seeking out teaching opportunities now that I have a better idea how to organize a course and utilize active learning techniques in the classroom. ”

PSC Participant

In Fall 2015, CRLT and Rackham along with the Office of Academic Innovation (AI) piloted *High Impact Practices for STEM Education*, an online format of the *Postdoctoral Short-Course*. Thirty-six postdoctoral scholars from U-M, Michigan State University, Purdue University, and University of California-Merced participated in the course, and

28 completed the course. The short-course covered topics including course design, the science of learning, inclusive teaching, and trends in STEM education. Each of the eight weekly online modules featured videos, short readings, online discussions, group and individual assignments, and additional resources. Each participant delivered a practice teaching session which included active learning, designed a syllabus for a course they might teach in the future, and developed a statement of teaching philosophy.

The *Intercampus Mentorship Program* connects faculty at nearby colleges with U-M graduate students and post-doctoral scholars. Nine students and postdocs were funded to take part in a mentorship, which involved activities such as campus visits, discussions of the academic job search, and guest teaching. The participants were from four schools and colleges and represented four LSA departments.

The thirteenth annual *Preparing Future Faculty Conference*, co-sponsored by Rackham, with contributions from the International Center and The Career Center, took place in September 2015. More than 590 graduate students registered for this one-day conference, which featured 31 faculty panelists and the following concurrent sessions:

- Building Communities of Support Toward a Successful Academic Job Search
- Designing an Effective Teaching Demonstration
- Developing Your Teaching Philosophy: All Fields
- Developing Your Teaching Philosophy: Humanities and Social Sciences
- Developing Your Teaching Philosophy: Science, Technology, Engineering, and Math Fields
- Faculty Success Off the Tenure Track
- From Interview to Job: The Hiring Process in Humanities and Social Sciences
- From Interview to Job: The Hiring Process in Science, Technology, Engineering, and Math Fields
- Interviewing for Academic Positions: Arts, Humanities, and Social Sciences
- Interviewing for Academic Positions: Science, Technology, Engineering, and Math Fields
- Preparing for the Unexpected Job
- Starting and Running Your Faculty Research Agenda: Humanities and Non-Lab Social Sciences
- Starting and Running Your Faculty Research Lab
- Strategies, Tools, and Resources for Productivity
- The Role of Service in Faculty Life
- The Tenure-Track Process
- Underrepresented in Our Fields: Strategies for Faculty Success
- What's It Like To Teach at a Community College?
- Writing CVs and Cover Letters for Academic Positions: Humanities and Social Sciences
- Writing CVs and Cover Letters for Academic Positions: Science, Technology, Engineering, and Math Fields

The seventeenth annual *Rackham-CRLT Seminar on College Teaching: Preparing Future Faculty* took place in May 2016, with funding provided by the provost's office and Rackham. Sixty-four advanced graduate students applied, and CRLT accepted 60 as participants. The applicants represented 12 schools and colleges and included 19 LSA departments and programs.

“ I learned so much about how higher education works—tenure, different institutions etc.—this has been so valuable, especially as a first generation college student. I had no idea how much I didn't know!

PFF Participant

”

The 10-session seminar covered three major areas:

- Preparation for the academic job search, including assistance with the creation of a statement of teaching philosophy and a syllabus
- Information about higher education (e.g., institutional types, the nature of today's students, tenure, and faculty worklife), including panels or roundtable conversations with U-M junior faculty, U-M senior faculty, U-M faculty with non-tenure track appointments
- Discussions of effective and reflective teaching, including conversations about diversity and inclusive teaching

The seminar's introduction to different types of institutions included conversations with local community college faculty and a trip to one of four campuses: Albion College, Eastern Michigan University, Kalamazoo College, or the University of Toledo. Those who successfully completed all requirements of the seminar received a certificate.



Graduate Teaching Consultants Program

CRLT's graduate teaching consultants (GTCs) are selected in a campuswide competition. CRLT prepares the GTCs to consult with GSIs about their teaching during the upcoming academic year. GTCs draw on their knowledge and experience to help support GSIs, while learning more themselves about teaching and learning. All GTCs receive training in observing and videotaping classes, giving constructive feedback on teaching, collecting student feedback about teaching, and evaluating statements of teaching philosophy. GTCs collaborate with CRLT instructional consultants on activities designed to promote excellence in graduate student teaching across the university. For instance, GTCs plan and conduct sessions at the fall and winter teaching orientations for new GSIs. GTCs for 2015-2016 are listed on p. 6.

A subset of GTCs focus on instructional technology. The IT-GTCs demonstrate effective uses of technology at fall GSI orientations and develop and deliver workshops on instructional technology throughout the year.

Engineering Teaching Consultants Program

Engineering Teaching Consultants (ETCs) are experienced GSIs recruited by CRLT in Engineering (CRLT-Engin) each semester, and prepared by CRLT-Engin to consult with GSIs and undergraduate instructional aides (IAs). ETCs consult with GSIs and IAs to collect midterm student feedback from several hundred undergraduate engineering students. ETCs also plan and conduct sessions at the engineering GSI and IA teaching orientations, as well as workshops in the CRLT-Engin Seminar Series. ETCs for 2015-2016 are listed on p. 6.

Departmental GSI Training and Development

Individual departments are responsible for training their new GSIs, and CRLT staff members help departments across the university to develop, improve, and evaluate their programs. During summer 2015, fall 2015, and winter 2016, CRLT developed and conducted several sessions to help faculty and staff coordinators and graduate student mentors (experienced GSIs) prepare for their GSI training roles and exchange resources. Workshop topics included running practice teaching sessions, observing classes and offering feedback, strategies for working with GSIs, issues in consulting, and conducting midterm student feedback sessions. In December, CRLT organized a networking lunch for graduate student mentors to exchange ideas and resources. In April, a program for faculty and staff GSI coordinators focused on preparing GSIs to teach inclusively. CRLT also provided multiple discipline specific workshops as part of departmental GSI training programs.

Web Resources



Faculty, instructional consultants, and administrators at U-M and in higher education institutions throughout the U.S. and the world visit the CRLT website to obtain resources on teaching and learning. Between June 1, 2015, and May 31, 2016, the website received over 879,000 visits, representing over 700,000 unique

visitors (a 25% increase over the previous year) from 226 countries. Approximately 6% of visitors were from Ann Arbor, with 44% from the United States. CRLT's web resources are updated and expanded on an ongoing basis.

CRLT Social Media

Many of CRLT's pages are highly ranked by search engines such as Google, and about 75% of all visits to CRLT's website come from such search engines. Top search terms include "lesson plan," "curriculum design," "lesson planning," "teaching strategies," and "active learning." Overall, the "Strategies for Effective Lesson Planning" page received the most visits, over 278,000, or about 20% of total visits. Other popular pages include "Active Learning," "Teaching Strategies," and "The Teaching Philosophy/Teaching Statement," each with over 43,000 visits.

The homepage crlt.umich.edu features a blog which is read by audiences around the world. Intended primarily for U-M instructors who visit CRLT's site for timely teaching guidance, the blog reaches 177 subscribers, and each post generates a Tweet to CRLT's 1,912 Twitter followers. In the past year, we updated the blog 22 times, publishing posts that highlight CRLT resources as well as innovative teaching by U-M faculty. While some posts announce events or news, the majority (following the advice of our faculty advisory board) contain timely discussion of teaching strategies for U-M instructors. For example, around Veterans Day, we featured a post about the experiences of student veterans in the classroom. After the San Bernardino shooting, our "Teaching in Unsettling Times" post advised instructors to acknowledge distressing incidents, refer students to campus resources, and review options for handling difficult conversations. And we often feature strategies for opening and closing the semester (e.g., "Breaking the Ice with Your Students" or "Reflecting on Learning at the End of the Term"). Most individual posts average a few hundred page views, but our most popular posts have been read by thousands: e.g., "Breaking the Ice" has received 8,612 pageviews, "Handling Wrong Answers" 5,752, and "Motivating Students to Learn" 4,409. In 2015-2016, our most popular new posts were "Student Groups: One Teacher's Successes" (1,035 pageviews) and "Choosing Your Classroom Technology" (820 pageviews).

Online Workshops

In addition to using the CRLT website to deliver resources and timely strategies to instructors, we offer online workshops to U-M instructors as a supplement to our face-to-face programs. The online workshops present evidence-based practices for specific teaching goals, engage participants in thinking individually about teaching topics, and facilitate the exchange of ideas among participants through blogging and commenting, re-creating key benefits of face-to-face workshops in an online environment. Busy instructors who may not be able to attend workshops in person appreciate the opportunity to attend online workshops during the term as well as during break periods when other workshops are not typically offered. The online workshops are based on a flexible template that can easily be adapted to different content, making the development of additional online workshops efficient. (For a list of offerings in 2015-2016, please see p. 23.)

Digital Education

Through consultation services, faculty development programs, and service on university- and unit-level committees, CRLT staff help individuals and academic units explore, integrate, and evaluate the use of instructional technology (IT). Several programs from the 2015-2016 academic year are highlighted below.

Campus-Wide Committees and Initiatives

With their focus on best teaching practices and their experience with program evaluation, CRLT staff play a key role in university-wide initiatives around IT.

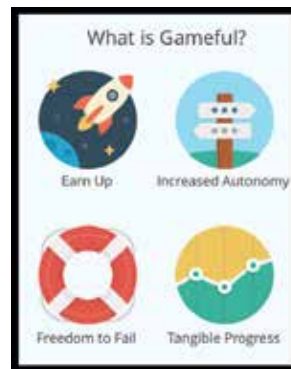
CRLT staff were part of the Digital Innovation Advisory Group (DIAG), which provides guidance and leadership to advance the institution's digital education strategy and ensure engagement of faculty, staff, and students in innovative experimentation and knowledge sharing across U-M. CRLT staff also served on two DIAG subcommittees: Residential Programs, Innovations, and Tools; and Digital Infrastructure at Scale.

In 2015-2016, CRLT concluded a two-year evaluation of the adoption and transition to the Canvas Learning Management System (LMS), which assisted in the development of communications to instructors, helped to identify needed support, and was presented to DIAG for faculty oversight of the adoption and transition process. (For a description of the evaluation, see p. 29.) Based on the findings of the evaluation, CRLT designed programming to support the transition, including seminars (see p. 14), sessions in orientations and teaching academies, and the Canvas Large Course Institute (p. 11).



In 2015-2016, CRLT collaborated with the Office of Academic Innovation's Digital Innovation Greenhouse on projects focused on leveraging learning analytics data to personalize education at U-M by modernizing the Academic Reporting Toolkit (ART 2.0) and developing an interface for students to see data previ-

ously only available to faculty, as well as expanding the use of ECoach, Gradecraft, and Student Explorer (an early warning system for academic advisors). As part of the collaboration with DIG, CRLT staff collected data from faculty and students about their experiences with GradeCraft. This app, developed by U-M



faculty, leverages gameful pedagogy to increase student motivation and promote deep learning. In 2015-2016, CRLT conducted 12 midterm student feedback sessions in courses using GradeCraft and held nine interviews with faculty and GSIs teaching these

courses. Results were used to inform the DIG development team's work on expanding the use of GradeCraft across campus.

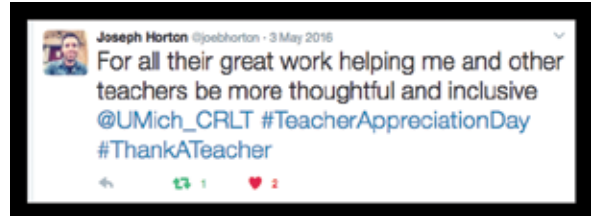
As a charter member of U-M's Teaching and Technology Collaborative (TTC), CRLT co-sponsored the 19th Annual Enriching Scholarship Conference, a week of workshops and demonstrations about technologies for teaching and learning. CRLT staff co-organized the opening event, including a poster fair of work by recipients of the U-M Provost's Teaching Innovation Prizes or of CRLT's Investigating Student Learning Grants and TTC projects. The keynote speaker was Barbara Oakley, professor of engineering at Oakland University and co-creator of the world's most popular MOOC, "Learning How to Learn: Powerful Mental Tools to Help You Master Tough Subjects." She presented a talk, "Learning How to Learn," and a workshop on creating riveting online courses. In addition, CRLT sponsored seven sessions on teaching with technology as part of the conference. The Canvas Large Course Institute (LCI) also kicked off during Enriching Scholarship, and participants were encouraged to participate in other sessions at Enriching Scholarship to comple-

Diversity *and* Inclusion

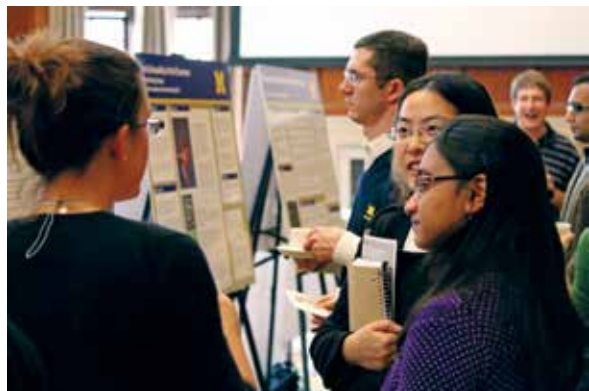
CRLT uses “inclusive teaching” as an umbrella term to name a complex network of pedagogical issues and strategies supported by a large body of research, much of it foundational scholarship on teaching and learning. This research shows that learning outcomes are improved when teachers (1) attend to student differences and (2) take deliberate steps to ensure that all students, across differences in academic and social background as well as physical and cognitive abilities, feel welcome, valued, challenged, and supported in succeeding in their field of study.

In 2015-2016, CRLT continued its work with the Office of the Provost on initiatives designed to promote diversity and inclusive teaching practices across the university. Recipients of the Faculty Communities for Inclusive Teaching grant, which was developed and administered by CRLT with funding from the Vice Provost for Equity, Inclusion, and Academic Affairs Robert Sellers, shared their first year’s work with the broader campus community at a poster fair. In addition, at the request of Vice Provost Sellers, CRLT staff regularly convened, trained, and disseminated information and resources to Faculty Liaisons for Inclusive Teaching from all U-M schools and colleges.

Following are some additional, specific ways in which CRLT staff promoted inclusive teaching and learning at U-M during the 2015-2016 academic year:



- Informed institutional efforts regarding professional development by convening faculty in focus groups to discuss their experiences with inclusive teaching, classroom climate, and the skills they would like to develop.
- Developed and performed a new CRLT Theatre sketch (*A Thousand Cuts*, see p. 10) and facilitated faculty and GSIs’ examination of climate challenges faced by U-M students.
- Promoted the use of inclusive teaching practices in classrooms during the May 2016 Inclusive Teaching @ Michigan Series, which drew approximately 360 participants over 17 sessions.
- Provided funding and support for 10 projects, representing five different colleges, through Faculty Communities for Inclusive Teaching grants (see also p. 10 and p. 40).
- Served on the LSA committee convened to review the Race & Ethnicity course requirement; the committee authored a proposal, funded by the Provost’s office, to hire a consultant to be based at CRLT to support instructors in R&E courses.



- Consulted with individual schools, departments, and colleges about instructor professional development with respect to diversity, equity, inclusion, and climate issues.
- Developed and facilitated customized programs for nine schools, colleges, and departments for GSIs and/or faculty in particular disciplines to develop their skills in attending to social identities and other differences in the classroom, cultivating inclusive learning environments, or handling difficult moments.
- Consulted with individual instructors on addressing diversity issues arising in instructional contexts.
- Disseminated information and resources about inclusive teaching and diversity during Teaching Academies, New Faculty Orientation, and GSI Teaching Orientations, including a required workshop on inclusive teaching for all participants attending the GSI teaching orientations.



- Presented pedagogical workshops as part of CRLT's seminar series on the impact of campus climate on classrooms, strategies for leading discussions about diversity, practice teaching for inclusive classrooms, facilitation skills for diversity and inclusive teaching, creating a classroom environment in which all students can succeed, and creating inclusive classrooms when using technology.

Inclusive Teaching @ Michigan

A series of free workshops for U-M instructors:
May 3-19, 2016

Facilitated by:
The Center for Research on Learning and Teaching (CRLT)
The Program on Intergroup Relations (IGR), and
The LSA Inclusive Pedagogies Committee

Full schedule and registration at:
crlt.umich.edu/MayInclusiveTeaching



Sessions include:

Opening Event: CRLT Players Workshop
Thurs, May 5 A Thousand Cuts: Responding to Student Climate Concerns
Designing Courses With Diverse Learners in Mind
Tues, May 3 Teaching With Technology: How Can I Include All Students?
Fri, May 8 Leveraging Group Work and Teams in STEM Courses to Enhance Student Learning
Mon, May 9 Planning for Diversity: Strategies for Inclusive Course Design (follow-up session **Wed, May 18**)
Tues, May 17 The Impacts of Social Identity in the Classroom (IGR)

Cultivating Inclusive Learning Environments
Tues, May 10 & Wed, May 12 Activities for Leveraging Student Diversity: 2 complementary sessions featuring different hands-on activities. Come to either or both.
Fri, May 13 Inclusive Teaching in Science, Technology, Engineering and Math (STEM) courses
Wed, May 11 Innovations in Inclusive Pedagogies: Showcasing Dynamic Tools for Engaged Practice (LSA)
Wed, May 16 Student Engagement with Each Other: Creating an Inclusive Classroom (IGR)

Responding to Challenges in the Classroom
Wed, May 11 Campus Climate in your Classroom
Fri, May 13 Making the Most of Hot Moments in the Classroom

Closing Lunch
Thurs, May 19 Putting It All Together: Sharing What We've Learned
 Please RSVP for the lunch (open to instructors who have registered for 2 or more sessions).



CRLT Players Theatre Program

2015-2016

36 U-M performances
2,500+ U-M audience members

10 performances (total) at:

- Massachusetts Institute of Technology
- Michigan State University
- Notre Dame
- Rochester Institute of Technology
- University of Maryland, Baltimore County

The CRLT Theatre Program explores ways that the performance arts can offer insights into pedagogical practices, enhance teaching and learning, support diversity, and improve institutional climate at U-M. The program is funded primarily by the Office of the Provost, the College of Engineering, the College of LSA, and the U-M ADVANCE Program.

Using local professionals and student actors, the CRLT Players present provocative and interactive sketches, vignettes, and traditional theatre productions that fall under two main headings: teaching and faculty worklife. The teaching sketches address issues of pedagogy, diversity, and inclusion in university settings, ranging from classrooms to labs and clinics. Sketches about faculty worklife are developed in collaboration with ADVANCE and cover topics such as faculty hiring, career advising, and the tenure decision-making process. All CRLT Players scripts are based on a solid

foundation of research on the experiences of students, faculty, and administrators at U-M and nationally. The Players perform at large, campuswide events (such as New Faculty Orientation); at workshops and retreats for academic departments, schools, and colleges; and at special events, such as a dinner organized by the dean of LSA for faculty serving on executive committees in the college. In addition, the Players are in demand nationally, performing for campuses and conferences around the country.

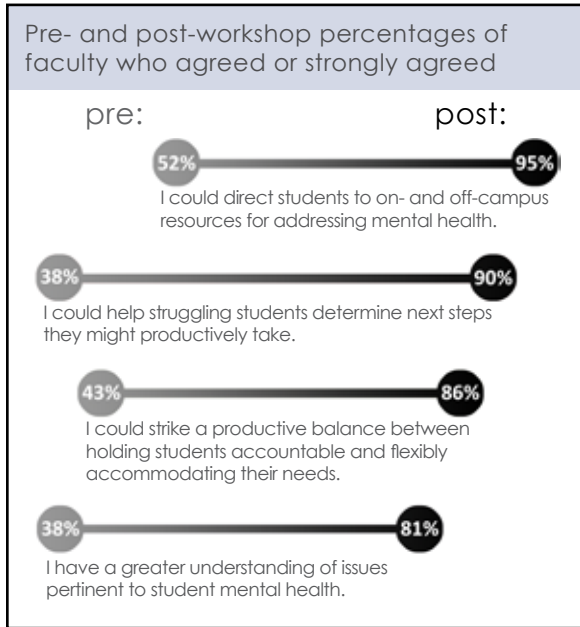
The Players are viewed as an on-campus resource skilled in encouraging critical reflection and facilitating strategy-focused dialogues about a range of diversity, equity, and inclusion (DE&I) issues. Throughout 2015-2016 they assisted units across campus in starting or deepening such conversations among members of their communities. The scope of assistance encompasses not only performances of sketches and facilitation of audience discussions, but also pre-performance planning dialogues and post-event debriefs. A notable collaboration with the College of Engineering entailed the creation of a 'special topics' dinner series, at which invited faculty came together to collectively consider their responsibility for creating inclusive climates in different domains of their professional lives. One area explored in this series was role-appropriate

“ I think you all did an incredible job in addressing some of the complex pieces involved with distressed students. Great way of incorporating challenges and initiating conversation!

Faculty Participant



Distress Signals Performance



ways instructors could support students facing mental health challenges, and the Players revisited this topic throughout the year with groups of GSIs, faculty, and campus leaders. Retrospective pre- and post-self-assessments indicate that participants left these sessions with a greater understanding of resources available to them and their students and increased confidence in their ability to navigate interactions of this kind productively. (See chart above.)

During the winter of 2016, the Players developed new work in anticipation of the operationalization of units' DE&I plans in 2016-2017. Piloted at Newnan Advising Center and premiered as the kick-off for CRLT's inaugural May Inclusive Teaching @ Michigan series, *A Thousand Cuts* invites instructors to consider the many kinds of interactions that shape students' sense of the university's campus climate and then to wrestle with what ally behavior might look like from within their instructional roles. Response to these performances was so positive that 10 sessions of this material have already been requested for the coming academic year.

A request from Michigan State University sparked the development of other new work that will ultimately

benefit U-M's own medical students. A series of vignettes paired with role plays prompt medical educators from practices and hospitals across the state to engage thoughtfully with the challenges of providing productive feedback to students, especially when those students vary in the stage of their program, as well as their attentiveness to interpersonal dynamics and the identities of patients and staff in clinical settings.

In addition to visiting other campuses, the Players engaged with academic leaders from Berkeley, Caltech, Columbia, Cornell, Harvard, MIT, Princeton, Stanford, UPenn, University of Wisconsin, and Yale at an evening gathering hosted by U-M's ADVANCE program. Snippets from the Players' repertoire illuminated a discussion of their approach to diversity programming. Princeton and Stanford subsequently booked the Players for performances on their campuses in 2016-2017.

What people are saying about the CRLT Players

"The interactive intervention and discussion about how to improve the conversation of the committee was very thought provoking. The actors were excellent."

"I walked away seeing how incredibly well done this presentation is and how serious breaking bad news is."

"This day has been eye-opening and encouraging. When we can identify the barriers to being great, we can address them. Thank you for facilitating a conversation that drove us to create solutions."

Assessment and Research

Services for Assessment of Student Learning crlt.umich.edu/assessment

During the 2015-2016 academic year, CRLT staff worked with faculty and academic units to review their current courses and curricula, develop new curricular offerings, and assess the results of course and curricular innovations. Services included assistance with data collection and analysis, consultations on evaluation plans for grants, facilitation of faculty discussions, and provision of funds through CRLT's grants programs. All of CRLT's assessment projects have three defining characteristics:

- 1) Projects are initiated by faculty responsible for the curriculum or the courses being assessed, with CRLT providing support and expertise as necessary.
- 2) They focus on improving U-M student learning experiences or outcomes.
- 3) They are action oriented, generating data that can be used by faculty and faculty committees to improve their courses or curricula.

CRLT worked on assessment initiatives for 18 schools and colleges, as well as the provost's office.

“ This report is incredible. The data and feedback create an incredible roadmap for us for this pilot. I am so grateful!

Faculty Participant ”

Campus-Wide and Multiple Unit Assessment Initiatives and Services

Transforming Learning and Teaching for a Third Century (TLTC)

Since 2013, CRLT staff have consulted with nearly 50 teams about assessment for their TLTC proposals or funded grants. At the proposal stage, the types of assistance provided by CRLT ranged from consultations about project design and assessment to provision of resources (e.g., performing literature reviews, locating measurement instruments, and drafting and revising assessment plans). For funded projects, CRLT contributions included developing survey instruments or rubrics, conducting focus groups, and drafting applications for exemption from IRB. Details for funded projects specific to a single unit appear in the list of department, school, and college discipline-specific projects (p. 30).

Funded TLTC projects that spanned two or more colleges are listed below:

- The Biological Station Initiative (U-M Biological Station, LSA, public health, engineering, art & design, SNRE): CRLT staff consulted on project assessment, including consultation for hiring an assessment postdoc and developing an assessment plan.



- Michigan Engaging Community Through the Classroom (architecture and urban planning, engineering, public health, public policy): CRLT staff consulted on the project assessment, including revising an assessment plan and identifying a pre-post measure of student learning of complexity.
- The Medical Device Sandbox: A Creative Learning Experience for Engineering Students and Medical Learners (engineering and medicine): CRLT staff consulted on the project assessment, including drafting surveys and focus group protocols, and facilitating a focus group and observation.
- M-Write II (education, LSA, engineering, information): CRLT staff facilitated an initial assessment consultation to discuss future plans for assessment and available assessment support.

Canvas at U-M

In 2015-2016, CRLT completed a two-year evaluation that influenced many aspects of U-M's path to the full adoption of this learning management system (LMS). Goals for the evaluation evolved as U-M progressed from pilot to adoption to transition, from identifying "showstoppers" to revealing trends in instructors' LMS preferences, satisfaction with support, and technical difficulties. Specific goals for 2015-2016 were to extend understanding of how overall Canvas satisfaction and support satisfaction have shifted over time, to examine the impact of Canvas on teaching innovation, to understand what instructors and students who have used Canvas value most about it, and to learn about the plans and identify the needs of instructors who would use Canvas for the first time in fall 2016. Faculty members who had not yet used Canvas were surveyed to learn about their support needs and their plans for transitioning to Canvas.

Evaluation reports were posted publicly and presented to the Faculty Senate to provide transparency about the adoption decision and process. Updates were presented regularly to unit support staff to inform their local support and transition processes, and evaluation data assisted in the de-

velopment of communications to instructors and helped to identify needed support. For example, awareness of issues faced in large courses resulted in the May 2016 Canvas Large Course Institute (more fully described on p. 11). In addition, from time to time, ITS identified specific subjects (e.g., project sites, analytics, video integration, transition from CTools) for which they desired information from instructors about their use, interest, or plans, and CRLT customized surveys to obtain information for staff involved in developing or supporting those services.

Besides evaluating the LMS platform itself, CRLT convened faculty and staff to rapidly evaluate a tool for migrating CTools courses to Canvas. This evaluation informed ITS's development of the Convert2Canvas services, as well as communications to instructors about how to move their CTools courses to Canvas.

Investigating Student Learning (ISL)



CRLT coordinates this annual grant competition, consulting at least twice with project teams, and works even more intensively with many. CRLT's assistance ranges from the design of projects to the presentation of findings. About 10 projects

each year are led by teams of faculty and graduate students or postdocs who are participating in the scholarship of teaching and learning (SOTL). Projects adhere to the following three criteria: 1) they are inquiry based, posing questions about problems or issues in teaching and learning and exploring practices that promote, deepen, or otherwise improve learning; 2) they use methods appropriate to the discipline in order to find answers to the questions posed; and 3) they are designed to be made public so that results can inform the work of colleagues and the discipline more broadly.

Newly selected grantees from Asian languages and cultures, education, engineering, information, and medicine participated in the January 2016 Engaged Learning Outcomes Kickoff. Prior year grantees from biology, the comprehensive studies program, dentistry, engineering, medicine, nursing, and statistics shared their results at a poster fair held in conjunction with the keynote address at the annual Enriching Scholarship Conference in May 2016.

Midterm Student Feedback and Course-Level Assessment

CRLT provides confidential, course-level assessment through its midterm student feedback (MSF) service, which allows faculty and GSIs to receive data from students on the effectiveness of their teaching during the term while they still have time to implement changes to improve their courses. In 2015-2016, CRLT conducted MSFs for 326 instructors, allowing more than 11,000 students to provide feedback on the effectiveness of their courses. For more details, see p. 12.

Evaluation Research for Education Grants

CRLT staff consulted with faculty applying for internal and external grants in areas related to curricular and pedagogical innovation. Faculty sought external grants from organizations such as the Japan Foundation, the Mellon Foundation, the National Science Foundation, and the National Institutes of Health.

CRLT's director of assessment and other CRLT

consultants worked on grant design, implementation, and evaluation issues with a variety of departments, administrators, faculty members, and staff.

Department, School, and College Assessment Projects

In addition to the TLTC and ISL projects listed above, individual schools, colleges, and departments worked with CRLT on the projects below.

Architecture & Urban Planning

TLTC projects:

- Cleveland Design Lab: CRLT staff facilitated an invited discussion with students regarding their role in engaged learning and facilitated a midterm student feedback session.
- Interactive Satellite Solar Lab: CRLT consulted on the project proposal as well as provided feedback on a survey draft.
- Michigan Engaging Community Through the Classroom (see p. 29)
- Practice Sessions: CRLT staff held various assessment consultations, as well as facilitated focus groups and observations.



- Tactile Technologies for Play and Learning: CRLT staff drafted the assessment plan.

Art & Design

CRLT staff conducted an evaluation of the Stamps social engagement requirement. See p. 35 for details.

TLTC projects:

- On the Drawing Board – Art and Architecture Collaboration in Detroit: CRLT staff consulted on engaged learning practices, particularly self-agency.
- The Biological Station Initiative (see pp. 28)

Dentistry

TLTC project on Translating the Science – A Bridge from Class to Clinic: CRLT staff consulted on the project proposal.

CRLT staff conducted a focus group with students to assess the impact of SW503, "Patient- and Family-Centered Care with Diverse Populations," a new course for students in the Bachelor of Science in Dental Hygiene program.

Education

Chauncey Monte-Sano received a 2016-2017 Investigating Student Learning Grant to investigate students' communication, collaboration, and self-agency in their understanding and application of core teaching practices.

Engineering

TLTC projects (see pp. 28-29):

- The Biological Station Initiative
- M-Write II
- The Medical Device Sandbox (see also p. 36)
- Michigan Engaging Community Through the Classroom

CRLT staff consulted with the associate chair for undergraduate education in mechanical engineering, conducted a workshop about assessment of teamwork for the diversity working group, and also consulted with a small course subcommittee regarding assessment.

CRLT staff assisted the Director of the Multidisciplinary Design Program with identifying instruments for assessing intercultural engagement.

Three projects received 2016-2017 Investigating Student Learning Grants: **Pauline Khan** is investigating the use of mobile devices for video review to improve oral communication. **Kathleen Sienko** and **Shanna Daly** are investigating stu-

dents' development of intercultural intelligence by engaging diverse stakeholders and using prototyping during design. (CRLT staff identified assessment instruments for intercultural engagement.)

Fei Wen is investigating the impact of student-created YouTube video on enhancing undergraduate active learning outcomes.

CRLT staff organized and facilitated monthly meetings for Investigating Student Learning teams.

Information

CRLT staff conducted two retreats on curricular change in the master's program, during which faculty laid out goals for student learning.

TLTC projects:

- Citizen Interaction Design: CRLT staff provided an assessment consultation.
- M-Write II (see p. 29)

Kinesiology

TLTC project on Using Hybrid Modular Courses to Scale Up Engaged Learning in Kinesiology: CRLT staff provided several assessment consultations, including surveys and rubric development, as well as conducting five MSFs.

Law

CRLT staff developed an IRB protocol and assessed the impact of flipped instruction on student performance in a legal writing course through instructor interviews, classroom observations, and a student survey.

CRLT staff developed an assessment plan for the Praktio project to develop an online module about legal contracts.

LSA: Asian Language & Cultures

CRLT staff conducted interviews with MA fellows and midterm student feedback to inform a report



to the Japan Foundation regarding the third and final year evaluation of the new master's curriculum "Reimagining the Master of Arts in Japanese Studies."

Kyongmi Park received a 2016-2017 Investigating Student Learning grant to create a virtual sandbox for intermediate language learning in Korean.

LSA: Biological Station

TLTC project on the Biological Station Initiative (see pp. 28)

LSA: Center for Engaged Academic Learning (CEAL)

TLTC project on Learning Across Borders and Disciplines: CRLT staff consulted on the project proposal.

LSA: Chemistry

TLTC project on M-Write II (see p. 29)
CRLT staff consulted on assessment of the Polymer Bootcamp.

LSA: Comparative Literature

CRLT staff consulted on using Canvas and rubrics for assessment regarding the Translation Networks project.

LSA: Dean's Office

CRLT staff participated on the Race and Ethnicity Review Committee assessing the success of the requirement in its current form, gathering input from various campus constituencies on possible revisions, and generating a series of recommendations for moving forward.

For a project on decreasing class size in introductory mathematics, CRLT staff summarized the literature on the effect of class size in mathematics classrooms for the associate dean, in addition to creating and submitting the IRB protocol for the project. The evaluation of smaller section sizes in Math 115 and 116 in fall 2015 and winter 2016

entailed conducting nearly 250 class observations and 5 focus groups with faculty and course coordinators, and the analysis of the observations, focus groups, grades, exam scores, concept inventory pre- and post- scores, mathematics attitude survey data, registrar data, and end-of-term evaluation data.

LSA: Earth and Environmental Sciences

TLTC project on the Biological Station Initiative (see p. 28)

LSA: Ecology and Evolutionary Biology

TLTC project on the Biological Station Initiative (see p. 28)

LSA: Economics

TLTC project on M-Write II (see p. 29)

LSA: English Language Institute

CRLT staff consulted on a plan to assess a new online pre-arrival course for international graduate students.

LSA: Environment (PITE)

TLTC project on the Biological Station Initiative (see p. 28)

LSA: Global and Intercultural Study

TLTC project on the Biological Station Initiative (see p. 28)

LSA: Mathematics

TLTC project on M-Write II (see p. 29)
Class size project (see above, under LSA: Dean's Office)

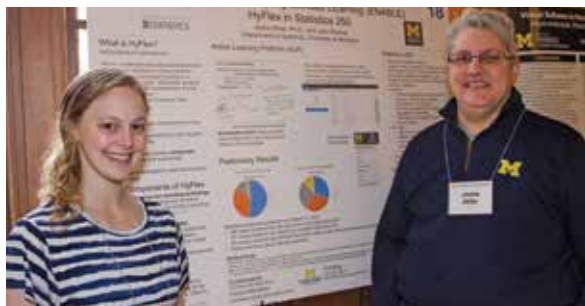
LSA: Molecular, Cellular, and Developmental Biology (MCDB)

TLTC project on the Biological Station Initiative (see p. 28)

LSA: Psychology

CRLT staff researched neuroscience concept inventories for a faculty member's NSF evaluation plan.

LSA: Statistics



CRLT staff conducted a student focus group and consulted with **Jackie Miller**, recipient of an EAGER grant from NSF.

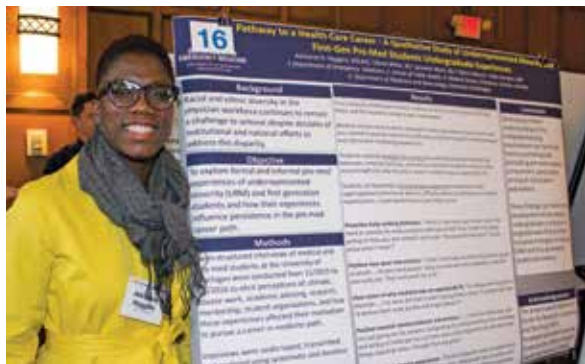
LSA: Sweetland Writing Center

CRLT staff conducted two faculty focus groups to inform a report to Sweetland on effective ways to support the development and teaching of upper-level writing courses.

Medicine

TLTC project on the Medical Device Sandbox (see p. 29 and p. 36)

CRLT staff assisted 2015-2016 Investigating Student Learning Grant recipients **Adrienne Haggins** and **Helen Morgan** with the development of focus group and interview protocols for their project exploring factors affecting underrepresented minority undergraduates' persistence in pre-med career paths.



Two projects received 2016-2017 Investigating Student Learning Grants: **Nasuh Malas** is piloting and evaluating a program to enhance pediatric resident competency in motivational interviewing and behavior change counseling. **Kate Peterson Stanley** is investigating the effectiveness of using

a book and movie club to improve the following professionalism skills among graduate medical learners: learner and patient communication, learner and medical team communication, learner sensitivity to cultural and personal values in patient decision-making, and upholding the ethical standards of the profession.

Music, Theatre & Dance

TLTC project on ArtsLab – Bringing Entrepreneurial Skills to Students in the Arts at the University of Michigan: CRLT staff drafted the assessment plan.

CRLT staff consulted on cultivating a community of practice around the 19th Century Acts project, assisted in the construction of an interview protocol, and prepared a faculty member to conduct interviews.

Natural Resources and Environment

TLTC projects:

- The Biological Station Initiative (see p. 28)
- Michigan Sustainability Cases: CRLT staff consulted on the project assessment, including drafting an assessment plan, providing feedback on assessment instruments, and analysis, and assisting with accessing registrar data. (See also p. 36.)

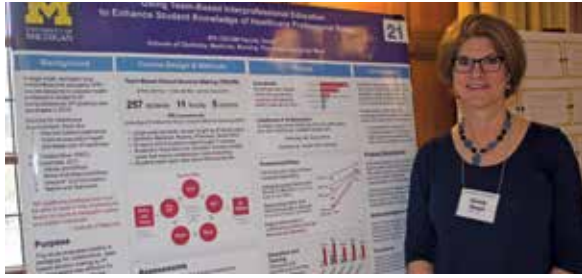
CRLT staff conducted a survey and interviews related to an NSF grant investigating the impact of a summer research internship on the attitudes of underrepresented minority students toward science careers.

CRLT staff consulted with **Jose Alfaro**, recipient of a 2015 Internationalizing the Curriculum Grant, assisting with survey creation and data collection to document the impact of the grant program.

Nursing

CRLT staff developed an assessment plan for the school's PhD program, facilitated faculty and student workshops about mentoring, conducted student and faculty focus groups and interviews, and revised the program's end-of-year student survey.

Pharmacy



CRLT staff analyzed qualitative data for a large-scale project on the impact of a new team-based learning curriculum on student learning outcomes. See pp. 35-36.

Public Health

TLTC projects (see pp. 28-29):

- The Biological Station Initiative
- Michigan Engaging Community Through the Classroom

To assess the short and long term impact of the Big Data Summer Institute, CRLT staff created a number of surveys, conducted three student focus groups, and wrote a report for the institute's director.

CRLT staff designed and conducted a survey to assess student learning in the school's Dietetics Internship.

CRLT staff conducted research on alumni assessment resources for the Department of Health Management and Policy.

CRLT staff conducted a feedback session and follow-up interviews with workshop participants for a Year 1 evaluation of an NIH R25 grant, *Dynamic Systems Science Modeling for Public Health*.

Public Policy

TLTC project Michigan Engaging Community Through the Classroom (see p. 29)

Rackham

CRLT staff assessed the new, online version of the postdoctoral short course.

CRLT staff collaborated with Rackham to investigate the long-term impact of the Preparing Future Faculty Seminar on the career preparation of UM students.

Social Work

TLTC project Testing an Intensive Community-based Program Evaluation Experience for Graduate Students: CRLT staff provided feedback on an assessment plan.

CRLT's contribution to an assessment of the New Leaders in African-Centered Social Work program is described below (see p. 36).

Other Units

Academic Innovation

TLTC project on M-Write II (see p. 29)

CRLT staff collaborated on the assessment of the Legal Practice Classroom (see Law above).

CRLT staff prepared a report regarding an evaluation of GradeCraft that entailed MSFs, online feedback surveys, and an instructor interview.

CRLT staff drafted an assessment plan for ELI's Small Private Online Course (SPOC)/MOOC.

CRLT staff collaborated on an evaluation plan for ART and facilitation of an ART student focus group.

Bentley Historical Library



TLTC project Engaging the Archives: CRLT staff provided feedback on the assessment plan.

Central Student Government

CRLT staff consulted on assessment methods and measures for CSG's mental health surveys.

Information and Technology Services (ITS)

CRLT staff designed and carried out evaluations of the Canvas pilot projects (see p. 29).

Michigan Center for Interprofessional Education

CRLT staff produced a report evaluating the 2015 Health Professions Education Day and provided resources and support for the Curriculum Mapping Workgroup.

Provost's Office

CRLT staff designed and carried out evaluations of the Canvas pilot projects (see p. 29).

CRLT's support of the Transforming Learning for a Third Century (TLTC) Initiative focused on developing campus capacity around assessment of engaged learning. CRLT staff consulted with applicants and grantees about their assessment plans and provided feedback on approaches to data collection and assistance with IRB applications. Further, TLTC assessment postdocs continued to work on an ambitious project to situate U-M's engaged learning goals in research and provide high-quality recommendations for assessment tools using local examples as well as established models. This project led to the "Engaged Learning at Michigan" website that launched in May 2016 (crlt.umich.edu/engaged-learning). Throughout the year, CRLT staff coordinated with other campus stakeholders and organized multiple events with the goal of convening faculty and staff to share innovative approaches to engaged learning practice and assessment.

CRLT Research

CRLT staff members (including an associate research scientist) are pursuing several research projects on teaching and learning topics of particular relevance to faculty and graduate students at U-M.

Partnering with Teaching and Learning Centers for Curricular Assessment: A Case Study of Best Practices

CRLT partnered with faculty and administrators from the Stamps School of Art & Design to conduct an evaluation of the school's social engagement requirement. The aim of the requirement was to help students in the school's under-

graduate programs understand the agency they possess as artists and designers and guide them in determining how to use that agency to impact the world around them. The goals of the evaluation were to provide information on the impact of the requirement on short- and longer-term student achievement of the intended learning outcomes, suggestions for improving student learning, and recommendations for ongoing assessment of the requirement. Evaluation methods included conducting feedback sessions with students in four engagement courses, focus groups with seniors and alumni, interviews with faculty and community partners, and analyses using data from the registrar and a university survey of students (UMAY).

A significant finding from the evaluation was that the engagement courses had an important and enduring impact on students' ability to work collaboratively with diverse communities. The evaluation presents a model for how academic units can partner with teaching and learning centers to facilitate faculty interpretation and use of multiple sources of evidence about student learning across a program or curriculum. A case study describing this collaboration will be published in an upcoming, special issue of *New Directions in Teaching and Learning on Assessment in Action – Evidence-Based Discussions about Teaching, Learning, and Curriculum*. In addition, CRLT staff were invited to present a workshop based on the project at the annual conference of the Association for Assessment of Learning in Higher Education in June 2016.

Qualitative Analysis of Student Perceptions Comparing Team-Based Learning and Traditional Lecture in a Pharmacotherapeutics Course

Researchers at CRLT and the U-M Department of Clinical Pharmacy conducted a qualitative analysis of students' attitudes and perceptions of team-based learning (TBL) as compared to lecture. Students in the study were exposed to TBL and lecture in an elective pharmacotherapeutics course in a randomized, prospective, cross-over

design. After completing the course, students provided their attitudes and perceptions through a written self-reflection and narrative questions on the end-of-course evaluation. The analysis yielded five major themes: impact of TBL on learning, perceptions about TBL learning methods, changes in approaches to learning, building skills for professional practice, and enduring challenges. Overall, students reported that TBL enhances their learning of course content (knowledge and application), teamwork skills, and lifelong learning skills. A manuscript has been accepted for publication in the *American Journal of Pharmaceutical Education*.

New Leaders in African-Centered Social Work Program

The New Leaders in African-Centered Social Work (NLACSW) scholars program was initiated in Fall 2015 with the aim of creating a culturally-responsive curriculum and learning environment that will enhance students' preparation for practice with African-American families. The creation of the program was supported by research funded through a 2013 TLTC Quick Wins grant. CRLT conducted interviews with the first cohort of students to enroll in this program to understand the impact of the program's curricular and co-curricular components on student learning. Students reported that the program enhanced their ability to provide effective, African-centered care in their field placements and has prepared them for future work with African-American clients, as well as clients from other populations. The interview findings informed a report to the School of Social Work on the intermediate outcomes of the program and suggestions for future implementation.

Assessing Engineering and Medical Learners' Perceptions of Interdisciplinary Work

Researchers at CRLT, the U-M Biomedical Engineering Department, and the Medical School conducted a qualitative analysis of students' attitudes and perceptions of interdisciplinary work after participating in a Medical Device Sandbox

(MDS) experience that tasked teams of biomedical engineering students and medical residents with re-designing medical devices. Data on students' attitudes and perceptions were gathered through a retrospective pre-post survey. The findings of this study indicate that students view MDS sessions as positive learning experiences that provide a unique opportunity to collaborate on interdisciplinary teams on medical device design challenges. A description of the study and its findings will be presented at the American Society for Engineering Education Annual Conference & Exposition in June 2016.

Case-Based Pedagogy for Sustainability Education

Researchers at CRLT and the U-M School of Natural Resources and Environment worked together to develop a suite of courses that use case-based pedagogies to teach sustainability content. The Michigan Sustainability Cases initiative adapts the case-based approach in three ways to support active and engaged learning: integration of audiovisual elements into conventional text-based case narratives; strong partnerships among students, faculty, and practitioners to flip the curriculum, and a digital platform for enhanced flexibility to configure case-based curriculum design. A competitive funding mechanism and writeshops for case development teams promise to open the case-based approach through imaginative appropriation for sustainability learners in diverse educational and organizational contexts globally. A manuscript describing the development of Michigan Sustainability Cases, as well as preliminary assessment work and future plans has been submitted to *World Development Perspectives* for publication.

Appendix A: Grants and Awards

► Provost's Teaching Innovation Prize (TIP)

The Provost's Teaching Innovation Prize was created and funded jointly by the provost's office, the university library, and CRLT. TIP recognizes faculty who have developed innovative approaches to teaching that incorporate creative pedagogies, and it encourages the dissemination of best practices by sharing promising innovations with faculty more broadly. In 2016, five teaching innovations were chosen from among 43 faculty nominees. Winning faculty received a \$5,000 award for their original approaches to teaching and creativity in the classroom.

Provost's Teaching Innovation Prize Recipients, Winter 2016

1. Sapan Ambani, *Medicine*
Making Every Second Count With Spaced Questioning Technology
2. David Chesney, *Computer Science and Engineering*
Developing Software Systems for Children With Disabilities
3. Brian Coppola and CSIE | UM participants, *Chemistry, LSA*
Improving Instruction and Nurturing Future Science Educators
4. David Hughes, Gurjit Sandhu, Lisa Leininger, Rishindra Reddy, and Susan Ryszawa, *Medicine*
Debriefing Students' Clinical Skills With the Minute Feedback System
5. Fei Wen, *Chemical Engineering*
Identify-Solve-Broadcast Students' Own Mass and Heat Transport Phenomena

► Faculty Development Fund

This fund provides grants for innovative projects that enhance teaching and learning. CRLT awards up to \$6,000 to individual faculty members or small groups of faculty who propose innovative new courses or revisions to existing courses or who initiate other projects that improve student learning. Grant awards up to \$10,000 are available to departments, programs, and other large faculty groups who want to collaborate on more extensive projects, such as curriculum development and evaluation, inclusive classrooms, novel applications and evaluations of instructional technology, non-traditional approaches to teaching, and GSI mentorship and training programs.

Faculty Development Fund Recipients, Winter 2016

1. Paul Barron, *English Language and Literature*, and Carol Tell, *Sweetland Center for Writing, LSA*
Expanding the Lloyd Hall Scholars Program Curriculum
2. Theodora Danciu and Vidya Ramaswamy, *Dentistry*
Preparing the Future Leaders of Dental Medicine in a Diverse and Global Society
3. Michelle Daniel, Joseph House, Fatema Haque, Heather Wagenschutz, and Paula Ross, *Medicine*
Faculty Development in Critical Reflection
4. Adrienne Haggins, Laura Hopson, and Michael Clery, *Medicine*
The Hidden Curriculum-Experiential Learning in Socially and Economically Contrasting Health Care Settings and Influence on Residency Competency Development in Delivering Care to Diverse Populations

5. Gary Harper, Jane Banaszak-Holl, Dina Kurz, and Jillian McConville, *Public Health*
School of Public Health Community of Learning for Undergraduate Education
6. Shane Quinonez and Hilary Haftel, *Medicine*
Curriculum Development in Pediatric Global Health Education
7. Beth Reed and Jorge Delva, *Social Work*
Strengthening Education for Justice and Diversity
8. Colleen Seifert, *Psychology, LSA*
Engaging Psychology Students Through the Case Method Approach
9. Dana Tschannen, *Nursing*
Improving Communication Among the Healthcare Team Through an Interprofessional Education
Virtual Training
10. Nina White, *Mathematics*, and Brenda Gunderson, *Statistics, LSA*
The Statistical Education of Future Teachers at the University of Michigan

► Gilbert Whitaker Fund for the Improvement of Teaching

The Office of the Provost finances the improvement of teaching through the Gilbert Whitaker Fund, which is administered by CRLT. This fund provides grants for innovative projects that enhance teaching and learning. CRLT awards up to \$6,000 to individual faculty members or small groups of faculty who propose innovative revisions to courses or innovative course development (e.g., interdisciplinary courses) or who initiate other projects that improve the learning of students. Grant awards up to \$10,000 are available to departments, programs, and other large faculty groups who want to collaborate on more extensive projects, such as curriculum development and evaluation, inclusive classrooms, novel applications and evaluations of instructional technology, non-traditional approaches to teaching, and GSI mentorship and training programs.

Gilbert Whitaker Fund Recipients, Fall 2015

1. Mustapha Beleh, *Pharmacy*
The Use of a Web-Based Application in an Integrated Pharmacology and Medicinal Chemistry Course
2. Michael Cole, Deborah Rooney, Matthew Stull, and Brendan Munzer, *Medicine*
In-Situ Critical Care Simulation to Improve Critical Patient Care by Senior Medical Students
3. Karl-Georg Federhofer, *Germanic Languages and Literatures*, and Maria De Lourdes Dorantes, *Romance Languages and Literatures, LSA*
Online Version Modern Language Aptitude Test
4. Sung Kyun Park and Bhramar Mukherjee, *Public Health*
From Methods to Applications: A Proposal for Redesigning a Course Providing an Interdisciplinary Educational Experience for the Modern Quantitative Epidemiologist
5. Veerendra Prasad, *Screen Arts and Cultures, LSA*
Middlebrook: An Anthology Web Series About Campus Life
6. Diane Spillane, *Molecular, Cellular, and Developmental Biology, LSA*
Development of an Inquiry-Based *C. elegans* Project for Genetics Laboratory

7. Martin Strauss and Gavin Larose, *Mathematics, LSA*
Enhanced Free-Form Submissions in WeBWork: Deductive Proofs
8. Catherine A. Walker, *Music, Theatre & Dance*
Technology Integration into the Musical Theatre Curriculum
9. Chin-Wei Wang and Martha McComas, *Dentistry*
Interactive Video Demonstration and Self-Reinforced Teaching and Learning to Customize Oral Hygiene Behavioral Shaping

► Investigating Student Learning Grant

This program provides grants to faculty who wish to investigate aspects of student learning in their courses, curricula, or educational programs. ISL participants attend a one-day symposium at U-M on research about teaching and learning, conduct educational research on student learning, and share their insights with colleagues at a CRLT-sponsored forum. Grant awards of \$6,000 are available to individual faculty members, and awards of \$8,000 are available to faculty member-graduate student/postdoc teams. Additional support for the 2015-2016 ISL grants came from the Vice Provost for Global and Engaged Education and the College of Engineering.

Investigating Student Learning Grant Recipients, Fall 2015

1. Pauline Khan, *Technical Communication, CoE*
Investigating the Use of Mobile Devices for Video Review to Improve Oral Communication
2. Nasuh Malas, *Medicine*
Enhancing Pediatric Resident Competency in Motivational Interviewing and Behavior Change Counseling
3. Chauncey Monte-Sano, *Education*
Investigating Students' Communication, Collaboration, and Self-Agency in Their Understanding and Application of Core Teaching Practices
4. Kyongmi Park, *Asian Languages and Cultures*
Creating a Virtual Sandbox for Intermediate Language Learning in Korean
5. Kate Peterson Stanley, *Medicine*
Remaining Human: Using Literature and Cinema to Teach Professionalism
6. Tanya Rosenblat, *Information*
Motivating Study Group Participation
7. Kathleen Sienko and Shanna Daly, *Mechanical Engineering*
Investigating Student Development of Intercultural Intelligence Through Diverse Stakeholder Engagement Using Prototyping During Design
8. Fei Wen, *Chemical Engineering*
Investigating the Impact of Student-Created YouTube Video on Enhancing Undergraduate Active Learning Outcomes

► Faculty Communities for Inclusive Teaching

This initiative builds faculty capacity for supporting an inclusive campus climate through their teaching in classrooms, clinics, studios, or labs. Funds of up to \$1,000 are available for projects that assemble small groups of faculty to discuss and learn together about campus diversity and inclusive teaching practices. Project leads gather twice: once to discuss their plans and once again at the end of the funding period to share key insights and dissemination plans.

Faculty Communities for Inclusive Teaching, Winter 2016

1. Laura K. Alford, *Naval Architecture and Marine Engineering*
Addressing the Impact of Implicit Bias on Teams in Introductory Engineering Courses
2. Kelly Allen and Dwight Fontenot, *Comprehensive Studies Program, LSA*
Teaching Summer Bridge Scholars: Inclusive Practices
3. Naomi André and Jennifer Myers, *Residential College, LSA*
Faculty Conversations on Racial Inclusion in the Classroom and RC Living-Learning Community
4. Irina Aristarkhova, *Art & Design*
Series of Faculty Workshops on Inclusive Teaching in the Stamps School of Art & Design
5. Charlotte Karem Albrecht, *American Culture, LSA*
Faculty Discussion Group on Supporting Arab, Middle Eastern, and Muslim Students
6. Jo Kurdziel, Marian Schmidt, and Susan Cheng, *Ecology and Evolutionary Biology, LSA*
Discussion Group on Equity and Inclusion in Biology Classrooms and Research Labs
7. Christine Modey and Simone Sessolo, *Sweetland Center for Writing, LSA*
Inclusive Teaching in Writing Center Contexts
8. Maren Oberman, *Education*
Pedagogical Book Club: Building Community & Capacity Using bell hooks' *Teaching to Transgress: Education as the Practice of Freedom*
9. Alisse Portnoy, *English Language and Literature, LSA*
Departmental Faculty Reading Group on Privilege in Teaching and Learning
10. Yeray Ramos Silgado, *Romance Languages and Literatures, LSA*
LGBTQA Inclusiveness in the Language Classroom: Challenging Heteronormative Assumptions While Teaching and Learning a Foreign Language
11. EJ Westlake, *Music, Theatre & Dance*
Integrating New Plays by People of Color Into the Theatre Curriculum

► Lecturers' Professional Development Fund

Lecturers with continuing teaching appointments on the Ann Arbor campus are eligible for grants of up to \$2,000 to support professional development activities that involve teaching, research, and/or creative endeavors. Examples of grant funding include participation at national or international professional meetings, pedagogical programs and projects, graduate student or work-study student assistance, computer hardware or software, travel required to access resources at other institutions, subscriptions to professional journals, and editorial assistance.

Lecturers' Professional Development Fund Recipients, Fall 2015

1. **Tatiana Calixto**, *Romance Languages and Literatures, LSA*
Intensive Quechua Course in Cusco, Peru
2. **Amy Cheng**, *Music, Theatre & Dance*
Attending the 38th Chamber Music America Annual Conference
3. **Susan Crabb**, *Social Work*
Attendance at the Gerontological Society of America Annual Meeting
4. **Shubhangi Dabak**, *Germanic Languages and Literatures, LSA*
The Energy Turn, Ecology and Sustainability - The Green City of the Future, Freiburg (Goethe Institute Seminar)
5. **Ana Fernandez**, *Residential College, LSA*
Lithography Printmaking Workshop
6. **Robin Fowler**, *Technical Communication, CoE*
Attendance at 2016 Conference of the American Society for Engineering Education
7. **Amy Hortop**, *Mechanical Engineering*
Attendance at the Annual ASEE Conference and Exposition
8. **Andrew Mills**, *Germanic Languages and Literatures, LSA*
Beekeeping Research and Training in Germany
9. **Laura Motta**, *Classical Studies and Anthropology, LSA*
The Seeds of Power: Cereal Crops and Exchange Networks. Paper to be presented at the Society for American Archaeology Meeting
10. **Payal Patel**, *Medicine*
Society for Healthcare Epidemiology of America 2016 Conference: Enhancing Antimicrobial Stewardship Education
11. **Mary Rodena-Krasan**, *Germanic Languages and Literatures, LSA*
Teaching the Holocaust as a Language Course
12. **Robert Russell**, *Residential College, LSA*
Attending 2016 AWP Writers Conference and Bookfair
13. **Simone Sessolo**, *Sweetland Center for Writing, LSA*
Self[ie] Awareness: A Resource for Faculty and Students to Practice Character Presentation Through the Selfie
14. **Julie Steiff**, *Architecture & Urban Planning*
Writing Strategies for Action: The 2016 Annual Convention of the Conference on College Composition and Communication

15. Adina Turcu, *Medicine*
The Contemporary Endocrinology of Congenital Adrenal Hyperplasia
16. Mike Umbriac, *Mechanical Engineering*
Attendance at Academic Conference on Engineering Education
17. Colleen Van Lent, *Information*
Creating a More Accessible Classroom by Teaching About Accessibility
18. Ilya Volkovich, *Electric Engineering and Computer Science*
Attendance and Paper Presentation at an International Academic Conference (Innovations in Theoretical Computer Science) at MIT
19. James Walker, *English Language and Literature, LSA*
2016 AWP Conference & Book Fair
20. Craig Wilkins, *Architecture & Urban Planning*
Smithsonian Museum of African American History: Research and Interviews
21. Isaac Wingfield, *Residential College, LSA*
Humanize the Numbers
22. Elaine Wisniewski, *Technical Communication, CoE*
Attendance at Academic Conference to Present Research on Workplace Communication Practices

► Instructional Development Fund

Through its Instructional Development Fund (IDF), CRLT awards small grants of up to \$500 to faculty on the Ann Arbor campus. These grants support innovative activities to improve teaching and learning. The funds may be used for expenses such as supplies and equipment, programming or research assistance, and fees for conferences directly related to teaching. Applications are accepted on a rolling basis throughout the year.

Instructional Development Fund Recipients, 2015-2016

1. Kwasi Ampene, *Afroamerican and African Studies, LSA*
Guest Artist Series for Music of Africa Class
2. David Baker, *Philosophy, LSA*
Author Visit to Science Fiction and Philosophy Course
3. Tomasz Baumiller, *Earth and Environmental Sciences, LSA*
Use of Exhibit Museum in teaching EARTH 103, EARTH 125
4. Anne Berg, *History, LSA*
Field Trip to New York City
5. Alison Cornish, *Romance Languages and Literatures, LSA*
Visit of Alessia Blad to Italian Program
6. Clare Croft, *Music, Theatre & Dance*
Establishing Berlin, Germany, Base for MFA Dancers
7. Anna Watkins Fisher, *Residential College, LSA*
Class Attendance at UMS Shows
8. Rachel Goldman, *Materials Science and Engineering*
M-Write MSE 220/250 Using an I-Pad Pro

9. Leslie Hollingsworth and Phylicia Allen, *Social Work*
New Leaders in African-Centered Social Work (NLACSW) Support and Consultation Mechanism
10. Michael Hopkins, *Music, Theatre & Dance*
String Pedagogy at Michigan Music Pre-Conference
11. Jeffrey Kidd and Jacob Kitzman, *Medicine*
Hands-on Experience in Computational Genomics
12. Hyun-Ju Kim, *Asian Languages and Cultures, LSA*
Korean Language FanFiction Project
13. Dae Hee Kwak, *Kinesiology*
Linking the Classroom to Comerica Park
14. Janine Maddock, *Molecular, Cellular, and Developmental Biology, LSA*
Creating a Digital Resource for Critical Thinking in Molecular Biology
15. Andrew Noverr, *Romance Languages and Literatures, LSA*
Digitizing Media-Rich Presentations for Spanish 232
16. Jonathan Rule, *Architecture & Urban Planning*
Building Blocks: Propositions Studio Dissemination
17. Courtney Snyder, *Romance Languages and Literatures, LSA*
Using the Coach's Eye + Teams Application as a Tool to Provide Enhanced Conducting Video Analysis in CONDUCT 315/316 Courses
18. Susan Waltz and Shobita Parthasarathy, *Public Policy*
Ford School IEDP 2016, Cuba
19. Rebecca Scharbach Wollenberg, *Judaic Studies, LSA*
Hypertext as a Pedagogical Tool in the Teaching of Midrash (and Other Premodern Texts)

► Transforming Learning for the Third Century - Networks for Engaged Teaching

The TLTC-NET initiative supported regular meetings of faculty and staff communities to advance engaged learning, with a focus on teaching approaches that help students gain practice in addressing unscripted, real-world challenges (e.g., global experiences, creative work and performance, discovery-based research experiences, client-driven projects). Funds of up to \$1,000 were awarded for projects that assembled small groups of faculty, or faculty/staff/student teams, for regular discussion of engaged learning practices or to plan next steps from a previously funded TLTC proposal. Funds supported activities scheduled any time during the winter, spring or summer terms. Project leads met twice with CRLT: first, to discuss plans and ways CRLT can support the community before initiation of the group, and second, during the following spring/summer or fall term to discuss key insights and next steps. Project leads were also asked to present ideas developed or materials created during a large CRLT event on engaged learning.

TLTC-NET Recipients, Winter 2016

1. Susan Crabb, Daicia Smith, and Mary Eldredge, *Social Work*
GEL: Gender Based Violence and Engaged Learning in Higher Education
2. Lesli Hoey, *Architecture & Urban Planning*
The Global and Comparative Planning Learning Community: Enhancing Engaged Learning and Career Opportunities
3. Anne McNeil, Michele Nelson, Alex Pontiowski, and Ginger Schultz, *Chemistry*, Joe Gennaro, *Physics*, and Marcus Ammerlaan, *Biology, LSA*
Establish a Faculty Learning Community for Engaged Learning in Large Enrollment Science Laboratory Courses in LS&A
4. Michelle Munro-Kramer, *Nursing*
Field Instruction Seminar
5. Carol Anne Murdoch-Kinch and Vidya Ramaswamy, *Dentistry*
Engaged Learning Study Group
6. Alexandra Stern and Lenny Ureña Valerio, *Center for Latin American and Caribbean Studies, LSA*
A Visit from Samox-San Lucas, Guatemala: Learning from Community Partners

Appendix B: Disciplinary-Based, Customized Services for Schools, Colleges, and Other Units

CRLT responds to units based on their particular teaching and learning needs. Services include support for assessment of student learning, customized seminars and retreats, support for unit-wide graduate student instructor (GSI) training, consultations offered to individual faculty at the request of a specific unit, and consultations with deans and chairs focusing on unit-wide activities. CRLT provided over 4,000 services for all 19 of U-M's schools and colleges, as well as 13 other units, including the provost's office.

Disciplinary-Based Services for U-M Schools, Colleges, and Departments

Architecture & Urban Planning

- * Development of assessment plan, and assistance with enactment, for Michigan Engaging Community through the Classroom (MECC), TLTC Transformation Grant
- * Grants for professional development received by Lesli Hoey, Jonathan Rule, Julie Steiff, and Craig Wilkins
- * Review of survey instrument for assessment of TLTC project, Interactive Satellite Solar Lab.

Art & Design

- * Evaluation of Stamps social engagement requirement's impact on short- and longer-term student achievement of intended learning outcomes
- * Grant for teaching innovation received by Irina Aristarkhova
- * Presentation at faculty meeting on inclusive teaching
- * Workshops for faculty on inclusive teaching

Business

- * Consultation on implementation of BA 200, "Businesses and Leaders: The Positive Differences"
- * Consultations on teaching resources with the Ross Teaching Advisory Committee
- * Organization, implementation, and evaluation of a teaching academy for newly hired faculty, in consultation with associate dean, including classroom observations, workshop on case-based teaching, and reunion meeting in the winter term
- * Planning, facilitation, and evaluation of a teaching academy for newly hired faculty, in consultation with associate dean, including August academy, classroom observations, and winter term reunion meeting

Dentistry

- * Evaluation of SW503, "Patient- and Family-Centered Care with Diverse Populations"
- * Grant for professional development received by Theodora Danciu and Vidya Ramaswamy
- * Grants for teaching innovation received by Martha McComas, Carol Anne Murdoch-Kinch, Vidya Ramaswamy, and Chin-Wei Wang
- * Planning and facilitation of faculty retreat for Department of Periodontics and Oral Medicine
- * Teaching academy for newly hired faculty in health science disciplines
- * Workshop for faculty on managing discussion in the classroom in the "Team-Based Clinical Decision Making" course

Education

- * Consultation on planning for math education retreat
- * Grants for teaching innovation received by Chauncey Monte-Sano and Maren Oberman

Engineering

- * Consultation on evaluation of Polymer Bootcamp
- * Development and facilitation of half day teaching orientation program for new engineering faculty
- * Development of assessment plan, and assistance with enactment, for Michigan Engaging Community through the Classroom (MECC), TLTC Transformation Grant
- * Facilitation of two meetings with faculty teaching small courses and preparation of recommendations
- * Facilitation of two focus groups on challenges of managing student teams for faculty who teach first- and second-year courses
- * Grants for professional development received by Robin Fowler, Rachel Goldman, Amy Hortop, Mike Umbriac, Ilya Volkovich, and Isaac Wingfield
- * Grants for teaching innovation received by Laura K. Alford, David Chesney, Shanna Daly, Pauline Khan, Kathleen Sienko, and Fei Wen
- * Interactive theatre performance for faculty about how to help students with mental health challenges
- * Interactive theatre performance for faculty on graduate climate in lab environments with a particular focus on gender
- * Interactive theatre performance for casebook committee on how gender and faculty rank influence dynamics and the decision-making process of tenure committees
- * Meeting with associate dean and planning CRLT Players performances in 2016-17, including multiple performances of *A Thousand Cuts*
- * Ongoing consultation with associate deans about CRLT-Engin initiatives for faculty and GSIs
- * Organization of an annual poster fair for faculty and GSIs showcasing scholarship and research in engineering education
- * Workshop on incivility
- * Workshops on inclusive teaching and assessing teamwork for mechanical engineering faculty with courses centered on teamwork
- * Workshop on inclusive teaching with respect to groups and teams for 1st and 2nd year instructors
- * Workshops for faculty: perspectives on teaching, preventing and addressing disruptive behavior in the classroom, teaching lessons from the Fortune 500,

GSI-related services

- * Facilitation of NextProf sessions on developing a teaching philosophy statement and teaching in academia
- * Hiring, training, and supervision of engineering teaching consultants (ETCs)
- * Interactive theatre performance for grad students on graduate climate in lab environments with a particular focus on gender
- * Interactive theatre performance on mental health for GSIs
- * Organization and facilitation of a customized GSI training program, fall term
- * Organization and facilitation of a customized IA training program, fall and winter terms
- * Organization of Towner Prize for Outstanding GSIs, including the nomination, selection, and publicity processes
- * Workshop on effective teaching for graduate students in CEE Seminar Series

- * Workshops for ETCs: observing classes, midterm student feedback, practice teaching, strategies for working with GSIs, consulting with GSIs, and research in engineering education
- * Workshops for graduate students and postdoctoral scholars: active learning, fostering student groups' effective teamwork, improving student learning, strategies for improving teaching, teaching for student retention

Information

- * Design and facilitation of a workshop on gameful pedagogy
- * Facilitation of "Diversity and Inclusion: Course Content and Classroom Environment"
- * Grant for professional development received by Colleen Van Lent
- * Grant for teaching innovation received by Tanya Rosenblat
- * Planning and facilitation of 2 faculty workshops to design new mastery courses

Kinesiology

- * Design and facilitation of a series of workshops on course design for movement science faculty
- * Support for assessment of TLTC Hybrid Modular Courses, including survey and rubric development and 5 MSFs
- * Grant for professional development received by Dae Hee Kwak
- * Teaching academy for newly hired faculty in health science disciplines

Law

- * Consultation with educational environment committee on inclusive teaching sessions for faculty
- * Evaluation of using flipped classroom methods to teach writing to law students
- * Planning and facilitation of a workshop on "hot moments" for faculty

Literature, Science, and the Arts

• *Afroamerican and African Studies*

- * Grant for professional development received by Kwasi Ampene
- * Grant for teaching innovation received by Naomi André

• *American Culture*

- * Consultation on retreat planning for Latino/a Studies
- * Grant for professional development received by Anna Watkins Fisher
- * Grant for teaching innovation received by Charlotte Karem Albrecht

• *Anthropology*

- * Grant for professional development received by Laura Motta

• *Asian Languages and Cultures*

- * Evaluation of Japan Foundation grant for creation of Japanese studies MA fellows program and undergraduate immersive learning experiences
- * Grant for professional development received by Hyun-Ju Kim
- * Grant for teaching innovation received by Kyongmi Park
- * Workshop for GSIs on course management

- *Biology*
 - * Consultation with Program in Biology about GSI training practices
 - * Grant for teaching innovation received by Marcus Ammerlaan
- *Chemistry*
 - * Consultation on GSI training practices
 - * Grant for professional development received by Anne McNeil, Michele Nelson, Alex Pontowski, and Ginger Schultz
 - * Grant for teaching innovation received by Brian Coppola and CSIE|UM
 - * Presentation for GSIs on disrespect and disruption in the classroom
 - * Workshop for faculty on facilitating focus groups for chemistry placement project
- *Classical Studies*
 - * Grant for professional development received by Laura Motta
- *Communication Studies*
 - * Moderation of "Faculty Roundtable on Teaching Race and Media"
 - * Planning and facilitation of workshop for faculty on "Building Diversity and Inclusion Into Your Course Content and Class Environment"
- *Comparative Literature*
 - * Consultation on GSI training
- *Comprehensive Studies Program*
 - * Grant for teaching innovation received by Kelly Allen and Dwight Fontenot
- *Dean's Office*
 - * Collaboration with Dean's Office and ADVANCE on planning and presentation of workshop for junior faculty on "Navigating the Third-Year Review"
 - * Collaboration with REBUILD in its final year included
 - Facilitation of retreat, multiple focus groups to gather input on the future of REBUILD and an October 2015 Provost's Seminar on Teaching
 - Organization of lunch meetings
 - Participation in committee meetings and organization of luncheon
 - Planning and discussion of seminar series
 - * Consultation on college's DE&I strategic plan
 - * Consultation with Undergraduate Education Committee to discuss TLTC champions program
 - * Consultations on training for undergraduate assistants
 - * Coordination and facilitation of the LSA Large Course Initiative
 - * Development and facilitation of a teaching academy for all new assistant professors in the college, including a two-day orientation, facilitation of midterm student feedback sessions, facilitation of peer observation of senior colleges, and a final program on issues arising in the first year of teaching
 - * Facilitation of "Disrespect and Disruption in the Classroom" for LSA Seminar Series
 - * Follow up with May 2015 Faculty Dialogue Institute participants (course planning consultations and dinner)
 - * Interactive theatre performance for faculty about how to help students with mental health challenges
 - * Interactive theatre performance for LSA administrators on successful chair/staff relationships

- * Interactive theatre performances for Newnan advisors about helping students with mental health challenges and responding to student climate concerns
- * Meetings with Growing STEM group to discuss undergraduate STEM reform efforts and Foundational Course Initiative
- * Multiple interactive theatre presentations on how gender and faculty rank influence dynamics and the decision-making process of tenure committees
- * Planning for Players performances for winter 2016 LSA Seminar Series
- * Presentation of results from pilot initiatives to decrease class size in introductory Spanish and German courses

GSI-related services

- * Collaboration with English Language Institute to develop and facilitate a three-week intensive course in August 2015 and a winter 2016 course for graduate students educated abroad in languages other than English who plan to have GSI appointments in LSA, including interactive theatre performances about gender climate issues in the classroom
 - * Facilitation of NextProf Science session "Developing a Teaching Philosophy and Building an Educational Portfolio"
 - * Organization and facilitation of GSI orientation training programs prior to fall 2015 and winter 2016 terms, including theatre performances on inclusive teaching practices
 - * Overview of CRLT services for GSIs and GSI training for Grad Coordinators Forum
 - * Session for GSI coordinators and GSMs to share strategies on GSI training, particularly those related to inclusive teaching
 - * Training for all incoming graduate students about sexual harassment, using interactive theatre performances
 - * Workshop training practice teaching facilitators for GSI teaching orientations
 - * Workshops for GSMs and GSI coordinators about observing classes, midterm student feedback, practice teaching, strategies for working with GSIs, and consulting with GSIs
- *Earth and Environmental Sciences*
 - * Grant for professional development received by Tomasz Baumiller
 - * Planning and presentation of an inclusive teaching workshop for faculty
 - *Ecology and Evolutionary Biology*
 - * Grant for teaching innovation received by Jo Kurdziel
 - * Multiple interactive theatre performances on how gender and faculty rank influence dynamics and the decision-making process of tenure committees
 - *English Language and Literature*
 - * Consultation on graduate pedagogy course
 - * Grants for professional development received by Paul Barron and James Walker
 - * Grants for teaching innovation received by Christine Modey and Alisse Portnoy
 - * Interactive theatre performance about how to help students with mental health challenges for faculty, lecturers, and graduate students in the Writing Program
 - *English Language Institute*
 - * Collaboration with English Language Institute to develop and facilitate ELI 994, a three-week intensive course in August 2015 and a winter 2016 course for graduate students educated abroad in languages other than English who plan to have GSI appointments in LSA

- * Development of assessment plan for new online pre-arrival course for international students
- * Interactive theatre performance for international graduate students about classroom climate
- *Germanic Languages and Literatures*
 - * Grants for professional development received by Andrew Mills and Mary Rodena-Krasan
 - * Grant for teaching innovation received by Karl-Georg Federhofer
 - * Presentation of results from pilot initiative to decrease class size in introductory German courses
- *Health Science Scholars*
 - * Meeting with Health Science Scholars Program about GSI training practices
- *History*
 - * Consultation on planning of pedagogy course for GSIs
 - * Grant for professional development received by Anne Berg
 - * Interactive theatre performance for GSIs about the ways identity affects student engagement and experience
 - * Participation in HISTORY 195 midterm instructional check-in meeting
 - * Planning and facilitation of a workshop for GSIs on hot moments in the classroom
 - * Presentation on classroom observation for History 808 grad students and GSIs
 - * Workshop for GSIs who will teach HISTORY 195 in 2016-2017
- *International Studies*
 - * Consultation on GSI training
- *Latin American and Caribbean Studies*
 - * Grant for teaching innovation received by Alexandra Stern and Lenny Ureña Valerio
- *Lloyd Hall Scholars Program*
 - * Grant for professional development received by Paul Barron and Carol Tell
- *Linguistics*
 - * Consultation on GSI training
- *Judaic Studies*
 - * Grant for professional development received by Rebecca Scharbach Wollenberg
- *Mathematics*
 - * Consultation on GSI training practices
 - * Consultation on scale to measure math anxiety
 - * Evaluation of pilot project to decrease course size in first year calculus, including facilitation of focus groups, observation of classes, training of calculus small class observers, and organizing a debriefing lunch
 - * Grant for professional development received by Nina White
 - * Grant for teaching innovation received by Martin Strauss and Gavin Larose
 - * Interactive theatre performance about climate in the classroom as part of the orientation program for instructors teaching introductory calculus
- *Molecular, Cellular, and Developmental Biology*
 - * Evaluation plan for broader impacts of NSF grant
 - * Grant for professional development received by Janine Maddock
 - * Grant for teaching innovation received by Diane Spillane

- *Newnan Advising Center*
 - * Interactive theatre performances about helping students with mental health challenges
 - * Planning for the development and performance of an interactive theatre sketch on climate concerns
- *Philosophy*
 - * Grant for professional development received by David Baker
 - * Workshop on syllabus design for GSIs
- *Physics*
 - * Grant for teaching innovation received by Joe Gennaro
 - * Meetings with applied physics, biophysics, and physics about GSI training practices
- *Political Science*
 - * Interactive theatre performance for GSIs about how to help students with mental health challenges
- *Program in the Environment (PiTE)*
 - * Meeting about GSI training practices
- *Psychology*
 - * Assistance with departmental GSI training
 - * Consultation with associate chair about inclusive teaching in the department
 - * Grant for professional development received by Colleen Seifert
 - * Grant for teaching innovation received by Jennifer Myers
 - * Planning and facilitation of workshop for GSIs on inclusive teaching
- *Residential College*
 - * Grants for professional development received by Ana Fernandez, Anna Watkins Fisher, Robert Russell, and Isaac Wingfield
 - * Grant for teaching innovation received by Naomi André and Jennifer Myers
- *Romance Languages and Literatures*
 - * Grants for professional development received by Tatiana Calixto, Alison Cornish, Shubhangi Dabak, Andrew Noverr, and Courtney Snyder
 - * Grant for teaching innovation received by Maria De Lourdes Dorantes and Yeray Ramos Silgado
 - * Presentation of results from pilot initiative to decrease class size in introductory Spanish courses
- *Screen Arts and Cultures*
 - * Grant for teaching innovation received by Veerendra Prasad
 - * Moderation of "Faculty Roundtable on Teaching Race and Media"
- *Slavic Languages and Literatures*
 - * Consultation with chair to discuss data gathering to inform curriculum revisions
- *Sociology*
 - * Evaluation of R25 NIH Grant, Dynamic Systems Science Modelling for Public Health
- *Statistics*
 - * Evaluation of HyFlex+ Instructional Model of Blended Learning in Stats 250, including focus groups with undergraduates
 - * Grant for professional development received by Brenda Gunderson

- *Sweetland Center for Writing*
 - * Evaluation of Upper-Level Writing Requirement, including focus groups with faculty who teach ULWR courses
 - * Grants for professional development received by Paul Barron, Simone Sessolo, and Carol Tell
 - * Grant for teaching innovation received by Christine Modey and Simone Sessolo
- *Women's Studies*
 - * Grant for teaching innovation received by Naomi André

Medicine

- * Assistance with evaluation of Health Professions Educational Research Day
- * Collaboration with the assistant dean for curriculum on the design and facilitation of the first meeting of the Medical School M1 Sequence Redesign process
- * Grants for professional development received by Michael Clery, Michelle Daniel, Adrienne Haggins, Fatema Haque, Hilary Haftel, Laura Hopson, Joseph House, Jeffrey Kidd, Jacob Kitman, Payal Patel, Shane Quinonez, Paula Ross, Adina Turcu, and Heather Wagenschutz
- * Grants for teaching innovation received by Michael Cole, Sapan Ambani, David Hughes, Lisa Leininger, Nasuh Malas, Brendan Munzer, Rishindra Reddy, Deborah Rooney, Susan Ryszawa, Gurjit Sandhu, Kate Peterson Stanley, and Matthew Stull
- * Interactive theatre performances for second-year medical students on breaking bad news, along with planning of performances for 2016-2017
- * Meeting to discuss possible performance for radiation oncology faculty
- * Meetings to discuss customized curriculum workshops
- * Presentation about Graduate Teacher Certificate for PIBS 800 graduate students
- * Provision of resources on CRLT programs and services at faculty orientation
- * Teaching academy for newly hired faculty in health science disciplines
- * Workshop for hematology and oncology faculty on clinical teaching scripts

Music, Theatre & Dance

- * Grant for professional development received by Amy Cheng, Clare Croft, and Michael Hopkins
- * Grant for teaching innovation received by Catherine A. Walker and EJ Westlake
- * Planning for diversity and inclusion programs for faculty
- * Workshop on inclusive teaching for faculty
- * Workshop on inclusive teaching for GSIs

Natural Resources and Environment

- * Assistance identifying materials for faculty discussion of student mentoring

Nursing

- * Evaluation of PhD Program, including facilitation of focus group with faculty
- * Grant for teaching innovation received by Michelle Munro-Kramer
- * Teaching academy for newly hired faculty in health science disciplines
- * Workshop for faculty on managing discussion in the classroom in the "Team-Based Clinical Decision Making" course
- * Workshops on mentoring for doctoral program faculty and students (separately)

Pharmacy

- * Analysis of qualitative data for large-scale project on impact of new team-based learning curriculum on student learning outcomes
- * Design and facilitation of a faculty workshop on backward course design and learning objectives
- * Grant for professional development received by Dana Tschannen
- * Grant for teaching innovation received by Mustapha Beleh
- * Teaching academy for newly hired faculty in health science disciplines
- * Workshop for faculty on managing discussion in the classroom in the "Team-Based Clinical Decision Making" course
- * Workshop for residents on facilitating discussions

Public Health

- * Assessment of the *Big Data Summer Institute*, including 3 focus groups with undergraduate students, to inform faculty as they plan next iteration
- * Consultation about departmental midterm survey
- * Consultation on alumni assessment resources for Department of Health Management & Policy
- * Design and facilitation of a workshop for biostatistics faculty on innovative teaching and active learning
- * Development and implementation of dietetics internship evaluation survey
- * Development of assessment plan, and assistance with enactment, for Michigan Engaging Community through the Classroom (MECC), TLTC Transformation Grant
- * Grant for professional development received by Gary Harper, Jane Banaszak-Holl, Dina Kurz, and Jillian McConville
- * Grant for teaching innovation received by Sung Kyun Park and Bhramar Mukherjee
- * Interactive theatre performance for graduate students about mentoring
- * Teaching academy for newly hired faculty in health science disciplines

Public Policy

- * Grant for professional development received by Shobita Parthasarathy and Susan Waltz
- * Development of assessment plan and assistance with enactment for Michigan Engaging Community through the Classroom (MECC), TLTC Transformation Grant

Rackham Graduate School

- * Collaboration regarding the Mellon Immersives Program's description and service as contact for interested students
- * Coordination and evaluation of a certificate for GSIs on the use of digital media
- * Coordination and evaluation of the U-M Graduate Teacher Certificate Program, including reviewing portfolios and awarding certificates
- * Development and fall 2015 pilot delivery of new, online version of the *Postdoc Short Course on College Teaching in Science and Engineering (PSC)*
- * Organization, implementation and evaluation of a 4-session training for diversity and inclusive teaching for GSIs, with The Program on Intergroup Relations
- * Organization, implementation, and evaluation of a 10-session *Rackham-CRLT Seminar on College Teaching: Preparing Future Faculty* for advanced doctoral students and postdocs, including an interactive theatre performance on productively addressing classroom conflict while attending to student diversity

- * Organization, implementation, and evaluation of a one-day *Preparing Future Faculty Conference*
- * Organization, implementation, and evaluation of the face-to-face version of the *PSC*, including an interactive theatre performance about classroom climate
- * Participation in career panel "What Now?" for graduate students in the biological sciences
- * Participation in Outstanding GSI Awards selection process and presentation of awards at ceremony
- * Participation in Rackham New Graduate Student Orientation Resource Fair, fall and winter terms
- * Presentation for the grad coordinators group that highlighted inclusive teaching throughout CRLT's GSI services
- * Review with the Digital Education and Innovation Lab of the fall 2015 pilot of the *Online Postdoc Short Course*

Social Work

- * Evaluation of New Leaders in African-Centered Social Work program
- * Planning and implementation of faculty retreat focused on mechanisms for peer review of teaching
- * Grants for professional development received by Phylicia Allen, Susan Crabb, Mary Eldredge, Jorge Delva, Leslie Hollingsworth, Daicia Smith and Beth Reed
- * Teaching academy for newly hired faculty in health science disciplines
- * Workshop for faculty on managing discussion in the classroom in the "Team-Based Clinical Decision Making" course

Customized Services for Other Units at U-M

Academic Innovation

- * Collaboration on Digital Innovation Greenhouse Initiative
- * Design and facilitation of a workshop on gameful pedagogy
- * Development and fall 2015 pilot delivery of new, online version of the *Postdoc Short Course on College Teaching in Science and Engineering*
- * Evaluation of GradeCraft, including feedback from students and interviews with faculty and GSIs
- * Evaluation of using flipped classroom methods to teach writing to law students
- * Participation in steering committee meetings for the Academic Reporting Toolkit 2.0
- * Review with the Digital Education and Innovation Lab of the fall 2015 pilot of the *Online Postdoc Short Course*

ADVANCE

- * Collaboration on Faculty Leading Change program planning committee and co-facilitation of sessions for faculty teams
- * Collaboration with LSA Dean's office on preparation and presentation of a workshop for junior faculty on the third year review
- * Interactive theatre performance on department politics and leadership strategies for faculty across the university (LIFT - Leadership and Integration in Faculty Transitions)
- * Planning of CRLT Players performances in 2016-17
- * Workshops on incivility and on helping students with mental health challenges as part of the ADVANCE-LSA seminar series

Career Center

- * Collaboration to plan, implement, and evaluate a one-day conference on preparing future faculty

Central Student Government

- * Consultation on CSG's Mental Health Initiative regarding their mental health and well-being syllabus statement

Ginsberg Center for Community Service and Learning

- * Participation in Ginsberg strategic planning focus groups

Information Technology Services

- * Evaluation of the Canvas Learning Management System in fall 2015 and winter 2016
- * Planning and facilitation of 3-day institute on Canvas for faculty teaching large courses, in collaboration with ITS, LSA ISS, LRC, and U-M Libraries
- * Presentation of Canvas evaluation summary to Faculty Senate

Institute for the Humanities

- * Assistance with evaluations for Michigan Humanities Collaboratory
- * Presentation on teaching center careers at a conference for graduate students on careers for PhDs in the humanities

Libraries

- * Workshop on active learning strategies and flipping the classroom

Michigan Center for Interprofessional Education

- * Collaboration with IPE Center and DEI to plan workshop for production of *Introduction to Interprofessional Education* video
- * Facilitation of faculty learning community for Interprofessional Education Leadership Fellows Program, including monthly meetings, consultations on team projects, and participation in the University of Virginia's Macy Foundation workshop
- * Meetings with Center for Interprofessional Education to discuss IPE scholarship
- * Participation in Executive Committee meetings
- * Participation in meetings of the Curriculum Workgroup
- * Participation on IPE scholarship committee
- * Planning and evaluation of kickoff dinner for Interprofessional Education Leadership Fellows Learning Community
- * Planning and facilitation of workshop about Team-Based Clinical Decision Making course for May 16 Provost's Seminar on Teaching
- * Planning and facilitation of workshop on managing discussions in the classroom for Team-Based Clinical Decision Making faculty
- * Planning, design, and facilitation of planning retreats for the IPE Curriculum Workgroup
- * Preparation and presentation of faculty development proposal to IPE leadership team

Office of the Provost and Executive Vice President for Academic Affairs

- * Assistance with evaluations for Michigan Humanities Collaboratory
- * Collaboration with other instructional technology units to organize and facilitate the Enriching Scholarship Conference, a university-wide, one-week program of workshops, demonstrations, and presentations
- * Contribution to Investing in Abilities week, a presentation to the U-M community and public, "Teaching With Technology: How Can I Include All Students?"
- * Evaluation of the Canvas Learning Management System in fall 2015 and winter 2016
- * Meetings to plan Liaisons for Inclusive Teaching gatherings
- * Organization and facilitation of New Faculty Orientation, including interactive theatre performance on inclusive teaching practices
- * Organization, facilitation, and evaluation of Provost's Campus Leadership Program, including an orientation for new chairs and associate deans and roundtables for all chairs and associate deans on "Sexual Harassment and Title IX," "Discussing Real-Time Dilemmas," "The Chair's Role in Hiring" (with STRIDE), and "Supporting Students Facing Mental Health Issues"
- * Planning and implementation of a provost's seminar on teaching, *Humanities Classrooms, Digital Environments, Critical Questions* (fall 2015)
- * Participation in Vice Provost and Associate Deans Group
- * Participation in Vice Provost's Task Force for Professional Development in Inclusive Teaching, including conducting 4 faculty focus groups
- * Support for teaching award and grant competitions, including
 - Administration of Gilbert Whitaker Fund for the Improvement of Teaching grants competition
 - Coordination of Faculty Communities for Inclusive Teaching grants, orientation lunch for project leads, interviews with grantees, and organization of poster fair to share grantees' work
 - Coordination of Lecturers' Professional Development Fund program for LEO lecturers
 - Coordination of campus-wide Provost's Teaching Innovation Prize and organization of a poster session before the Enriching Scholarship keynote address
 - Organization of competition to select Thurnau Professors and dinner honoring 2016 recipients
 - Organization of competition to select U-M faculty for Michigan Distinguished Professor of the Year Award
- * Support for the Third Century Initiative and TLTC, including
 - Assessment of TLTC initiative at the institutional level
 - Consultations on assessment for TLTC-NET Grants
 - Development and launch of the "Engaged Learning at Michigan" website
 - Facilitation of faculty discussion of fostering and assessing students' collaboration and teamwork skill, for the development of an assessment toolkit
 - Organization of dinner for TLTC faculty and staff working on interprofessional/interdisciplinary learning initiatives to share initiatives, challenges, and ways to mitigate obstacles
 - Organization of lunches and collection of feedback from TLTC grantees about assessing high impact practices, intercultural intelligence, social and civic responsibility and self-efficacy
 - Planning and implementation of the provost's seminar on teaching, *Thinking Long-Term: Next Steps for Engaged Learning at Michigan and Beyond* (winter 2016)
 - Planning of meetings for TLTC-NET proposal focused on large introductory science lab courses
 - Presentation to the Council on Global Engagement group on TLTC and Intercultural Intelligence

- Publication and distribution of 5 Occasional Papers addressing the TLTC learning goals: a) creativity, b) intercultural engagement, c) social/civic responsibility and ethical reasoning, d) communication, collaboration and teamwork, and e) self-agency, and the ability to innovate and take risks

Teaching and Technology Collaborative

- * Collaboration with other instructional technology units to organize and facilitate the Enriching Scholarship Conference, a university-wide, one-week program of workshops, demonstrations, and presentations
- * Coordination of campus-wide Provost's Teaching Innovation Prize, in collaboration with the senior vice provost and the dean of libraries, including creation of posters for sharing innovations
- * Facilitation of "PowerPoint Supported by the Science of Learning" during November 2015 TTC Teach Fest
- * Facilitation of November Teach Feast workshop on including all students while teaching with technology

U-M Flint

- * Facilitation of faculty learning community for Interprofessional Education Leadership Fellows Program

University Musical Society

- * Consultation on evaluation of Mellon Foundation Grant to diversify and strengthen arts/academic integration in U-M undergraduate curriculum
- * Session on assessment for University Musical Society (UMS) Faculty Institute

Appendix C: Collaborations and Committee Work

Collaboration with Other Units

Collaboration with other U-M offices is a key component of CRLT services. During 2015-2016, CRLT worked with all schools and colleges on teaching improvement projects. Additionally, CRLT collaborated with:

- * Academic Innovation (formerly Digital Education and Innovation)
- * ADVANCE
- * Center for Engaged Academic Learning
- * Digital Innovation Greenhouse
- * English Language Institute (ELI)
- * Ginsberg Center for Community Service and Learning
- * Growing STEM
- * Information Technology Services
- * Institute for the Humanities
- * The Program on InterGroup Relations (IGR)
- * Language Resource Center
- * LSA Instructional Support Services (ISS)
- * LSA Student Academic Affairs
- * Michigan Center for Interprofessional Education
- * News Service
- * Office of the Vice President for Student Life
- * REBUILD
- * Sweetland Center for Writing
- * Teaching and Technology Collaborative
- * University Career Center
- * University Library
- * University Musical Society
- * University of Michigan Biological Station

Committee Work

As part of their collaborative efforts, CRLT staff served on a large number of committees within U-M and nationally:

- * Academic Affairs Diversity Planning Group (AADPG)
- * Academic Reporting Toolkit (ART) 2.0 Steering Committee
- * Academy of Medical Educators Advisory Committee
- * Association of U-M Chinese Professors
- * College of Engineering Towner Prize for Outstanding GSIs
- * CRLT-Engin Director Search Committee
- * CSHPE PhD Committee

- * Digital Innovation Advisory Group (DIAG)
- * DIAG Developing a Tools and Technology Innovation Pipeline Subcommittee (DTTIP)
- * DIAG Digital Ecosystem Subcommittee
- * DIAG Residential Programs, Innovations, and Tools Committee
- * Doctorate of Nursing Practice Committee
- * Enriching Scholarship Keynote Committee, Chair
- * Faculty Leading Change Planning Committee (ADVANCE)
- * Integrity Roundtable Committee
- * Liaisons for Inclusive Teaching
- * LSA Inclusive Pedagogies Committee
- * LSA Race & Ethnicity (R&E) Review Committee
- * Michigan Center for Interprofessional Education--Curriculum Workgroup
- * Michigan Center for Interprofessional Education--Executive Committee (by invitation)
- * Michigan Center for Interprofessional Education--Scholarship Workgroup
- * Nontraditional Student Council
- * Provost's Teaching Innovation Prize Selection Advisory Committee
- * Rackham Outstanding Graduate Student Instructor Awards Committee
- * REBUILD Faculty and Postdoc Committee
- * Teaching and Technology Collaborative (TTC) Committee
- * Thurnau Professorship Selection Advisory Committee
- * Vice Provost and Associate Dean Group (VPADG)
- * Vice Provost's Task Force for Professional Development in Inclusive Teaching

External Committee Participation

- * Committee on Institutional Cooperation (CIC) Assessment Group
- * Committee on Institutional Cooperation (CIC) Teaching Center Directors Group
- * Ivy Plus Teaching Center Directors
- * POD Core Committee
- * POD Executive Committee
- * POD Finance Committee
- * POD Governance Committee
- * POD Graduate Student Professional Development Subcommittee on Assessment and Evidence-Based Practice

Appendix D: External Colleges, Universities, and Organizations Served

Because of its national reputation, representatives of many other institutions contact CRLT for advice and information. In 2015-2016, CRLT provided 1,040 services to external clients who represent 82 colleges and universities, and 12 associations, foundations, and other organizations in the United States and abroad (see below). Most frequently, CRLT staff provided information on topics such as how to develop a new teaching center and evaluate its programs, how to work with faculty at a research university, how to embed inclusive teaching into the work of a teaching center, and requests to use CRLT publications and web resources. Additionally, 482 individuals from outside U-M attended performances of the CRLT Theatre Program. Following are lists of the institutions and organizations that received services from CRLT.

* indicates that individuals from that institution or organization visited CRLT in Ann Arbor

Colleges and Universities within the U.S.

Boston College	University of California, Davis
Bowling Green State University	University of California, Los Angeles*
Brigham Young University	University of Chicago
Brown University	University of Cincinnati
California Institute of Technology	University of Florida
Central Michigan University	University of Idaho
Cleveland State University*	University of Illinois
Columbia College Chicago*	University of Iowa
Columbia University	University of Kentucky
Cornell University*	University of Louisville
Dartmouth College	University of Maryland, Baltimore County
Eastern Michigan University	University of Minnesota
Florida International University	University of Montana
Georgetown University*	University of North Dakota*
Harvard University*	University of Northern Iowa
Indiana University-Purdue University Columbus	University of Notre Dame
Massachusetts Institute of Technology	University of Pennsylvania
Michigan State University	University of South Carolina Upstate
Northwestern University	University of Texas at Austin
Oregon State University	University of Texas Pan-American
Plymouth State University	University of Utah
Princeton University	University of Washington
Rochester Institute of Technology	University of West Florida
Rutgers University	Washington University in St. Louis
Saint Louis University	Wayne State University
San Diego State University	Wellesley College
Stanford University	Western Michigan University*
TASIS School in Dorado, Puerto Rico	Xavier University
University at Albany, State University of New York	Yale University

Colleges and Universities outside the U.S.

Addis Ababa University, Ethiopia*	Ozyegin University, Turkey
Chongqing University, China*	Renmin University of China*
Dawson College, Canada*	Shanghai Jiao Tong University, China*
Free International University of Moldova*	St. Paul's Hospital Millennium Medical College, Ethiopia*
Harbin Institute of Technology, China*	Stellenbosch University, South Africa*
Huazhong University of Science & Technology, China*	Universidad de Valparaíso, Chile*
McGill University, Canada*	Université Cheikh Anta Diop de Dakar, Senegal
Middle Eastern Technical University, Turkey	Université Chrétienne Bilingue du Congo*
Nanjing University, China*	University of Alberta, Canada
Norwegian University of Science and Technology, Norway*	University of Gondar, Ethiopia*
Ocean University of China	University of Saskatchewan, Canada
Osh State University, Kyrgyzstan	University of Tasmania, Australia

Other Organizations and Associations

Alan Alda Center for Communicating Science
Alpha Plus Community and Education Organization - Detroit
American Association of Colleges and Universities
Anglo Singapore International School
Brookings Institution
Ethiopian Ministry of Health
Glassdoor
Independent Nursing
MathWorks
Montclair Immaculate Conception High School
Unizin
VisualClassrooms.com

Appendix E: Publications and Presentations

In the 2015-2016 academic year, CRLT published five Occasional Papers, each of which addressed one of the goals for student learning outcomes articulated by the Transforming Learning for a Third Century (TLTC) initiative: a) creativity, b) intercultural engagement, c) social/civic responsibility and ethical reasoning, d) communication, collaboration and teamwork, and e) self-agency, and the ability to innovate and take risks. The Occasional Papers focus on how faculty can foster and assess these learning outcomes in their classes and programs. These papers include comprehensive literature reviews of definitions of concepts and current research on the pedagogical practices with which they are associated. They also provide curated lists of established measures and recommendations for faculty carrying out evaluations of the learning goals.

In conjunction with the Occasional Papers, CRLT collaborated with the Office of the Vice Provost for Global Engagement and Interdisciplinary Academic Affairs to launch an “Engaged Learning at Michigan” website (crlt.umich.edu/engaged-learning/) in May 2016 with the goal of serving as a long-term resource for faculty looking to adopt engaged learning practices. The website documents the history of the TLTC initiative, provides electronic versions of the Occasional Papers, and includes U-M case studies of assessments of learning goals, along with tutorials that introduce assessment practices and help identify measurement instruments.

In addition, CRLT distributed regular blog posts on topics of interest to campus. For example, “Teaching in Unsettling Times” offered faculty concrete suggestions for acknowledging and dealing with the effects of turmoil on students’ minds, both in ongoing courses and while planning for future semesters. (See p. 21 for more blog details.)

CRLT again distributed two publications for GSI development: *A Guidebook for University of Michigan Graduate Student Instructors: Strategies and Resources for New and Experienced GSIs* and *Departmental GSI Development: A Handbook for Faculty and GSIs Who Work with GSIs*. The guidebook, handbook, and a series of Occasional Papers are available on CRLT’s website. <http://crlt.umich.edu/resources/publications>

Publications by CRLT Staff

- Blazek, M. C., Dantz, B., Wright, M. C. & Fiedorowicz, J. G. (2016). Spaced learning using emails to integrate psychiatry into general medical curriculum: Keep psychiatry in mind. *Medical Teacher*. <http://dx.doi.org/10.3109/0142159X.2016.1150982>
- Finelli, C. J., Borrego, M., & Rasoulifar, G. (2015). Special Report: Development of a taxonomy of keywords for engineering education research. Jointly appearing in:
 - *Australasian Journal of Engineering Education*. <http://dx.doi.org/10.1080/22054952.2015.1133215>
 - *European Journal of Engineering Education*, 41(3), 231-251. <http://dx.doi.org/10.1080/03043797.2016.1153045>
 - *Journal of Engineering Education*. 104(4), 365-387. doi 10.1002/jee.20101
 - *IEEE Transactions on Education*. 58(4), 219-241. doi 10.1002/jee.20101
 - *International Journal of Engineering Education*. 32(1), 3-18.
- Hallman, S. K. (2016). *Development and assessment of student social/civic responsibility and ethical reasoning*. Transforming Learning for a Third Century No. 5/CRLT Occasional Paper No. 36. Ann Arbor, MI: Center for Research on Learning and Teaching, University of Michigan.

- Hallman, S. K., Wright, M. C., & Conger, A. J. (2016). *Development and assessment of student creativity*. Transforming Learning for a Third Century No. 2/CRLT Occasional Paper No. 33. Ann Arbor, MI: Center for Research on Learning and Teaching, University of Michigan.
- Hardin R., Bhargava, A., Bothner, C., Browne, K., Kusano, S., Golrokhian, A. M., Wright, M. C., Zheng, P. Z., Agrawall, A. (2016). Towards a revolution in sustainability education: Vision, architecture, and assessment in a case-based approach. *World Development Perspectives*, 1, 58-63. <http://dx.doi.org/10.1016/j.wdp.2016.05.006>
- Kusano, S. M., Conger, A. J., & Wright, M. C. (2016). *Development and assessment of intercultural engagement*. Transforming Learning for a Third Century No. 1/CRLT Occasional Paper No. 32. Ann Arbor, MI: Center for Research on Learning and Teaching, University of Michigan.
- Kusano, S. M., Wright, M. C., & Conger, A. J. (2016). *Development and assessment of self-agency and the ability to innovate and take risks*. Transforming Learning for a Third Century No. 3/CRLT Occasional Paper No 34. Ann Arbor, MI: Center for Research on Learning and Teaching, University of Michigan.
- Kusano, S. M., Wright, M. C., & Conger, A. J. (2016). *Development and assessment of collaboration, teamwork, and communication*. Transforming Learning for a Third Century No. 4/CRLT Occasional Paper No. 35. Ann Arbor, MI: Center for Research on Learning and Teaching, University of Michigan.
- Lande, E., & Mesa, V. (2016). Instructional decision making and agency of community college mathematics faculty. *ZDM The International Journal on Mathematics Education*, 48(1), 199-212.
- Tang, S., McLoyd, V. C., & Hallman, S. K. (2016). Racial socialization, racial identity, and academic attitudes among African American adolescents: Examining the moderating influence of parent–adolescent communication. *Journal of Youth and Adolescence*, 45(6), 1141-1155.

Presentations

- Braunschneider, T., & Bakewell, M. (2015, November). *New faculty programs*. Session facilitators at the 40th Annual POD Conference, San Francisco, CA.
- Braunschneider, T., & Pinder-Grover, T. (2015, November). *Scaling up diversity: Designing programs on inclusive teaching to reach all faculty*. Roundtable at the 40th Annual POD Conference, San Francisco, CA.
- Carpenter, D. C., Sutkus, J., Finelli, C. J., Harding, T. S., Harris, R., & Cole, M. L. (2015, June). *Assessing the ethical development of students in an undergraduate civil engineering course using a standardized instrument*. Presented at ASEE's 122nd Annual Conference & Exposition, Seattle, WA.
- DeMonbrun, R. M., Finelli, C. J., & Shekhar, P. (2015, June). *Methods for establishing validity and reliability of observation protocols*. Presented at ASEE's 122nd Annual Conference & Exposition, Seattle, WA.
- DeZure, D., Kalish, A., Kaplan, M., & Ouellett, M. (2015, November). *Expanding your team: Effective hiring practices for center directors*. Pre-conference session at the 40th Annual POD Conference, San Francisco, CA.
- Dynarski, S., Ishop, K., Pryor, T., & Kaplan, M. (2016, Feb). *"We are all in this together": Implementing the president's diversity, equity & inclusion vision*. Closing panel at U-M Management Conference 2016: Developing the Leaders and the Best, Ann Arbor, MI
- Greenberg, R., & Bakewell, M. (2015, November). *How can teaching centers guide campus-wide learning technology change?* Presented at the 40th Annual POD Conference, San Francisco, CA.
- Haynes, M. T., & Pinder-Grover, T. (2015, June). *Leveraging reflection to deepen engineering graduate student instructor professional development*. Poster presented at the 2015 Chemical Sciences at the Interface of Education|University of Michigan (CSIE|UM) Symposium, Ann Arbor, MI.

- Hershock, C., Niemer, R., & Lovett, M. (2015, November). *Which CTL events impact faculty learning and teaching practices most?* Presented at the 40th Annual POD Conference, San Francisco, CA.
- Hirshfield, L., Chachra, D., Finelli, C. J., & Goodman, J. M. (2015, June). *Relating project tasks in design courses to the development of engineering self-efficacy.* Presented during roundtable at ASEE's 122nd Annual Conference & Exposition, Seattle, WA.
- Kusano, S. M. & Johri A. (2015, June). *Developing global engineering competency through participation in "Engineers Without Borders."* Presented at ASEE's 122nd Annual Conference & Exposition, Seattle, WA.
- Lovett, M., Kaplan, M., Bederson, B., Dunbar, R., & Levesque-Bristol, C. (2015, November). *Envisioning models for teaching center and ed-tech center collaboration.* Interactive workshop at the 40th Annual POD conference, San Francisco, CA.
- Meader, E., Maxwell, K., Pinder-Grover, T., & Braunschneider, T. (2016, January). *How faculty can lead – on equity, excellence, and inclusive teaching in the classroom.* Presented at the 2016 Association of American Colleges and Universities (AAC&U) Annual Meeting, Washington, D.C.
- Pinder-Grover, T., Finelli, C., Millunchick, J., & Moldwin, M. (2015, November). *A faculty learning community to prompt critical reflection and improve practice.* Presented at the 40th Annual POD conference, San Francisco, CA.
- Pinder-Grover, T., & Haynes, M. T. (2015, June). *Leveraging reflection to deepen engineering graduate student instructor professional development.* Presented at ASEE's 122nd Annual Conference & Exposition, Seattle, WA.
- Pulford, S., Ruzycki, N., Finelli, C. J., Hahn, L. D., & Thorne, D. (2015, June). *Making value for faculty: Learning communities in engineering faculty development.* Presented during roundtable at ASEE's 122nd Annual Conference & Exposition, Seattle, WA. Best Paper Award, ASEE-Educational Research and Methods Division.
- Vernon, J., Finelli, C. J., Perkins, N. C., & Orr, B. G. (2015, June). *Piloting i-Newton for the experiential learning of dynamics.* Presented at ASEE's 122nd Annual Conference & Exposition, Seattle, WA.
- Wright, M. (2015, November). *Assessment of student learning.* Session facilitator at the 40th Annual POD Conference, San Francisco, CA.
- Wright, M., Gebb, P., & Small, G. (2015, November). *Financial planning for educational developers.* Presented at the 40th Annual POD Conference, San Francisco, CA.
- Wright, M., & Huerta, M. (2015, November). *How teaching centers can support student global learning.* Roundtable at the 40th Annual POD Conference, San Francisco, CA.

Review and Editorial Work

- *Advances in Engineering Education* (S. Kusano)
- American Educational Research Association Conference (D. Meizlish)
- American Society for Engineering Education Conference (S. Kusano)
- *Canadian Journal of Higher Education* (M. Wright)
- *Educational Studies in Mathematics* (E. Lande)
- *European Journal of Psychology of Education* (S. Hallman)
- *International Journal for the Scholarship of Teaching and Learning* (M. Kaplan)
- *Innovative Higher Education* (T. Braunschneider)
- *Journal of Dental Education* (M. Wright)
- *Journal of Education Technology and Society* (E. Zhu)
- *Journal of Engineering Education* (T. Pinder-Grover)
- *Journal of Faculty Development* (M. Kaplan; D. Meizlish)
- *New Media & Society* (E. Zhu)
- National Science Foundation grant review panel for Improving Undergraduate STEM Education (IUSE) program (M. Kaplan)
- Professional and Organizational Development Network in Higher Education Conference (POD) (R. Greenberg, D. Meizlish, R. Niemer, M. Wright)
- *Science Advances* (M. Wright)
- *To Improve the Academy* (M. Wright)
- Wisconsin Center for Education Research (M. Wright)

Appendix F: CRLT Regular Staff, 2015-2016

Executive Director	Matthew Kaplan
Administrative Team	Deborah Meizlish , <i>Senior Associate Director</i> Mary Wright , <i>Director of Assessment and Associate Research Scientist*</i> Sara Armstrong , <i>Senior Associate Director and Artistic Director, CRLT Theatre Program</i>
Director of CRLT in Engineering	Tershia Pinder-Grover
Associate Directors and Instructional Consultants	Ronit Ajlen , <i>Instructional Consultant</i> Meg Bakewell , <i>Associate Director</i> Theresa Braunschneider , <i>Associate Director and Coordinator of Diversity Initiatives</i> Tazin Daniels , <i>Instructional Consultant</i> Victoria Genetin , <i>Instructional Consultant</i> Michelle Majeed , <i>Instructional Consultant</i> Rachel Niemer , <i>Assistant Director*</i> Gina Shereda , <i>Instructional Consultant</i> Erping Zhu , <i>Associate Director</i>
CRLT Theatre Program	Sara Armstrong , <i>Artistic Director, CRLT Theatre Program</i> Kathryn Pamula , <i>Performance Coordinator</i> Courtney Riddle , <i>Company Manager</i>
Administrative Staff	Lori Dickie , <i>Budget Administrator</i> Ryan Hudson , <i>Administrative and Publications Specialist</i> Lorraine Robert , <i>Assistant to the Executive Director*</i>
Project Staff	Pam Fisher , <i>Events Coordinator and Multimedia Designer*</i> Laura Gonzalez-Garcia , <i>Events Coordinator and Grants Assistant</i> Jeri Hollister , <i>Events Coordinator and Graphic Designer</i> Melinda Thompson , <i>Administrative Assistant</i> Matthew Yettaw , <i>Events Coordinator</i>
Staff in CRLT in Engineering	Tershia Pinder-Grover , <i>Director</i> Carol Lagemann , <i>Financial Specialist and Event Planner</i> William Lloyd , <i>Instructional Consultant*</i> Steve McKenzie , <i>Graphic Designer and Event Planner</i>

List does not include postdoctoral research associates, graduate teaching consultants, graduate research assistants, actors, or student assistants.

*No longer at CRLT

