



2016 – 2017
Annual Report



CRLT

CENTER FOR RESEARCH ON
LEARNING & TEACHING
UNIVERSITY OF MICHIGAN

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This report was compiled by Ryan Hudson, Matt Kaplan, Meg Bakewell, Amy Hamermesh, and Jeri Hollister.

Executive Summary

Letter From Executive Director Matthew Kaplan

In last year's letter, I wrote that expanding the Diversity, Equity, and Inclusion (DE&I) aspect of CRLT's portfolio was central to my vision for the center moving forward. Unforeseen at that time was the sharp increase in bias incidents at U-M and at campuses across the nation that would accompany a very divisive U.S. presidential campaign and its aftermath. Disappointing as it was to see the negative impact on our community of these incidents, our staff nonetheless felt very fortunate to have already invested years developing and refining resources that enable instructors to create positive learning environments for *all* students, especially in such turbulent times.



Toward that end, CRLT worked closely with the central administration and leaders of schools and colleges to support faculty, GSIs, and administrators in continuing to expand the reach of inclusive teaching throughout 2016-2017. Our main phone number was rebranded as an inclusive teaching “hotline,” or starting point for individual consultations. Our blog posts on “Responding to Incidents of Hate Speech” and “Returning to the Classroom After the Election” laid out timely and actionable suggestions. We met increased demand for our new theatre sketch, *Cuts*, which helped groups throughout the institution to grasp, in some cases for the first time, the cumulative impact of microaggressions. We offered Inclusive Teaching at Michigan, a series of inclusive teaching workshops that drew over 370 instructors at the start of May. And our consultants worked overtime with units to craft workshops and retreats that responded to specific climate concerns.

At the same time, CRLT continued to provide the full range of services that instructors have come to rely on. For example, our grants and awards programs allocated almost \$280,000 to 138 faculty for teaching innovation and professional development. We gathered midterm student feedback from nearly 13,000 students to inform the teaching practice of more than 300 instructors. We organized teaching academies for new faculty in 10 schools and colleges and provided teaching orientations for over 780 new GSIs.

Finally, over the course of the 2016-2017 academic year, CRLT worked collaboratively to build support for a major new initiative that will impact the learning experience of thousands of students across campus. The Foundational Course Initiative (FCI) seeks to enable re-design of 30 of the largest undergraduate courses across the university, and the proposal to create this extraordinary new endeavor secured widespread support from academic leaders across campus. We are very excited to report that the university has committed \$5 million to this initiative over the next five years, in part to fund a team of consultants at CRLT who will partner with departmental faculty on a process of collaborative course design. The initiative will create the infrastructure that allows faculty not only to dream big but also to make their visions a reality. CRLT looks forward to collaborating with and learning from faculty as they transform large introductory courses at Michigan over the next five years and beyond.

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. *2016-2017 highlights: Collaboratively developing Foundational Course Initiative proposal and building a coalition of deans and chairs to request funding*

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. *2016-2017 highlights: Convening faculty communities around gameful pedagogy, rapid evaluation of Snapshot*

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. *2016-2017 highlights: Hiring 3 new CRLT staff dedicated to DEI work, supporting units as they implement their DEI plans*

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. *2016-2017 highlights: Campuswide roll out of Cuts sketch about climate; debut of Tenure Decisions vignettes*

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. *2016-2017 highlights: Disseminating tools for assessing engaged learning beyond TLTC projects; planning for 2020 HLC re-accreditation*

CRLT Year at a Glance

► SUMMARY of CRLT SERVICES

Total Services Provided **14,341**
 (Some individuals receive multiple services)

Total Services for U-M Clients **12,931**

Campuswide programs	6,317
Customized programs for departments, schools, & colleges	4,461
Consultations	1,847
Instructors receiving midterm student feedback (MSF) sessions	306

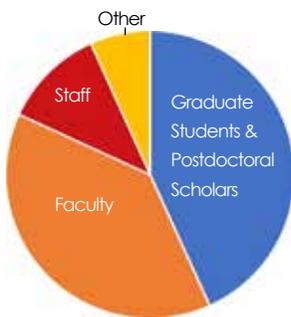
Total Services for External Clients **1,410**

Presentation and workshop participants	299
Audience members at external theatre performances	502
Consultations and other services	609

► SERVICES by SCHOOL/COLLEGE

<i>School or College</i>	<i>Individuals</i>	<i>Services</i>
Architecture and Urban Planning	63	116
Art & Design	44	163
Business	70	134
Dentistry	72	222
Education	119	261
Engineering	1,031	2,670
Information	89	263
Kinesiology	27	180
Law	28	75
LSA	1,219	4,147
Medicine	407	842
Music, Theatre & Dance	97	200
Natural Resources and Environment	85	304
Nursing	66	242
Pharmacy	67	286
Public Health	138	458
Public Policy	56	108
Rackham	1	2
Social Work	114	300
Administration	222	886
Libraries (U-M)	58	290
Other	52	113
U-M Dearborn	23	47
U-M Flint	7	62
Individuals, Unit Unknown	24	-
Services, Unit Unknown	-	681
TOTAL:	4,179	13,052

► U-M Client Profiles



4,179 Unique Individuals

- Graduate Students & Postdoctoral Scholars ... 1,806
- Faculty 1,616
- Staff 475
- Other 282



Faculty by Rank

- Assistant Professor 468
- Lecturer 326
- Professor 260
- DDC (Deans, Directors, Department Chairs) 193
- Associate Professor 191
- Other 178

► CONSULTATION SERVICES

- 2,035** Consultations
- 281** Midterm student feedback sessions (MSFs) conducted*
- 12,887** Students served by MSFs
- 14** U-M offices advised
- 30** Committees with CRLT representatives

*Some courses have multiple instructors.

► FACULTY GRANTS & AWARDS

- 3** Award competitions
- 6** Grants competitions
- 138** Faculty recipients
- \$280,000** Distributed by CRLT

► ONLINE

- 917,459** Visits to CRLT website from
- 224** Countries
- 15** Blog posts
- 2,239** Twitter followers

GLOBAL REACH

-  72 U.S. educational institutions
-  8 other U.S. organizations
-  16 foreign institutions



► CRLT PLAYERS

- 43** Performances at U-M
- 13** External performances
- 12** Different sketches performed
- 3,248** Audience members

► PROGRAMS FOR GRADUATE STUDENTS/POSTDOCS

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

► RESEARCH & PUBLICATIONS

- 17** Schools and colleges using CRLT assessment services
- 15** Investigating Student Learning grantees
- 7** 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

CRLT-Engin

Tershia Pinder-Grover
Audra Baleisis
Carol Lagemann
Steve McKenzie

CRLT Consultants

Ronit Ajlen
Meg Bakewell
Theresa Braunschneider
Tazin Daniels
Victoria Genetin
Malinda Matney
Gina Shereda
Nicole Tuttle
Erping Zhu



Theatre Program

Sara Armstrong
Courtney Riddle
Kathryn Pamula

Postdoctoral & Other Research Associates

Tracy Bartholomew
Sam Hallman
Stephanie Kusano

Administrative Staff

Lori Dickie
Michelle Getchell
Ryan Hudson

Project Staff

Laura Gonzalez-Garcia
Jeri Hollister
Hitomi Katsumi
Katie Neu
Melinda Thompson
Matthew Yettaw

Graduate Teaching Consultants See p. 19 for a description of the GTC program.



Mara Bollard
Thomas Bridges
Katherine Crocker
Anna Edmonds
Niloufar Emami
Merideth Garcia

Julie Ghekas
Kathryn Holland
Sophie Hunt
Grant Jackson
Lisa Jong

Jessica Joslin
Caitlin Lawson
Hannah McMurray
Karen Nielsen
Kelsey Pakkala

Rebecca Pickus
Mary Renda
Marian Schmidt
Jeff Shi
Lisa Walsh

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



Neha Agarwal
Jonathan Beaumont
Lauren Bilbo
Liam Casey

Emily Deschenes
Mark Dong
Molly Kozminsky

Ramya Kumar
Jeff Lowe
Margaret Reuter

Kathleen Ropella
Tianlin Wang
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.



Evan Chambers
Professor of Music Composition



Sandro Cinti
Professor of Internal Medicine



Pamela Davis-Kean
Professor of Psychology



John Foster
Professor of Nuclear Engineering and Radiological Sciences



Victor Li
Professor of Civil Engineering



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



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



Colleen Van Lent
Lecturer IV in the School of Information



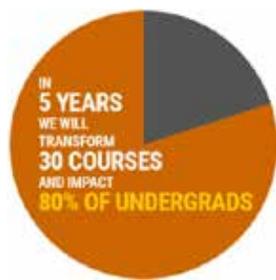
John Wolfe
Arthur F. Thurnau Professor and Associate Chair of Chemistry



Lisa Young
Lecturer IV in Anthropology

New and Noteworthy

Innovations in Teaching at Scale: U-M Funds the Foundational Course Initiative (FCI)



The university has committed \$5 million over 5 years to support creation of a collaborative course design process that will offer unprecedented and comprehensive support to selected departments that

commit to revising a foundational course over three years. FCI is a collaboration between Arthur F. Thurnau Professor Tim McKay and CRLT. Teams of faculty who teach the courses (and who therefore know the material, the students, and the context best) will receive hands-on, step-by-step support for instructional design, technology, analytics and assessment, and classroom climate. CRLT expects to hire four staff in 2017-2018 and convene an initial cohort of teams at a May 2018 course design institute. Instructors and departments interested in proposing foundational courses for inclusion in the program can find more information at the CRLT website <http://crlt.umich.edu/fci> and are encouraged to talk to CRLT's Meg Bakewell, who will be directing the project.

Gearing Up for Re-Accreditation

CRLT staff have joined the Vice Provost's central coordination team that is laying the groundwork for U-M's reaccreditation by U-M's by the Higher Learning Commission (HLC) in 2020. As part of a coordinated university-wide effort, CRLT is co-leading faculty and staff teams in addressing criteria that speak to teaching and learning activities across the entire university, while also working with a number of associate deans to address school-specific issues. CRLT is also coordinating faculty learning communities to create new ways to document how departments, particularly within LSA, can articulate learning and create templates for

each other to do so more easily in a large research university context. (See also p. 28.)

Expanding CRLT's DEI Work

Implementation of strategic plans for diversity, equity, and inclusion got underway throughout the University of Michigan in 2016-2017. Demand for our services in this area continued trending upward with 12 schools and colleges explicitly stating their intent to make use of CRLT resources in their three-year strategic plans. Stepping up to the challenge, we provided more DEI-related consultations and tailored workshops, retreats, and other programs than ever before. For example, the CRLT Players season tallied 20 performances for 653 attendees of sketches about mental health or microaggressions, and CRLT consultants offered workshops and retreats customized for faculty at 7 schools and colleges as well as 15 individual departments and programs.

In addition, we added three new staff to increase our capacity to deliver services around inclusive teaching in 2017-2018: Dr. Whitney Peoples works primarily with the LSA faculty and GSIs whose courses fulfill the race and ethnicity (R&E) requirement; Dr. Grant Jackson serves as an Inclusive Teaching Postdoc to support inclusive teaching across disciplines; and Motoko Maegawa joins the CRLT Theatre Program as a performance facilitator. Moving forward, CRLT has a total of six staff members fully dedicated to this work.

Learning and Teaching in a Tense Election Season



CRLT published a blog post with this title at the end of August 2016, offering strategies to instructors who wished to address the impact of this

election season on their students. A second post laid out options and resources for “Returning to the Classroom After the Election.” A third post, “Teaching in the Current Political Climate” addressed longer-term issues like setting classroom boundaries for civil discourse, supporting students in distress, responding to tensions in the classroom, and tending to instructors’ own self-care needs. CRLT also hosted a February 2016 lunch where faculty thought together with colleagues about how teaching might be different in a new political era. Finally, central administrators supplied CRLT’s main phone number as a “hotline” to assistance for instructors concerned about classroom interactions.

Student Climate Sketch Rolls Out

The divisive political climate leading up to and in the wake of the 2016 presidential election, as well as a number of incidents of hate speech at both U-M and campuses nationwide, have brought into stark relief the gap between many students’ lived experiences and U-M’s aspirations for an inclusive campus climate. CRLT Players new sketch, *Cuts*, portrays the impact of these incidents, as well as everyday ways that students from underrepresented backgrounds are marginalized (often referred to as microaggressions).

Approximately 500 faculty, graduate students, and academic leaders attended 14 performances of *Cuts*, including special previews for President Schlissel, and for the chairs of LSA departments. In post-performance evaluations, 96% of respondents agreed or strongly agreed that *Cuts* “enhanced or altered their understanding of the issues/topics discussed,” and a striking 92% anticipated changing their current practices as a result of their participation.

What faculty are saying about *Cuts: Responding to Student Climate Concerns*

“I got a fresh glimpse of all the things an under-represented student could face and the extraordinary responsibility we all have for acknowledging, guiding, speaking up, providing support and resources.”

“Thank you for the performance/workshop. It was desperately needed, exactly on target, and easily one of the most useful things I’ve attended in a long time.”

“The workshop was well-received and effective in achieving our desired goals - raising awareness and arming our faculty with tools to be more sensitive and inclusive. I really appreciate the adjustments that Sara put into place for our group.”

Inclusive Teaching @ Michigan Series

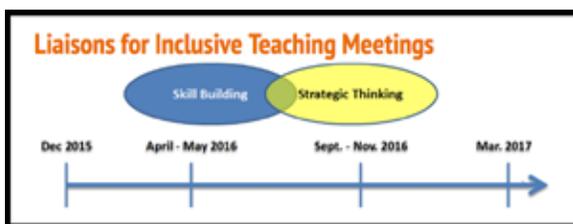
Building on the success of the inaugural 2016 series, CRLT and six co-sponsors hosted another series of 17 workshops for building skills in inclusive teaching in May 2017. Eleven of the workshops were new or significantly modified, providing advanced opportunities for returning participants. The series drew high ratings and served over 370 participants from 16 U-M Ann Arbor schools and colleges and many campus units, as well as from the Dearborn and Flint campuses. 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 CRLT Players performance of *It Was Just a Moment: Building Resiliently Inclusive Learning Environments*. Subsequent workshops addressed topics such as designing community-based learning courses with diverse learners in mind, understanding how stereotype threat and growth mindset affect student learning, and responding to challenges in the classroom (see p. 25).

Collaborating with Faculty Liaisons for Inclusive Teaching

Appointed in 2015, these representatives from each school and college work with their own unit's leadership and faculty allies to foster local development of inclusive teaching practices. The timeline summarizes topics addressed by CRLT facilitators as the liaisons developed plans for building capacity and learned from each other's efforts. Participants highly appreciated the dual structure of sessions that modeled skill-building activities and provided time to think strategically with colleagues from other units about the broader challenges and opportunities for professional development around inclusive teaching in their own spaces.



Engaged Learning Beyond TLTC

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. First, the Engaged Learning at Michigan website that launched in

May 2016 has become the institutional source for assessment instruments and pedagogical models developed as part of TLTC. Second, to continue creating communities of practice across the disciplines, CRLT hosted three lunch gatherings on topics related to engaged learning: entrepreneurship, critical reflection, and global learning. CRLT also organized a March 2017 Provost's Seminar on *Teaching—Teaching at the Bicentennial: Building the Evidence Base for Engaged Learning*—to shift the focus from the specifics of Third Century Initiative projects to a university-wide examination of assessment of engaged learning. Finally, CRLT compiled a report documenting the scope and reach of the TLTC initiative.

Supporting the Michigan Center for Interprofessional Education (IPE)



CRLT continued collaborations with the Center for IPE in their second year of a five-year initiative that is transforming learning for more than 4,000 students from nine schools and colleges across all three U-M campuses. CRLT consulted on a number of efforts across three key areas: (1) faculty development, (2) curriculum development, and (3) assessment (see p. 29). For example, CRLT developed and administered a seed funding process for projects initiated by the inaugural cohort of Interprofessional Leadership (IPL) Fellows, helped recruit a second cohort of fellows (see p. 17), supported curriculum mapping and the development of a process for eliciting and endorsing new IPE course offerings, and shared reflections on the first year of the IPL program at the 2017 Health Professions' Education (HPE) day. Finally, CRLT was proud to see a team project from the first IPL cohort win a Demonstration Model Award at a 2017 regional IPE conference for an IPE Course Adapter Toolkit that guides instructors through the process of converting currently siloed health science courses into interprofessional offerings. (See p. 59 for full list of services for IPE.)

Supporting the New SEAS Curriculum



The founding of the new School for Environment and Sustainability (SEAS) has presented faculty an exciting opportunity to re-imagine interdisciplinary education for global sustainability. After consulting with CRLT, the school's Faculty Transition Team Curriculum Innovation working group applied for and secured a \$10,000 grant from the Gilbert Whitaker Fund for the Improvement of Teaching. The grant will allow the Working Group to investigate environmental sustainability career trends, the competencies required for success in these careers, and pedagogical strategies for developing these competencies. To support those investigations, CRLT staff will design, administer, and analyze surveys of students, alumni, and faculty. Data will be used to inform design of the various curricular offerings in the new school.

Preparing U-M Postdocs to Teach in Detroit Community Colleges

Faculty in medicine and engineering received a National Institute of Health (NIH) grant to pair faculty mentors at Henry Ford College and Wayne County Community College District with U-M postdoc recipients of the Institutional Research and Academic Career Development Award (IRACDA) over the next five years. The relationships yield multiple benefits in southeast Michigan: U-M's IRACDA Fellows gain classroom team-teaching experience, community college students interact with inspiring scholars who spend 75% of their time conducting cutting-edge science research, and U-M stands to attract outstanding transfer students from institutions that serve significant minority populations. CRLT will offer professional development for

fellows that includes existing programs, as well as new, customized services.

International Faculty Development

In October 2016, CRLT's Executive Director, Director of Assessment, and Associate Director presented keynote remarks and concurrent sessions at the 3rd Annual Chinese Higher Education Developers Conference in Hefei, China, which brought together over 700 faculty and staff members from newly created teaching centers across China (see p.xx Presentations). CRLT's participation builds on long-standing collaborations with these newly developing centers that began in 2006 as part of U-M's China initiative. Those efforts include a China Fellows Program, an intensive, three-week internship for 6-10 key staff from Chinese university teaching centers to learn about strategies for effectively running their centers and improving the quality of teaching and student learning on their campuses. August 2016 marked the fifth offering of the Fellows program, with six participants from Chongqing University, Harbin Institute of Technology, Huazhong University of Science & Technology, Renmin University of China, and Shanghai Jiao Tong University.



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 over 2,000 individual consultations, some brief and some extensive, with U-M clients during the 2016-2017 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 2016-2017 academic year, CRLT staff conducted 281 midterm student feedback sessions for faculty and GSIs across campus. These sessions provided an opportunity for 12,887 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

“I am so thankful that U-M offers this service, and working with the consultant has been a pleasure.”

“The consultant provided extremely actionable advice, much of which could be accomplished without requiring additional time.”

“The consultant helped me think more thoroughly about what changes to make and how to communicate with students about those changes.”

“As a person of color, gay and an immigrant, the consultation provided was very useful to understand the dynamics of the classroom and talk about how to improve my teaching without compromising my identities.”

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 August 2016, 158 faculty members attended this event. The president and 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 Student Diversities in Discussion
- Leveraging Student Work and Teams to Enhance Student Learning
- 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 2016 and winter 2017 terms. The fall program was attended by 451 GSIs, and the winter program by a total of 218 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 session of "Inclusive Teaching During the First Week 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 and Social Sciences
- Facilitating Group Work in Discussions and Labs
- 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 with Technology: Canvas and the Google Suite

CRLT also organized a customized teaching orientation program for 147 new GSIs in the college of engineering in fall 2016. 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 226 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 2016, 23 international graduate students participated in the course, and during winter 2017, 19 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 2016-2017, 848 faculty, graduate students, and postdocs attended seminars, including the following programs:

- Activities for Leveraging Student Diversity**
- Applying Universal Design Principles to Promote Active Participation by All Students
- Canvas for GSIs: Pedagogies and Practicalities**
- Community Engagement Series
 - Engaged Scholarship and Academic Values - A Broader Impact Through Community Engagement
 - Engaged Design: Developing Community-Based Learning Courses*
 - Effective & Ethical Partnering*
 - Maximizing Impact with Strategic Course Design*
- Developing Your Teaching Philosophy: An Online Workshop**
- Developing Your Teaching Philosophy** (2x)
- Engaging Students in Learning: An Online Workshop
- Facilitating Discussions in the Social Sciences and Humanities** (2x)
- Four-Session Training for Diversity and Inclusive Teaching**
- Gameful Learning Community of Practice* (4 sessions)
- Gameful Learning with GradeCraff
- Gameful Pedagogy
 - What Is It and How Might You Use It?
 - Potential Tools to Support Learning*
 - Planning Your Course*
- Implementing Inclusive Teaching Principles in Your Classroom (2x)
- Inclusive Teaching in U-M's Undergraduate Classrooms*
- Making the Most of Hot Moments in the Classroom*
- Managing Academic Identities in Digital Spaces**
- Now That I Have It, What Grade Should I Give It? Evaluating Student Writing
- Organize, Streamline, and Simplify: Teaching Efficiently With Technology**
- The Power of Peer Review: Collaborative Learning in the Classroom and in Canvas
- Research-Based Practices for College Teaching: An Online Workshop
- Revising Your Teaching Philosophy**
- Sharing Our Work: Key Insights from Faculty Communities for Inclusive Teaching
- Supporting the Inclusion of Nontraditional Students in the Classroom
- Teaching in a New Era: Exploring the Impacts of the 2016 Presidential Election*
- Teaching Skills: Disrespect and Disruption in the Classroom - Strategies for Prevention and Response*
- Using Technology to Check Student Understanding and Provide Feedback: An Online Workshop
- Writing and Grading Exams: An Online Workshop

CRLT in Engineering Seminar Series

During the fall 2016 and winter 2017 terms 462 faculty, graduate students, and postdocs attended the following programs and seminars offered by CRLT in Engineering:

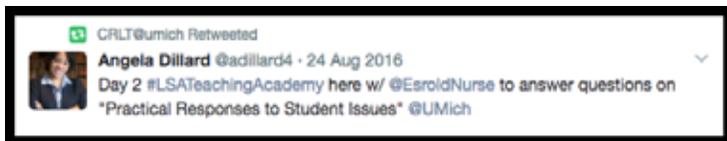
- Active Learning Laboratory: Advanced Practice Teaching** (5x)
- Are They "Getting It"? Low-Stakes Ways to Assess Student Learning**
- Creating Effective Presentation Slides: Presentation by Jean-luc Doumont
- CRLT Players Performance: Distress Signals*
- CRLT Players Performance: Distress Signals**
- Did You Really Mean That? Improving Communication With Your Students**
- Gameful Engineering*
- Managing Emergent Crises in Student Teams*
- Research-Based Principles for Making Learning Work**
- Understanding How Stereotype Threat and Growth Mindset Affect Student Learning**
- What Do I Do Now? Strategies for Handling Sticky Situations with Students**

* 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.



“ A hearty thanks to you for a fun and informative two days. It was jampacked, but so helpful to get a crash course in all things teaching at U-M. And done in a way that was reassuring, not intimidating.

*LSA Teaching Academy
Faculty Participant*

”

Additional topics at the LSA Teaching Academy address pedagogies for teaching undergraduate students, issues of inclusion and equity in the classroom, and strategies for teaching and mentoring graduate students.

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 2016-2017, 40 assistant professors took part in the LSA Teaching Academy, and the Health Sciences Teaching Academy served 22 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 2016-2017, nine faculty participated in the Academy.

College of Engineering Programs: The day before the campuswide new faculty orientation (p. 13), CRLT in Engineering provided additional programming for 19 faculty new to the college. Participants engaged in a workshop about inclusive teaching, a panel discussion with U-M engineering undergraduate students, a presentation about research resources with a complementary panel discussion with experienced faculty about starting a research group, and a workshop on strategies for new faculty success. Subsequent programs covered responding to incidents on campus, applying for the first grant, preparing for the third year review, mentoring graduate students, teaching with technology, supporting students in distress, preparing for tenure and promotion, and networking with senior faculty. Offered for the first time, a half-day orientation for new faculty starting in winter term was attended by five faculty.

“ The active learning session helped reinvent my thinking about how to teach and about how students learn.

The ratio of time spent to value added was great — really felt I learned a lot in a short period of time.

*Ross Teaching Academy
Faculty Participants*

”

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 2016-2017 included strategies and approaches for handling difficult conversations with faculty, a conversation with the provost, and the chair/associate dean's role in hiring. The programs were well attended, with 62% of new department chairs and 57% of new associate deans and directors participating in at least one of the leadership events.

Faculty Grants and Awards



In 2016-2017, CRLT administered the Provost's Teaching Innovation Prize (TIP), designed to recognize outstanding pedagogical practices, as well as six 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. CRLT directly funded three competitions: the Faculty Development Fund (FDF), the Investigating Student Learning (ISL) Grant, and the Instructional Development Fund (IDF). A total of 138 faculty received grants or awards totaling almost \$280,000. (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 2017, the latter award was received by U-M's nominee, Arthur F. Thurnau Professor Barry Fishman (School of Education and School of Information).

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 October 2016 about 100 faculty, administrators, and staff attended *Transformed: Foundational Courses for a Third Century*. Examples of transformations already under way in a wide range of U-M courses were shared by faculty presenters, and then concurrent sessions allowed participants to engage more deeply with leaders of specific change initiatives. Attendees also provided feedback on an initial draft of the Foundational Course Initiative proposal (see p. 8). In March 2017, 114 faculty members attended *Teaching at the Bicentennial: Building the Evidence Base for Engaged Learning*. This

“ Thank you for all the organizational and strategic work that went into the session yesterday. I enjoyed taking part. Events and opportunities like these truly do transform our approaches to learning. I've got all kinds of new ideas bubbling.

PSOT Participant

”

event featured an opening panel moderated by Phil Deloria that included Ashley Finley (Dominican University), Sylvia Hurtado (University of California, Los Angeles), and Vice Provost James Holloway, along with concurrent sessions that shared approaches to assessing each of the five engaged learning goals established by the Third Century Initiative. (See also TLTC in the Assessment section on p. 29.)



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 second cohort included 17 faculty from dentistry, kinesiology, medicine, nursing, pharmacy, public health, and social work, and Taubman Health Sciences Library (Ann Arbor), as well as U-M Flint. 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 a patient care simulation centered around chronic disease management, a foundational teamwork experience, a literature review of qualitative assessment tools for evaluating IPE competencies, and a simulation based learning experience for a child with autism.



Large Course Initiative (LCI): CRLT sponsored a learning community for faculty who teach large enrollment courses in LSA. Ten faculty participated 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, four of the faculty received small grants from LSA to revise their courses. CRLT staff presented a poster on the structure and impact of the LCI at the annual meeting of the Professional and Organizational Development Network in Louisville, KY in November 2016.

“ The facilitators are very good at helping faculty who have yet to teach a large course. Additionally, they are great resources even after the workshop is long past. I highly recommend it.

LCI Faculty Participant

”

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.

“Earning the certificate was a great experience. It added structure to my engagement with CRLT and my GSI work.”

Graduate student

Participation continued to increase during the 2016-2017 academic year. Specifically, 161 more graduate students enrolled, bringing the total number of enrollees to 1,477. This year 58 students completed the certificate requirements. Since the program's inception, CRLT and Rackham have awarded a total of 485 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, 64 graduate students representing 10 schools or colleges have enrolled in the program, and seven students have completed the requirements and received the certificate.

Preparing Future Faculty (PFF) Programs

In 2016-2017, CRLT offered three programs in collaboration with Rackham.

The ninth iteration of the *Postdoctoral Short-Course on College Teaching in Science and Engineering* was conducted in winter 2017 for 29 postdoctoral scholars. The course was taught in a flipped format, emphasizing advance preparation using video podcasts and readings so that time during face-to-face sessions was devoted to active learning and reflection. Each participant delivered a 5-minute and a 15-minute lesson to colleagues who offered them constructive feedback, developed a lesson plan for an inquiry-based lab exercise, and designed a syllabus for a course to be taught in the future.

“I now see no need to just use a standard lecture format. Every lesson can easily include at least one active learning technique to better engage my students and facilitate learning.”

PSC Participant

After a fall 2015 pilot, the first iteration of *High Impact Practices for STEM Education*, an online format of the *Postdoctoral Short-Course* ran in summer 2016. Fifty-eight postdoctoral scholars from U-M, Brown, Iowa, Illinois, OSU, Stanford, Wisconsin, and Yale signed up for the course, and 43 received a certificate of completion. 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 eighteenth annual *Rackham-CRLT Seminar on College Teaching: Preparing Future Faculty* took place in May 2017, with funding provided by the provost's office and Rackham. Sixty-three advanced graduate students applied, and CRLT accepted 62 as participants. The applicants represented 12 schools and colleges and included 16 LSA departments and programs.

“ Coming into the seminar, I knew that I enjoyed teaching, but I didn't know much more than that. PFF has really broadened my viewpoint about multiple topics and I'm incredibly grateful.

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 tenured academic administrators, U-M faculty with non-tenure track appointments, and faculty from community colleges
- Discussions of effective and reflective teaching, including conversations about diversity and inclusive teaching

The seminar's introduction to different types of institutions included 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 2016-2017 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 2016-2017 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 and fall 2016 and winter 2017, 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 panel of faculty and staff GSI coordinators shared their units' models for preparing GSIs to teach. In addition to highlighting specific practices, the program provided an opportunity to discuss mechanisms for infusing diversity, equity, and inclusion considerations into GSI training. 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, 2016, and May 31, 2017, the website received over 917,000 visits, representing over 717,000 unique

visitors from 224 countries. The percentage of visitors from Ann Arbor is small (about 2%), but another metric of usage (unique pageviews) shows that the source of almost 13% of traffic is Ann Arbor. Similarly, although only 41% of visitors are from the United States, half of all unique pageviews are from the U.S.

CRLT Social Media

Many of CRLT's pages are highly ranked by search engines such as Google, and about 73% of all visits to CRLT's website come from such search engines. Top keywords include "lesson plan," "curriculum design," "lesson planning," "teaching strategies," and "active learning." Overall, the "Strategies for Effective Lesson Planning" page received the most pageviews, nearly 338,000, or about 25% of total pageviews. The next most popular page was "Active Learning" (over 56,000 pageviews), followed by "Teaching Strategies" (over 38,000 page views).

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 1,445 subscribers, and each post generates a Tweet to CRLT's 2,243 Twitter followers. 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, our post on “Returning to the Classroom after an Election” nearly tripled traffic to the website on November 9, 2016, with 12% of the visitors clicking through to the resource “Responding to Difficult Moments,” and another 11% going on to “Guidelines for Discussing Difficult or Controversial Topics.” Most visitors came directly to that blog post from an email link or via facebook. 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 14,101 unique pageviews, “Returning to the Classroom after an Election” 11,639, “Handling Wrong Answers” 9,835, and “Motivating Students to Learn” 5,053. In 2016-2017, our most popular new posts were “Returning to the Classroom after an Election” (11,639 unique pageviews) and “Responding to Incidents of Hate Speech” (2,840 unique 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 2016-2017, 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 2016-2017 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 Academic Innovation Advisory Council, 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 represented U-M on two Unizin committees: the Faculty Development Subcommittee and the Teaching and Learning Group. CRLT staff also served on the Teaching Evaluation System Replacement Project coordinated by the Office of the Registrar.

In summer 2016, CRLT delivered its final report from a two-year evaluation of Canvas, and staff continued to draw on the findings to design seminars (see p. 14) and sessions in orientations and teaching academies that help instructors leverage features of the learning management system in their pedagogy.

“ The support provided at the institute was really terrific. Thanks. I moved from being quite reluctant to convert from CTools to being quite enthusiastic about Canvas. I found the switch to Canvas was actually easier than the fine tuning each term to use a repeated CTools site, and found quite a few advantages to Canvas.

*Faculty participant in May 2016
Canvas Large Course Institute*

”

In fall 2016, CRLT planned and conducted a rapid evaluation of a beta pilot of Snapshot, a learning analytics dashboard integrated into the Canvas learning management system. Snapshot lets faculty view student engagement trends, monitor outcomes, and identify students at risk of failure. Students can view their own dashboard and compare it to their peers. CRLT staff met separately with small groups of faculty and students to introduce them to the tool, observe their use of it, and elicit any concerns. CRLT's evaluation protocol was shared with additional institutions in the Unizin network: observers from Ohio State University attended the faculty exercise, and Indiana University made CRLT's plan the basis of its own evaluation effort.

CRLT continued to collaborate with the Office of Academic Innovation's Digital Innovation Greenhouse on projects focused on leveraging learning analytics data to personalize education at U-M. A key goal in 2016-2017 was expanding the use of gameful pedagogy across the campus. To this end, CRLT and the DIG development team hosted a faculty learning community on gameful pedagogy in fall 2016 and facilitated a community of practice around gameful pedagogy in winter 2017. These programs drew on data previously collected by CRLT staff about the experiences of students, faculty, and GSIs in more than a dozen courses using Gradecraft, an app that leverages gameful pedagogy to increase student motivation and promote deep learning. Facilitators will share their work on building communities for innovative practice at the national conference for faculty developers, in November 2017.



Another type of collaboration between CRLT and Academic Innovation took the form of assisting with the development of specific courses, including an online, introductory module for interprofessional education across the health sciences, as well as *Act on Climate*, a Coursera MOOC designed by Michaela Zint's graduate students in the school of Natural Resources and Environment. The latter project earned recognition as one of five finalists in the Campus of the Future competition that was part of U-M's bicentennial celebration.

As a charter member of U-M's Teaching and Technology Collaborative (TTC), CRLT co-sponsored the 20th 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. U-M's own Scott Page, the Leonid Hurwicz Collegiate Professor of Political Science, Complex Systems, and Economics, delivered the keynote address, "Technology, Diversity, and Complexity," and took part in the closing panel, "Emerging Landscapes: A Cross-Disciplinary Conversation with U-M Faculty." In addition, CRLT sponsored seven sessions on teaching with technology as part of the conference (see p. 61).

CRLT Programs and Resources Incorporating IT

CRLT incorporates opportunities for instructors to explore and learn about IT within programs for instructors at all stages of their careers.

CRLT grants fund a wide-range of IT projects proposed by faculty. In 2016-2017, about 25% of the funded grants and awards involved IT projects such as apps, blended or flipped courses, digital resources for students and instructors, online student projects, and multimedia production. (See Appendix A for a full list of grants.)

CRLT's Preparing Future Faculty (PFF) programs for graduate students and postdocs model effective use of instructional technology and focus on IT that

participants may use in their own future teaching. For example, the *May PFF Seminar* includes presentations by faculty whose innovative pedagogies incorporate technology, and the *Postdoc Short Course (PSC)* is run in a "flipped" environment, with participants watching screencasts beforehand and then spending in-person meeting time actively engaged in applying what they learned. An online version of the *PSC* ran in summer 2016 and influenced the development of a hybrid version planned for winter 2018.

The GTC+ Digital Media Teacher Certificate Program provides graduate students with structured opportunities to engage with current scholarly conversations about the ways digital environments shape our thinking and practice as teachers and learners. (For more information, see p. 18.)

Each fall and winter term, CRLT's Seminar Series features several programs on IT topics. This year, for example, the series included "Canvas for GSIs: Pedagogies and Practicalities," "Gameful Learning with Gradecraft," "Managing Academic Identities in Digital Spaces," "Organize, Streamline, and Simplify: Teaching Efficiently With Technology," and "The Power of Peer Review: Collaborative Learning in the Classroom and in Canvas," "Using Technology to Check Student Understanding and Provide Feedback."

CRLT also continues to identify faculty development topics that can be engaged with in a fully online setting. In August 2016, a fifth workshop, "Developing Your Teaching Philosophy," joined four already in rotation: "Engaging Students in Learning," "Researched-Based Practices for College Teaching," "Using Technology to Check Student Understanding and Provide Feedback" and "Writing and Grading Exams."

For new faculty and GSIs, CRLT organizes orientation programs and teaching academies that feature sessions on getting started with IT at U-M. Co-facilitated by experienced instructors, these mini-workshops allow participants to choose the specific technologies (e.g., clickers, screencasting) they wish to explore in more depth. (See pp. 13 and 15 for more on orientations and academies.)

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 2016-2017, CRLT continued its work with the Office of the Provost on initiatives designed to promote inclusive teaching practices across the university. At the request of Chief Diversity Officer Robert Sellers, CRLT staff regularly convened, trained, and disseminated information and resources to Faculty Liaisons for Inclusive Teaching from all U-M schools and colleges (see p. 10). The Faculty Communities for Inclusive Teaching grants program (also funded by the Chief Diversity Officer), continued to expand its reach beyond LSA. This year’s poster fair featured projects from an additional four schools and colleges: art and design; education; engineering; and music, theatre and dance.

Following are some additional, specific ways in which CRLT staff promoted inclusive teaching and learning at U-M during the 2016-2017 academic year:

- Consulted with individual schools, colleges, departments, and other groups about professional development with respect to diversity, equity, inclusion, and climate issues.
- Developed and facilitated customized programs for 12 schools and colleges and 10 departments or groups in particular disciplines to develop faculty and GSI skills in attending to social identities and other differences in the classroom, cultivating inclusive learning environments, or handling difficult moments.
- Provided resources for instructors responding to a challenging political climate following the 2016 presidential election (see pp. 8-9).
- Promoted the use of inclusive teaching practices in classrooms during the May 2017 Inclusive Teaching @ Michigan Series (see p. 9).
- Consulted with individual instructors on addressing diversity issues arising in instructional contexts.
- Facilitated examination of inclusive teaching topics by nearly 500 faculty and 150 GSIs through performances by the CRLT Players of sketches about supporting students facing



mental health challenges, addressing student climate concerns, and mentoring in a diverse community.

- Provided support for the completion of 11 projects spanning five colleges in the second cohort of grantees forming Faculty Communities for Inclusive Teaching. We also funded a new round of projects which included, for the first time, teams from public health, pharmacy, and U-M libraries (see p. 41). Funding for the program has been committed through 2018-2019.
- Conducted a national search to hire a new consultant to be based at CRLT in support of LSA Race & Ethnicity course instructors, with funding from the Provost's office.
- 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 developing community-based learning courses and partnering effectively and ethically with community partners, supporting the inclusion of nontraditional students, managing emergent crises in student teams, understanding how stereotype threat and growth mindset affect student learning, preventing and responding to disrespect and disruption in classrooms, applying indigenous ways of teaching and learning in the classroom, applying universal design principles to promote active participation by all students, leveraging student diversity, facilitation skills for diversity and inclusive teaching, making the most of hot moments, creating a classroom environment in which all students can succeed, and creating inclusive classrooms when using technology.

Inclusive Teaching @ Michigan

Join us for a series of free workshops for U-M instructors: May 8-18, 2017

Sponsored by:

- The Center for Research on Learning & Teaching (CRLT)
- The Program on Intergroup Relations (IGR)
- Edward Ginsberg Center for Community Service & Learning
- Center for Engaged Academic Learning (CEAL)
- LEO's Anti-Racism Task Force
- Center for the Education of Women (CEW)
- Women in Science & Engineering Program (WISE)

Full schedule and registration at: crit.umich.edu/inclusive_teaching_series



Sessions include:

May 8	1:00p-3:00p	Kick-off Event Featuring the CRLT Players
May 9	10:00a-12:00p	Implementing Inclusive Teaching Principles in Your Classroom (for faculty)
May 9	2:00p-4:00p	Role of Institutional Agents in Promoting Equity/Inclusion in STEM Learning Outcomes
May 10	10:00a-12:00p	Implementing Inclusive Teaching Principles in Your Classroom (for GSIs)
May 10	2:30p-4:00p	Understanding "Nontraditional" Student Experiences in/out of U-M Classrooms (Panel)
May 11	10:00a-12:00p	Campus Climate in Your Classroom: Responding to Student Microaggressions
May 11	2:00p-3:30p	Grading Matters: Inclusive Grading and Assessment
May 12	10:00a-12:00p	Understanding How Stereotype Threat and Growth Mindset Affect Student Learning
May 12	1:00p-3:00p	Distress Signals: Supporting Students Facing Mental Health Challenges (CRLT Players)
May 15	10:00a-12:00p	Inclusive Course Design
May 15	2:00p-4:00p	Managing Emergent Crises in Diverse Student Teams
May 16	9:00a-11:00a	Inclusive Strategies for Teaching with Writing
May 16	1:00p-3:00p	Approaching Challenging Classroom Conversations
May 17	10:00a-12:00p	Designing Community-Based Learning Courses with Diverse Learners in Mind
May 17	2:00p-4:00p	Workshopping Your Inclusive Teaching Materials
May 18	9:00a-11:00a	Dance and Dialogue: Human Contact and Democracy
May 18	12:00p-1:30p	Closing Lunch: Engaging Colleagues in Conversations about Inclusive Teaching



CRLT Players Theatre Program

2016-2017

43 U-M performances
2,900+ U-M audience members

13 performances (total) at:

- Princeton University
- Columbia University
- Stanford University
- Yale University
- Central Michigan University
- Rochester Institute of Technology

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 com-



“ Thank you and the CRLT Players for coming to Yale, as the final piece in our inaugural Diversity & Education Series. Your actors created a powerful – and thoughtful -- presence on stage, and Sara did a masterful job of asking questions of our participants.

Yale Center for Teaching and Learning

mittees in the college. In addition, the Players are in demand nationally, performing for campuses and conferences around the country.

The CRLT Players encourage critical reflection and facilitate strategy-focused dialogues about a range of diversity, equity, and inclusion (DE&I) issues. They enable units across U-M, as well as campuses across the nation to start or deepen such conversations among members of their communities. The scope of involvement encompasses not only performances of sketches and facilitation of audience discussions, but also pre-performance planning dialogues and post-event debriefs centered on a unit's specific strategic goals. New collaborators in 2016-2017 included the schools of kinesiology, public health, and public policy.

The Players also experimented successfully with new approaches for effectively handling an increased demand for performances. First, while finalizing the upcoming year's performances in May 2016, the theatre program dedicated January and February

of 2017 to two newer sketches: *Distress Signals* on mental health and *Cuts* on microaggressions (see p. 9). Temporarily narrowing the repertoire enables a greater number of actual performances because fewer sketch casts can rehearse more efficiently. **Although it is most helpful when schools and departments can extend their planning horizons and talk to us about their potential performance needs a year or two out**, we were delighted to find that concentrated scheduling allowed us to accommodate a few last-minute requests for these pieces. Units can expect to see clustered scheduling of additional sketches in 2017-2018.

In a second set of experiments, the Artistic Director worked with ADVANCE and the College of Engineering to design and facilitate interactive and engaging sessions based on case studies, which can be developed more quickly than new sketches. In addition to being useful at U-M, the ability to offer this kind of companion piece has the potential to make it more feasible for external institutions to host the Players and address multiple topics without needing multiple casts of actors. Further innovation along these lines will be enabled by the hiring of an additional facilitator who will join the theatre program team in 2017-2018.

Finally, the Players debuted *Tenure Decisions* vignettes in 2016-2017, performing for audiences of department chairs and members of executive committees in LSA. U-M's sustained attention to and long-term investments in making tenure processes more equitable has made it possible to move past the broad strokes of the long-used sketch *The Fence* and to focus on deeper subtleties and complexities of how bias still pops up despite widely held commitments to fair and unbiased processes. The modular format of shorter vignettes is flexible, allowing units to work on specific areas of concern.

In addition to creating their own programming, U-M's CRLT Players work to shape the national conversation about practices for inclusive teaching and learning, as well as equitable evaluation. Notably, CRLT's Artistic Director and its Executive Director consulted with the University of Virginia creating an

applied theatre program to help open up dialogues and advance institutional goals specific to their own campus. Separately, the Artistic Director served as a sounding board for the National Academies of Sciences, Engineering, and Medicine regarding plans to use theatre to disseminate research about the benefits of integrating skills and dispositions nurtured by the humanities into STEM disciplines. And the Players will present a special plenary performance of *Cuts* at the November 2017 annual meeting of the Professional and Organizational Development Network (POD), the national organization for educational developers.



Responses to Tenure Decisions Performances

<p>“What worked best about the vignettes, for you?”</p> <ul style="list-style-type: none"> • The quick hitting scenes and then time to reflect upon what we'd seen was more effective than a single, longer performance. • Learning how subtle and implicit the biases can be was eye opening. We really have to be careful about our unconscious biases.
<p>“What was the most significant thing that you learned from today's performance?”</p> <ul style="list-style-type: none"> • Ways to redirect meeting conversations • Differences in how criteria are used with different candidates • It was eye-opening to see the strengths/weaknesses at each stage of the process.
<p>“What might you do differently as a result of participating in this session?”</p> <ul style="list-style-type: none"> • Be objective, and say something if discussion goes off tangent to more subjective points. • Clearly define goals, expectations, criteria at start of meeting. Clearly remind members about various implicit biases that may come up. • Converse with junior faculty about building their narrative/ portfolios.

Assessment and Research

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

During the 2016-2017 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 17 schools and colleges, as well as the provost's office.

Campus-Wide and Multiple Unit Assessment Initiatives and Services

Accreditation 2020

This section expands on the overview offered in the New & Noteworthy section (p. 8).

Every 10 years, U-M participates in a re-accreditation process led by the Higher Learning Commission (HLC). In summer and fall 2016, a coordinating team of six staff from the vice provost's office and CRLT started meeting regularly

to begin laying groundwork for the 2020 site visit by an HLC team. A key goal of the vice provost was to set up a process that would take advantage of the impetus provided by the HLC's requirements for documentation, yet put U-M faculty in the drivers seat, where they could proactively choose what to address based on units' own goals for student learning. About 20 Accreditation Evidence Leads, one from each school or college and Student Life, have been recruited. They were charged at their March 2017 orientation with identifying and submitting pieces and sources of evidence available (or obtainable) in their own settings. Additionally, a working group of about 10 people was formed to begin evaluating data gathered by the evidence leads and marshaling it in 2017 and 2018 into claims on behalf of the university that address specific HLC criteria. Their work will eventually be refined by the Vice Provosts and Associate Deans Group (VPADG) and reviewed by the campus before being submitted to HLC in 2019.

LSA is an example of a school where CRLT staff are furthermore working closely with the associate dean and faculty from nine units (astronomy, chemistry, classical studies, communication studies, ecology and evolutionary biology, history, political science, romance languages and literatures, and sociology) to create a team of faculty and administrators who are actively engaging in ways to make accreditation work a supportive exercise for the variety of disciplines comprising the school. They are building models, documenting teaching and learning outcomes, and creating templates and curricular review structures that can be adopted on a broader scale. The "Lucky 9" faculty learning community will convene in fall 2017 for three 2-hour meetings facilitated by CRLT, and consultations will continue with each department regarding their specific assessment strategies.



Transforming Learning and Teaching for a Third Century (TLTC)

This section expands on the overview offered in the New & Noteworthy section (p. 10). Since 2013, CRLT staff have consulted with nearly 50 teams about assessment for their TLTC proposals or funded grants. In 2016-2017, the focus was on supporting the sustainability of teams' efforts and sharing successful approaches to assessment. Faculty have become more comfortable applying simple assessment tools, overcoming a perception that scaling TLTC initiatives would require additional staff and/or technology. Faculty have also developed a common vocabulary for discussing learning outcomes that reference both national AAC&U value rubrics and goals articulated locally by the Offices of the Provost and of Student Life.

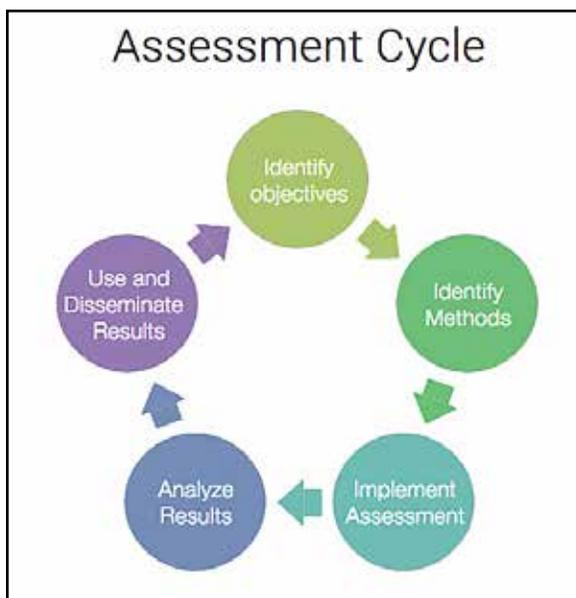
In addition to launching an Engaged Learning at Michigan website to house assessment-related resources, CRLT hosted three lunch gatherings on topics related to engaged learning: entrepreneurship, critical reflection, and global learning. Participants included TLTC grant winners, as well as faculty and staff who focus on these three areas. All of the lunches included discussions of how to foster and assess TLTC learning goals (creativity; intercultural engagement; social/civic responsibility and ethical reasoning; communication, collaboration, and teamwork; and self-agency and risk taking), and time for faculty and staff to share pedagogical challenges and opportunities associated with TLTC high-impact practices.

Besides the lunch series, CRLT organized a special Provost's Seminar on Teaching in March 2017 that was part of the bicentennial celebration. *Teaching at the Bicentennial: Building the Evidence Base for Engaged Learning* shifted the focus from the specifics of Third Century Initiative projects to a university-wide examination of assessment of teaching and learning across the breadth of the institution. With the 2020 Higher Learning Commission re-accreditation process fast approaching, the expanded focus helped prepare a broader array

of departments and faculty to document teaching and learning outcomes for external audiences.

Funded TLTC projects that spanned two or more colleges are listed below; unit-based TLTC projects appear in the list that starts on p. 31.

- The Biological Station Initiative (U-M Biological Station, LSA, SNRE): Consultations focused on developing, providing feedback on, and implementing assessment plans. CRLT staff also developed questions and helped interview a candidate for the Biostation's assessment and evaluation postdoc position.
- Michigan Center for Interprofessional Education (Ann Arbor: dentistry, kinesiology, medicine, nursing, pharmacy, public health, social work, and Taubman Health Science Library; Flint: health professions and studies): CRLT staff met with the Curtis Center to discuss assessment of the IPE initiative. With the chairs of the IPE Curriculum Workgroup, CRLT developed a survey to gauge experiences and desired outcomes of workgroup members. Compiled data were presented to both the workgroup and the IPE Executive Committee. CRLT staff delivered presentations on assessment to Interprofessional Leadership Fellows and consulted with project teams. CRLT staff developed an instructor survey, analyzed data, and compiled



a report for the Team-Based Clinical Decision Making course. They also provided feedback on a separate survey to assess the experiences of students participating in the Intro to IPE online course. An evaluation report on Health Professions Education Day 2017 was also compiled by CRLT staff.

MACRO Graduate Program

MACRO supports interdisciplinary research in the field of polymer science and engineering. As it scales to include 40 graduate students from four schools and colleges (engineering, art & design, LSA, and medicine), CRLT is helping measure the impact of an “Innovation” track adding research rotations, professional development, and industrial placements that emphasize entrepreneurship and innovation.

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 business, biomedical engineering, education, and medicine participated in the January 2017 ISL Symposium (see p. 40). Prior year grantees from Asian languages and cultures, education, engineering, information, and medicine shared their results at a poster fair held in conjunction with the keynote address at the annual Enriching Scholarship Conference in May 2017.

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 2016-2017, CRLT conducted MSFs for 306 instructors, allowing nearly 13,000 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 Burroughs Wellcome Fund, 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 that follow.

Architecture & Urban Planning

TLTC project: Practice Sessions: Consultations focused on developing, providing feedback on, and implementing assessment plans, as well as disseminating assessment results. CRLT staff also conducted MSFs or focus groups

Art & Design

MACRO Graduate Program (see p. 30) TLTC projects:

Business

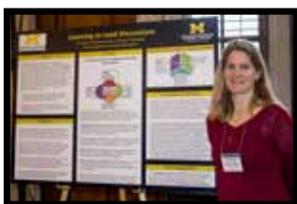
Jane Dutton, Monica Worline, and Betsy Erwin received a 2017-2018 Investigating Student Learning Grant to examine the transformational impact of an action learning immersion program grounded in the multidisciplinary field of positive organizational scholarship.

Dentistry

TLTC project: Michigan Center for Interprofessional Education (see p. 29)

In the second year of adjusting a pilot program, CRLT is helping to measure dental hygiene students' perspectives on how *SSW 503: Differences in Clinical Populations* has prepared them for their work in placements and other client-focused settings.

Education

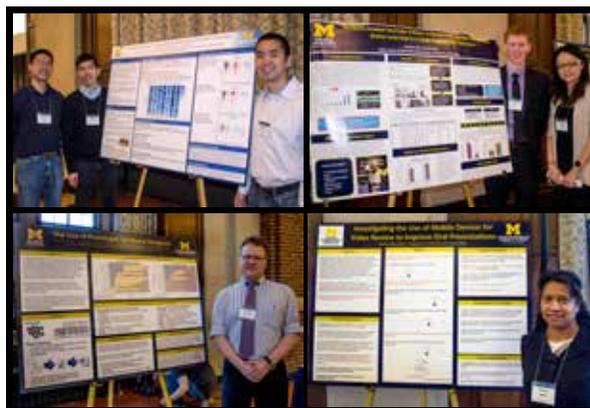


With particular attention to issues of inclusion across the array of program offerings, CRLT helped faculty conduct focus groups

of first-year Ph.D. students. This information is intended not only to inform the shaping of next year's offerings but also to refine courses and placements for the current cohort.

Chandra Alston and Simona Goldin received a 2017-2018 Investigating Student Learning Grant to examine patterns and trajectories in undergraduate thinking concerning issues of privilege, access, and stratification in U.S. public schools; findings will support the design and redesign of three undergraduate courses

Engineering



TLTC project: CRLT staff developed an assessment and analysis plan for the Multidisciplinary Design Program.

CRLT staff discussed an assessment plan for an NIH grant (NERC for Directed Multiscale Assembly of Cellular Metamaterials with Nanoscale Precision: CELL-MET) and consulted on next steps for a multi-institution grant.

The Department of Civil and Environmental Engineering asked CRLT to evaluate its recruitment efforts to help faculty understand student awareness of the civil engineering and environmental engineering fields, with particular emphasis on how CEE can help undergraduate students interested in engineering, infrastructure, or environmental related fields understand how they might accomplish their areas of interest through these specific engineering programs.

In fall 2016 and winter 2017, CRLT conducted two focus groups with ENGR 100 students to help a PI investigate a finding at odds with the literature on team gender composition and student learning. (See research section p. XX.) CRLT staff also consulted on rubrics used to grade group projects and presentations and evaluated demographic effects on student satisfaction with teamwork.

Aileen Huang-Saad and Prateek Shekhar received a 2017-2018 Investigating Student Learning Grants to compare the effects of two types of project-based courses (engineering design vs.

entrepreneurial) on students' self-agency and their innovativeness and risk-taking skills. CRLT staff also assisted with an IRB application to extend a separate ISL-related research project that examines student data longitudinally.

CRLT staff consulted with the Executive Director for Student Affairs on evaluation of faculty teaching circles, with focus on inclusive excellence (Faculty Leading Change initiative).

MACRO Graduate Program (see p. 29)

Information

TLTC project: Citizen Interaction Design: Consultations focused on developing, providing feedback on, and implementing assessment plans. CRLT staff also conducted MSFs or focus groups.



Kinesiology

TLTC projects:

Michigan Center for Interprofessional Education (see p. 29)

Using Hybrid Modular Courses to Scale Up Engaged Learning in Kinesiology: Consultations focused on developing, providing feedback on, and implementing assessment plans, as well as disseminating assessment results. CRLT staff also conducted MSFs or focus groups.

Law

After the first full year of a new writing support program, CRLT surveyed students and interviewed faculty to understand the program's impacts on student learning in courses and clinics,

as well as faculty capacity for teaching across the curriculum.

CRLT staff supported the launch of a new problem-solving initiative and developed an assessment plan, working with four piloting faculty in whole group working meetings and individual course consultations. After collecting midterm and end-of-term student feedback, a debriefing meeting was held with the faculty team. With the associate dean, student evaluation questions were identified for the registrar to add. During the 2017-2018 academic year, CRLT will repeat this process as more courses launch.

CRLT continued assisting faculty with assessment of the Flipping the Legal Practice Classroom project, providing a revised assessment plan analyzing and presenting results of online student surveys in a meeting with the instructors and Academic Innovation staff associated with the project

Literature, Science, and the Arts (LSA)

LSA: Biological Station

TLTC project on the Biological Station Initiative (see pp. 29)

LSA: Biology

CRLT helped faculty begin crafting an assessment plan for Biology 173 to secure additional funding for the course.

LSA: Dean's Office

MACRO Graduate Program (see p. 30)

LSA: English Language Institute

CRLT conducted a follow-up survey of participants in the online Preparing for Graduate Success program for newly admitted international graduate students, assessing the long-term impact on students' adaptation to the linguistic, academic, and cultural landscape at U-M.

CRLT staff also worked with ELI's director on an evaluation plan for a curriculum review and outreach, and met with faculty to assess needs and resource utilization.

LSA: Global Scholars Program

CRLT staff consulted on the use of pre/post tests and the inclusion of a control group on both ends for assessing the program.

LSA: Instructional Support Services

CRLT staff consulted on an assessment plan for the Active Learning in Classroom project and provided feedback on winter 2017 instructor survey questions.

LSA: Statistics

CRLT studied the impact of the HyFlex+ method of course delivery for *Statistics 250* by interviewing students in fall 2016. Within this course, students could elect to attend lectures in person, watch synchronously from remote locations, and/or watch recorded lectures at a later time. Of particular interest were the ways students could make different decisions about which modalities they were using as the course was in progress.

LSA: Sweetland Writing Center

CRLT consulted on the assessment of the peer consultant program.

Medicine



TLTC project: Michigan Center for Interprofessional Education (see p. 29)

CRLT staff also worked with instructors to

develop an ongoing assessment plan for *Pharmacology 603*, a course that teaches quantitative analysis, data handling, and presentation skills to graduate students from a variety of medical and health science fields. They developed and administered a customized student survey, and compiled a report with baseline data.

CRLT staff conducted focus groups with residents, alumni, and faculty about their experience of the Clinical Veterinary Residency (including pre-board exam curriculum, experiential elements, and mentorship) for the University Lab for Animal Medicine (ULAM). As this project

unfolds, CRLT anticipates coordinating 2 retreats where program faculty will use the information to address both results of this assessment and other trends in the field while fine tuning curriculum. CRLT also consulted on a video script for ULAM.

CRLT staff conducted focus groups with current trainees and interviewed faculty and program advisory committee member in order to provide an external review (with particular attention to faculty/student mentorship) of *Integrated Training in Microbial Systems*, an interdisciplinary program for graduate students across population studies fields, as part of a Burroughs Wellcome Fund grant.

CRLT collaborated with faculty to evaluate the *Academy of Medical Educators Peer Observation Project*. Work included the submission of an IRB application, development of an evaluation tool, analysis and presentation of data at a meeting of medical educators in November 2016.

Four projects received 2017-2018 Investigating Student Learning Grants: **Stephanie Kukora**, **David Fessell**, **Jen Stojan**, and **Catherine Kim** are evaluating whether improvisational theatre training improves communication, collaboration, and teamwork within faculty mentor dyads and groups of medical students. CRLT staff consulted on assessment of improve workshop components. **Deborah Rooney** and **Suzanne Dooley-Hash** are expanding on pilot work at the clinical simulation center that combines web- and simulation-based mechanisms that support the cognitive, psychomotor, and affective learning of techniques used in pediatric emergency medicine. **Marc Thorne** and **Mark Prince** are developing a full month “boot camp” curriculum for otolaryngology-head and neck surgery residents that will include formal training in airway management, communication/handoff, common and emergent clinical scenarios, and competency based simulation/task trainers. **David Zopf** is studying the potential of a new, interdisciplinary pediatric craniofacial surgical simulation course for residents from different specialties to counter the effects of

siloed disciplinary training and improve communication, collaboration, and teamwork in the performance of complex craniofacial procedures. (For the last project, CRLT staff consulted on how to conduct and analyze findings from focus groups.)

CRLT staff consulted on assessment and planning with a Whitaker grantee regarding a workshop series on inclusion.

CRLT discussed focus groups and surveys for a geriatric psychiatry residency.

MACRO Graduate Program (see p. 30)

Music, Theatre & Dance

TLTC project on Student Partnerships in Arts & Technology: Consultations focused on developing, providing feedback on, and implementing assessment plans.

Natural Resources and Environment

TLTC projects:

Biological Station Initiative (see pp. 29)

Michigan Sustainability Cases: Ongoing program-level and course-level consultations focused on developing, providing feedback on, and implementing assessment plans, as well as disseminating assessment results. CRLT staff participated in the Curriculum Advisory group and helped develop workshops about assessment for project leaders to conduct when onboarding faculty who will be using sustainability cases in their courses. CRLT staff also organized a lunch workshop that introduced participants to best practices for using case studies as a pedagogy in their courses.

After a faculty working group obtained a Whitaker grant for curriculum planning for the new School of Environment and Sustainability, CRLT staff began designing, administering, and analyzing surveys of alumni, students, and faculty (see p. 11).

Nursing

TLTC project: Michigan Center for Interprofessional Education (see p. 29)

Pharmacy

TLTC project: Michigan Center for Interprofessional Education (see p. 29)

In collaboration with faculty, CRLT staff helped develop a survey to gauge instructor experiences in the course *Team-Based Clinical Decision Making*, analyzed the data, and compiled a report that informed instructors planning future iterations of the course.



Public Health

TLTC project: Michigan Center for Interprofessional Education (see p. 29)

CRLT surveyed students' engagement with course material and their reactions to *HBHE 720: Racial and Ethnic Disparities in Health* being shifted from a year-long to a more semester-long offering.

CRLT conducted a feedback session and follow-up interviews with workshop participants for a Year 2 evaluation of an NIH R25 grant, *Dynamic Systems Science Modeling*.

CRLT conducted focus groups with present and past trainees for an external review that explored how students and recent alumni believe the NIH-funded and interdisciplinary Genome Science Training Program's certificate serves their degree programs and future placements.

CRLT staff provided feedback on an alumni survey for the Health Management & Policy program.

CRLT staff facilitated a focus group lunch and gathered feedback from attendees of the Genom-

ics subgroup from the Big Data Summer Institute and reported the data.

Social Work

TLTC project: Michigan Center for Interprofessional Education (see p. 29)

In the second year of adjusting a pilot program, CRLT is helping to measure dental hygiene students' perspectives on how *SSW 503: Differences in Clinical Populations* has prepared them for their work in placements and other client-focused settings.

Other Units

Academic Innovation

CRLT continued assisting faculty with assessment of the Flipping the Legal Practice Classroom project, providing a revised assessment plan and budget for the project, analyzing and presenting results of online student surveys in a meeting with the instructors and Academic Innovation staff associated with the project.

Central Student Government

CRLT staff provided feedback on the Mental Health Taskforce's report.

Ginsberg Center for Community Service and Learning

CRLT consulted on the evaluation of teaching across service learning courses and helped identify measures for assessing service learning that are aligned with goals articulated by the Offices of the Provost and Student Life.

Information and Technology Services (ITS)

CRLT staff developed a rubric for assessing vendors' responses to U-M's request for proposals for a new course evaluation system.

CRLT staff wrapped up evaluation of U-M's new learning management system, analyzing the results of winter 2016 surveys of instructors (both those who used Canvas and those who did not) and submitting a final report to ITS in summer 2016.

CRLT staff planned and conducted a rapid evaluation of Snapshot (now Course Monitor) and compiled a report analyzing the resulting student and faculty data. Methods were shared with Unizin, and U-M hosted staff observers from The Ohio State University.

Michigan Center for Interprofessional Education (see p. 29)

Provost's Office

CRLT conducted a brief assessment of the May 2016 *Inclusive Teaching @ Michigan* series. Ten months after the program, over 85% of respondents reported that participation had led to positive changes in their teaching.

CRLT staff wrapped up evaluation of U-M's new learning management system, analyzing the results of winter 2016 surveys of instructors (both those who used Canvas and those who did not) and submitting a final report to ITS in summer 2016.

CRLT staff continued to support the Transforming Learning for a Third Century (TLTC) Initiative (see p. 10 and p. 29). In addition to planning events and coordinating the preparation of an institution-level report, staff discussed reviewing teaching evaluation items to provide alignment with TLTC learning outcomes.

Research, Office of Vice President for

CRLT staff consulted on strategies for analyzing social media data.

Student Life, Office of

CRLT staff assisted with MPortfolio measures, discussed considerations for transition of the administration of the CIRP survey to address current institutional needs, and discussed connecting and aligning Ginsberg community service learning with Engaged Learning Outcomes and Student Life Learning Outcomes. They also offered a breakout session, "Tools of the Trade for Action-Based Research—Using Surveys to Gather Information," at the Student Life Research Symposium in May 2017.

Taubman Health Science Library

TLTC project: Michigan Center for Interprofessional Education (see p. 29)

University of Michigan-Flint

TLTC project: Michigan Center for Interprofessional Education (see p. 29)

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.

Theatre as Creative Scholarship

An article by CRLT staff appeared in the June 2016 issue of *To Improve the Academy: A Journal of Educational Development*. It focuses on the use of theatre as a mode of creative scholarship, from the research involved in sketch creation to the presentation of that research to academic audiences. A specific sketch developed by the CRLT Players—one that explores the consequences of subtle discrimination faced by women scientists in research laboratory settings—illustrates the ways in which theatre can engage audiences with research results. The article explains how participation in such performances promotes a more active exploration of scholarship than simply reading or hearing a presentation. Interactive theatre directs and focuses an audience's attention in ways unique to the stage; the embodiment of research in 3-dimensional characters allows spectators to explore multiple perspectives on research results; and the process of critical reflection and facilitated discussion that follows the performance leads viewers to consider changes, both personal and institutional, that can address the issues depicted in the sketch.

Measuring the Impact of the LSA Teaching Academy

CRLT staff conducted a quasi-experimental evaluation of a required, teaching-focused, new faculty program at U-M. The study makes use of institutional data, including student evaluations of

teaching and faculty participation in educational development activities, which are available on many campuses yet rarely used in program evaluation. Results show positive impacts. Faculty found the program valuable and reported increases in their preparation for a range of teaching tasks. In comparison to earlier cohorts, program participants received stronger student evaluations on two global items, and demonstrated significantly more connections with the teaching center in their early careers. An article has been accepted for publication in the *International Journal for Academic Development*.

Intended and Enacted Teaching Strategies in Smaller Classes

Findings from an action research study conducted in winter 2015 by CRLT have been published in *Active Learning in Higher Education*. LSA's piloting of smaller class sizes in two language departments provided an opportunity to contribute to filling a gap in the literature about a) changes in instructors' pedagogical practices when class sizes are reduced and b) instructors' perceptions of challenges to making greater use of active learning techniques. Investigators met with participating instructors twice, in a large group early in the semester, and in smaller focus groups toward the end of the term. Written reflections were collected at both time points, allowing investigators to analyze the pedagogies faculty planned to enact and the barriers they encountered. Participants reported that the main benefits of smaller course sizes were greater use of active learning strategies, more feedback, and inclusive teaching. Challenges include physical space constraints, highly structured curricula, and identity and authority in the classroom.

Analysis of Educational Development Position Advertisements

CRLT staff conducted an analysis of educational development positions appearing on the POD Network listserv between June 1, 2015 and May 31, 2016. The motivation for the study was to examine employment trends in the field of educational development that could inform center

directors who oversee hiring of teaching center staff, and individuals who may be considering a career in educational development. The results of this study revealed a steep growth in the need for qualified staff. Comparing the results of this analysis to a similar analysis conducted in 2001-02, this study found a 160% increase in the number of educational development positions posted. A 77% increase was also seen in the number of colleges and universities advertising for educational development personnel. In terms of the focus of the positions, generalists with no particular subfield were the most commonly sought (41%). Over one-third of the advertised positions (34%) indicated a focus on the implementation of instructional technologies. Other popular subfields were assessment (10%), STEM education (7%), and graduate student instructor development (4%). The full results of the study were published in the Fall 2016 POD Network News.

Comparing Text-Based and Image-Based Active Learning Exercises

Findings were published in *Anatomical Science Education* in 2017 from research conducted by faculty in the School of Kinesiology and CRLT staff. Each session of an introductory musculoskeletal anatomy course used an average of 12 active learning exercises, about 60% of which were image-based, while the rest were text-based. Clicker participation data from 231 students over two semesters were compared with their examination performance on 262 questions associated with the in-class exercises. Students also rated the helpfulness and difficulty of the in-class exercises on a survey at the end of the semester. Participation in image-based learning exercises was associated with higher examination scores, while participation in text-based active learning was not. Students found both types of active-learning exercises helpful, but they rated image-based exercises as requiring less effort than the text-based activities.

Case-Based Pedagogy Assessments Piloted

With funding from a TLTC Transformation Grant for the Michigan Sustainability Cases project, researchers at CRLT and the School of Natural Resources and Environment have worked together in recent years to develop a suite of courses that use case-based pedagogies to teach sustainability content. After a case about climate adaptation planning in Ethiopia was used in a large undergraduate course in winter 2016, students participated in focus groups and a qualitative survey, and their midterm exam results were compared to those from the same class in 2015, when no case method was used. Test scores improved, and non-traditional students especially reported more engagement with the rich, multimedia materials than a printed case. Two articles appeared online in *World Development Perspectives* in July 2016.

Clinical Faculty Peer Observation Project

The Academy of Medical Educators offers a peer review process so that faculty may receive feedback on their clinical teaching. In summer and fall 2016, CRLT staff assisted with the development of an online survey of U-M faculty who had participated in this process at least once. Preliminary data were shared with academy members at their November meeting, during which about 30 instructors also took part in a feedback session about the ease of using peer observation instruments. Results informed planning of the next training of peer observers in June 2017.

Appendix A: Grants and Awards (see also p. 16)

► 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 2017, five teaching innovations were chosen from among 65 nominations. 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 2017

1. Sandro Cinti, Michael Cole, Michelle Daniel, and Douglas Gelb, *Medicine*
Teaching Early Learners "How Doctors Think" in the Chief Concern Course
2. Mary Lou Dorf, *Computer Science and Engineering*
Inspiring Confidence Through Achievement: Inclusive Teaching in Computer Science
3. Lolita Hernandez and Craig Regester, *Residential College/Semester in Detroit, LSA*; and Stephen Ward, *Afroamerican and African Studies*
Detroiters Speak: Building Community Classrooms
4. Stephen Rush and Amy Chavasse, *Music, Theatre & Dance*; Yojairo Lomeli, *Architecture and Urban Planning*; Andrew Thompson, *Art & Design*; Herbert Winful, *Electrical Engineering and Computer Science*
Opening Students' Minds Through Interdisciplinary Making
5. Adam Simon, *Earth and Environmental Sciences, LSA*
Mapping Possibilities for U-M's Energy Independence

► 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 2017

1. Patricia Abbott, *Nursing*, and Allen Flynn, *Information*, and Johmarx Patton, *Medical School*
Electronic Health Record System Simulator for Inter-Professional Education
2. Tomasz Baumiller, *Earth and Environmental Sciences, LSA*
Digital Preservation of Ruthven Exhibits for Teaching Natural History
3. Matthew Davis, *Nursing*
Development of an Integrative, Hands-On Health Data Analysis Course

4. Rachel Goldman, John Heron, and Manos Kioupakis, *Materials Science and Engineering*
M-Write Electronic Materials Science
5. Cindy Hsu, Ross Kessler, and Sage Whitmore, *Medicine*
Michigan Critical Care Project
6. Samantha Kempner and Adam Baruch, *Medicine*
Birth of Modules: Developing Interactive Web-Based Modules Orienting Medical Students to Labor and Delivery
7. Hera Kim-Berman, *Dentistry*
Three-Dimensional Virtual Reality Patient Model for Enhanced Student Learning
8. Elizabeth Kuzma, *Nursing*
Integrating Trauma Informed Practices into Nursing Education
9. Janine Maddock, *Molecular, Cellular, and Developmental Biology, LSA*
The Molecular Biology Video Project
10. Christian Matijas-Mecca, *Music, Theatre & Dance*
Studies in Dalcroze Eurhythmics

► 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 2016

1. Theodora Danciu, Erika Benavides, and David Brzezinski, *Dentistry*
Integrating Basic and Diagnostic Sciences Using Team-Based Pedagogy in the DDS Curriculum
2. Robert Duncan, *Medicine*
Enhancing Success of Underrepresented Minorities in Graduate Education by Fostering Support and Self-Agency
3. Robin Fowler, *Technical Communication, CoE* and Laura Hirshfield, *Chemical Engineering*
Understanding Task Allocation on First-Year Undergraduate Engineering Teams
4. Maisie Gholson, *Education*
The Impact of Assessment Collaboratives on Secondary Mathematics Teaching Interns' Development
5. Ann Hilberry and Tatiana Calixto, *Romance Languages and Literatures, LSA*
Fortifying Diverse Cultural Content in Spanish 231 with Audio Mini-Lectures & Conversations
6. Elizabeth Keren-Kolb, *Education*, and Elliot Soloway, *Electrical Engineering and Computer Science*
To App or Not to App: An Innovative Instructional Approach to Preparing Preservice Teachers to Critically Evaluate Educational Applications for Teaching and Learning

7. **Adi Raz, Behrad Aghaei, and Nilay Sevinc, *Near Eastern Studies, LSA***
Online Components for Intensive Language Learning (OCILL): Hebrew, Persian, Turkish, Hindi and Urdu
8. **Caren Stalburg, Michael Engelsbe, and Jen Stojan, *Medicine***
Preparing Educators: Teaching Medical Students to Teach
9. **Michaela Zint, *Natural Resources and Environment***
SEAS of Change - Toward Assessing Student Learning Outcomes of Environmental Sustainability Education at the University of Michigan

► 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.

Investigating Student Learning Grant Recipients, Fall 2016

1. **Chandra Alston and Simona Goldin, *Education***
Examining Access and Stratification in Public Schools: Supporting Undergraduates' Engaged Learning About Issues of Privilege and Equity
2. **Jane Dutton, Monica Worline, and Betsy Erwin, *Business***
Investigating Engaged Learning and Transformational Impact in an Action Learning Immersion Program
3. **Aileen Huang-Saad and Prateek Shekhar, *Biomedical Engineering***
Assessing the Development of Self-Agency, Innovativeness and Risk-taking Skills in Engineering Design and Entrepreneurship Courses
4. **Stephanie Kukora, David Fessell, and Jen Stojan, *Medicine***
Improving Medical Education: Enhancing Communication and Teaching Skills Through Medical Improv
5. **Deborah Rooney and Suzanne Dooley-Hash, *Medicine***
A Novel Mixed Modality Approach in Self-Directed Procedural Simulation
6. **Marc Thorne and Mark Prince, *Medicine***
Novel Intern Curriculum in Response to Changing ACGME Requirements in Otolaryngology Residency
7. **David Zopf, *Medicine***
Developing an Interdisciplinary Pediatric Craniofacial Surgery Course Utilizing High Fidelity, Computer Aided-Designed, 3D-Printed Surgical Simulators

► 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 2017

1. **Olivia Anderson and Susan Aronson, *Public Health***
Series of workshops and discussions of inclusive teaching for faculty in new Nutritional Sciences department.
2. **Karen Farris and Jolene Bostwick, *Pharmacy***
Session on unconscious bias, followed by workshop on inclusive teaching practices for faculty teaching in course sequences in Pharmacotherapeutics and Healthcare Systems.
3. **Paul Fleming and Roshanak Mehdipanah, *Public Health***
Discussion series and skill-building workshop, with focus on supporting nontenured faculty in achieving the school's mission of focusing on health equity and identity-based health disparities.
4. **Robin Fowler, *Technical Communication, CoE***
Series of meetings among Engineering 100 instructors to explore ways to intervene in gendered role-taking in student teams.
5. **Shuwen Li and Simone Sessolo, *Sweetland Center for Writing, LSA***
Sequence of meetings for Sweetland, English, and Residential College instructors to enhance understanding and build skills related to teaching inclusively in multilingual classrooms.
6. **Mark Moldwin, *Climate and Space Sciences and Engineering***
Learning community of faculty from Climate and Space Sciences program to discuss research on inclusive teaching and mentoring.
7. **Stephanie Moody and Megan Sweeney, *English Language and Literature, LSA***
Monthly meetings for faculty members teaching new courses on Literature and Writing Outside of the Classroom, reflecting on social justice pedagogy in order to create resources for future instructors in similar courses.
8. **Sile O'Modhrain and Michael Gurevich, *Music, Theatre & Dance***
Day-long workshop for faculty in Performing Arts Technology department, featuring expert speaker on gender-inclusive teaching in a male-dominated discipline and sessions on workshopping course materials and implementing inclusive teaching practices.
9. **Maren Oberman and Enid Rosario-Ramos, *Education***
Lunch meetings for SOE faculty to collaborate on designing a pedagogy course for GSIs, focused on building GSI capacity to engage in complex conversations with their students around issues of identity, racial politics, and charged classroom dynamics.
10. **Stephanie Rosen and Melissa Gomis, *U-M Libraries***
Series of meetings for Library faculty instructors to develop skills in inclusive teaching. Focus on inclusive practices for teaching context which often involves single sessions with students.

11. Emily Youatt and Gary Harper, *Public Health*
Monthly meetings for faculty members preparing to teach in new undergraduate SPH curriculum, with focus on highlighting inclusive teaching practice.

► 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 2016

1. Adnan Ajmal, *Medicine*
Participation in 2017 National Pituitary Society and Endocrine Society Meetings
2. Ashley Bigham, *Architecture and Urban Planning*
Bizarre Bazaar: A Guide to Ukrainian Markets
3. Russell Brakefield, *English Language and Literature, LSA*
Attendance at the 2017 Association of Writers and Writing Programs Conference and Bookfair
4. Seder Burns, *Residential College, LSA*
Black and White Mastery Workshop
5. Jeremiah Chamberlin, *English Language and Literature, LSA*
Attendance at the 2017 Association of Writers and Writing Programs Conference and Bookfair
6. Susanna Coll Ramirez, *Romance Languages and Literatures, LSA*
Course Development and Teaching Hardware Request
7. Juan de los Santos, *Romance Languages and Literatures, LSA*
Introduction to the Clock Method
8. Christine Feak, *English Language Institute, LSA*
Attendance at the 2017 TESOL International Conference
9. Karl-Georg Federhofer, *Germanic Languages and Literatures, LSA*
German for Professional Purposes - Planning Meeting and Session
10. Mar Freire Hermida, *Romance Languages and Literatures, LSA*
Present at 2017 ALCESXXI International Conference
11. Victoriano Garre Leon, *Romance Languages and Literatures, LSA*
Participation in an International Professional Program on Contemporary Manifestations of Popular Culture and Its Incorporation in the Spanish as a Foreign Language (FL) Classroom
12. Elizabeth Goodenough, *Residential College, LSA*
Phoenix Award Committee
13. Erik Herrmann, *Architecture and Urban Planning*
Digital Tools for Detroit Urbanism
14. Elizabeth Hildinger and Elaine Wisniewski, *Technical Communication, CoE*
Is instructor feedback most effective for helping freshmen make the transition to professional writing?

15. Sarah Jonovich, *Psychology, LSA*
Attending the "Teaching and Supervising Cognitive-Behavioral Therapy" Workshop at the Beck Institute
16. Janaya Lasker-Ferretti, *Romance Languages and Literatures, LSA*
New Technologies and Multi-Disciplinary Perspectives in Italian Language Teaching
17. Donka Markus, *Classical Studies, LSA*
Travel to the [Society for Classical Studies] convention to present a paper about Heloise on ancient philosophy as a way of life
18. Stephanie Sheffield, *Technical Communication, CoE*
Travel to American Society of Engineering Education (ASEE) 2017 Annual Conference
19. Vijay Singh, *Medicine*
Pilot testing violence against women training curricula with evaluation methods for healthcare providers and students in the Ghana-Michigan Emergency Medicine Collaborative
20. Nina White, *Mathematics, LSA*
Attending Joint Math Meeting for professional development and advancement
21. Kiyono Yamashita, *Dentistry*
Attendance at the 2017 47th Annual meeting of the American Colleges of Prosthodontists

► 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, 2016-2017

1. Sara Ahbel-Rappe, *Classical Studies, LSA*
Tarot Symbolism, Divination, and Tarot Card Reading
2. Ella August, *Public Health*
Developing a workplace writing sample repository for teaching epidemiology students
3. Kenneth Balazovich, *Molecular, Cellular, and Developmental Biology, LSA*
Incorporating CRISPR-Cas9 technology into MCDB 429
4. Matthew Bengtson, *Music, Music, Theatre & Dance*
Online Resources for Piano Literature
5. Christi-Anne Castro, *South and Southeast Asian Studies, LSA*
Large Course Evaluation and Practicum for Future Faculty
6. Amy Chavasse, *Music, Theatre & Dance*
Transdisciplinary Focus - Research Opportunities in Dance and Science
7. Alan Deardorff, *Public Policy*
International Economic Development Program

8. Angela Dillard, *Afroamerican and African Studies, LSA*
Practical Strategies and Ethical Reflections for Teaching About Detroit - An Interdisciplinary Faculty Discussion About Engaging Detroit in University Learning 2.0
9. Margot Finn, *University Courses, LSA*
Cooking a Moderate-Cost, Healthy, Culturally-Appropriate Meal for the Families at the Ronald McDonald House
10. Kate Fitzpatrick, *Music, Theatre & Dance*
Enrichment Through Experience: Teaching Music to Students in Under-Resourced Contexts
11. Brenda Gunderson, *Statistics, LSA*
Name That Scenario Expansion
12. Amy Hortop, *Mechanical Engineering*
Using Lego Mindstorms EV3 in ENG 100
13. Robert Ike, *Medicine*
Video assisted instruction and demonstration of labial salivary gland biopsy
14. Nancy King, *Music, Theatre & Dance*
IllumiNation: New American Works Recording Project (featuring SMTD students and soloist Nancy Ambrose King)
15. Ioulia Kovelman, *Psychology, LSA*
Teaching institute to improve the teaching of Human Development
16. Kevin Kuo, *Medicine*
Bedside Ultrasound for the Pediatric Intensivist
17. Larissa Larsen, *Architecture and Urban Planning*
Adding Soil Science to the Urban Planning Students' Toolkit
18. Laura MacLatchy, *Anthropology, LSA*
Data Collection at the Cleveland Museum of Natural History
19. Yuta Mori, *Asian Languages and Cultures, LSA*
Development of an online novel for Japanese language learners at the novice level
20. Christianne Myers, *Music, Theatre & Dance*
Digital Re-Skilling for Design & Production
21. Sally Oey, *Astronomy, LSA*
Logistics Support for Astro 461, "Ground-Based Observatories"
22. Damani Partridge, *Anthropology, LSA*
Filming the Future of Detroit (Markus Schmidt visit)
23. Marianetta Porter and Elizabeth Hay, *Art & Design*
Creativity and Cognition
24. Robert Rayher, *Screen Arts and Cultures, LSA*
Editing Hard Drive for Video Teaching
25. Hannah Smotrich and Katie Rubin, *Art & Design*
Exhibition design field trip to Washington, DC

26. Matthew Solomon, *Screen Arts and Cultures, LSA*
Short Resource Guide for Audiovisual Essays
27. Megan Sweeney, *English Language and Literature, LSA*
"Agents of Change" Screening and Panel Discussion
28. Elizabeth Van Tubergen, Elisabeta Karl, and Kyriaki Marti, *Dentistry*
Assessment of Faculty Inter-Rater Agreement for Grading in the Pre-Clinical Restorative Dentistry
Simulation Course - A Pilot Study

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. In 2016-2017, CRLT served all 19 of U-M's schools and colleges, more than 30 departments and programs in LSA, as well as 15 other units, including the Office of the Provost.

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

Architecture & Urban Planning

- * Consultation with task force on supporting international students and providing mechanisms for faculty to understand students' cultural backgrounds and aspirations
- * Grants for professional development received by Ashley Bigham, Erik Herrmann, and Larissa Larsen
- * Grant for teaching innovation received by Yojairo Lomeli

Art & Design

- * Grants for professional development received by Elizabeth Hay, Marianetta Porter, Katie Rubin, and Hannah Smotrich
- * Grant for teaching innovation received by Andrew Thompson
- * Interactive theatre performance for faculty and lecturers about how to help students with mental health challenges
- * Panel on inclusive teaching for faculty and students
- * Planning and participation in panel on inclusive teaching for faculty and students
- * Planning of curricular evaluation for undergraduate program
- * Workshop for faculty on inclusive course design
- * Workshop for faculty, "I Wish I Could Rewind That"

Business

- * Consultation with Diversity and Inclusion Director about assessment methods
- * Consultations on the implementation of the inaugural Ross First Year Experience course (BA 100)
- * Grant for teaching innovation received by Jane Dutton, Betsy Erwin, and Monica Worline
- * Planning, facilitation, and evaluation of an August teaching academy for newly hired faculty, in consultation with the dean's office
- * Workshop for faculty, "Active Learning: Teaching That Sticks"

Dentistry

- * Consultation on assessment of ongoing DENT 615 innovations for upcoming grant
- * Development, provision, and evaluation of faculty development for two cohorts of Interprofessional Leadership Fellows, including recruitment of fellows, meetings with project teams, and facilitation of monthly dinner meetings of faculty learning community
- * Evaluation of impact of *SW 503: Patient- and Family-Centered Care with Diverse Populations* on dental hygiene students (see p. 31)
- * Facilitation of feedback session for IPE Adapter Toolkit
- * Facilitation of reunion dinner for Health Science Teaching Academy cohorts (2011-2016)
- * Grants for professional development received by Elisabeta Karl, Marti Kyriaki, Elizabeth Van Tubergen, and Kiyono Yamashita
- * Grants for teaching innovation received by Erika Benevides, David Brzezinski, Theodora Danciu, and Hera Kim-Berman
- * Organization, implementation, and evaluation of a 2-day teaching academy before fall term for newly hired faculty, including follow-up consultations and reunion meeting in winter term
- * Planning and facilitation of faculty retreat (Periodontics and Oral Medicine) on active learning and student mental health

Education

- * Consultation with ISL grantee about acquisition of Registrar data
- * Consultations regarding first-year doctoral cohort in Education Studies
- * Grants for professional development received by Maren Oberman and Enid Rosario-Ramos
- * Grants for teaching innovation received by Chandra Alston, Maisie Gholson, Simona Goldin, and Elizabeth Keren-Kolb
- * Planning and facilitation of a workshop on inclusive teaching and classroom climate for Education Studies faculty
- * Planning and facilitation of a workshop on inclusive teaching for Higher Education faculty
- * Planning and facilitation of CPEP workshop for GSIs on lesson planning for ED391: Ed Psych and Human Development

Engineering

- * Collaboration with Associate Dean for Undergraduate Education on strategic direction for CRLT in Engineering
- * Collaboration with WISE and Growing STEM to host a research talk by Dr. Malcom-Piqueux on broadening participation in STEM
- * Design and facilitation of workshop for chairs and full professors about associate professors' experiences and resources for better supporting them
- * Development and facilitation of a full-day teaching orientation program for new engineering faculty
- * Grants for professional development received by Robin Fowler, Elizabeth Hildinger, Amy Hortop, Mark Moldwin, Stephanie Sheffield, and Elaine Wisniewski

- * Grants for teaching innovation received by Mary Lou Dorf, Robin Fowler, Rachel Goldman, John Heron, Lisa Hirshfield, Aileen Huang-Saad, Manos Kioupakis, Prateek Shekhar, Elliot Soloway, and Herbert Winful
- * Interactive theatre performance for faculty about responding to student climate concerns
- * Meeting with CoE Associate Deans and ADVANCE Director to plan CRLT Players performances for college in 2017-18
- * Organization of Engineering Education Research Day panel and poster fair
- * Participation in departmental meetings and faculty retreats on engineering inclusive classroom climates
- * Planning and facilitation of CRLT Players performance for Mechanical Engineering faculty retreat
- * Planning and facilitation of workshop for faculty
- * Provision of tailored professional development opportunities to IRACDA postdoctoral fellows, assessment of impact on teaching and professional goals, and planning and facilitation of a workshop for community college faculty partners
- * Seminar for faculty about crisis clinic/dysfunctional teams
- * Support for multiple assessment projects (see pp. 31-32 for more detail)
 - CEE - recruitment techniques
 - CLASP - IRB assistance for ISL-related research
 - ENG 100 - teamwork
 - Faculty learning communities/teaching circles
 - Innovation track of Macromolecules program
 - Multidisciplinary Design Program
 - MSE - assessment plan for multi-institution NIH grant
- * Interactive theatre performances about responding to student climate concerns for graduate chairs and staff, and, separately, graduate students, requested by Office of Graduate Education

GSI-related services

- * Interactive theatre performances on mental health for faculty and EGSI (separately)
- * Meeting with graduate student leaders in CLASP to discuss climate issues
- * Organization and facilitation of a customized GSI training program, fall term
- * Organization and facilitation of a customized IA training program, fall and winter terms
- * Planning and facilitation of NextProf session on teaching in academia for Graduate Education
- * Planning with Center for Engineering Diversity & Outreach (CEDO), design, and facilitation of NextProf workshop on preparing to teach for graduate students
- * Sessions for GSIs and postdocs on classroom assessment techniques, handling sticky situations with students, practicing active learning techniques, how learning works, improving communication with students
- * Workshop for GSIs and GSI Coordinators on observing their GSIs' classes and collecting student feedback

Information

- * Consultations with assistant dean on GSI training, including customized orientation, planning and provision of MSFs for all new GSIs, and follow-up workshop on inclusive teaching
- * Facilitation of faculty roundtables on inclusive teaching
- * Grant for teaching innovation received by Allen Flynn
- * Interactive theatre performance for faculty about how to help students with mental health challenges
- * Organization and facilitation (with Academic Innovation) of 4-session faculty community of practice for gameful learning
- * Organization and facilitation of faculty program on undergraduate teaching, including a student panel and debriefing discussion
- * Planning and facilitation of roundtables on inclusive teaching for faculty

Kinesiology

- * Consultation and workshop on blended learning
- * Development, provision, and evaluation of faculty development for two cohorts of Interprofessional Leadership Fellows, including recruitment of fellows, meetings with project teams, and facilitation of monthly dinner meetings of faculty learning community
- * Facilitation of feedback session for IPE Adapter Toolkit
- * Facilitation of reunion dinner for Health Science Teaching Academy cohorts (2011-2016)
- * Interactive theatre performance for faculty, staff, and graduate students about responding to student climate concerns
- * Organization, implementation, and evaluation of a 2-day teaching academy before fall term for newly hired faculty, including follow-up consultations and reunion meeting in winter term
- * Presentation on CRLT resources at faculty teaching meeting

Law

- * Consultations with associate dean on interdisciplinary, problem-solving initiative
- * Consultation with assistant dean for international affairs on using active learning practices in intensive summer master's program
- * Support for assessment projects (see p. 32 for detail)

Literature, Science, and the Arts

• *Afroamerican and African Studies*

- * Grant for professional development received by Angela Dillard
- * Grant for teaching innovation received by Stephen Ward

• *Anthropology*

- * Consultation on rebranding environmental anthropology
- * Grants for professional development received by Laura MacLatchy and Damani Partridge

• *Asian Languages and Cultures*

- * Grant for professional development received by Yuta Mori
- * Planning and facilitation of workshop on "hot moments" for graduate students

- *Astronomy*
 - * Grant for professional development received by Sally Oey
 - * Interactive theatre performance about how to help students with mental health challenges for faculty and staff
 - * Outreach meeting with department administration about GSI training needs
- *Biology*
 - * Consultation about scaling teaching method (student microbiome) from 1-2 sections across Bio 173, for possible funding by Howard Hughes Medical Institute
 - * Presentation on U-M Graduate Teacher Certificate program for 801
- *Biophysics*
 - * Planning for assessment of innovation track of Macromolecules (MACRO) program
- *Chemistry*
 - * Evaluation of MACRO program rotation process
 - * Participation in meetings for TLTC-NET proposal focused on large introductory science lab courses
 - * Participation in REBUILD faculty committee meetings
- *Classical Studies*
 - * Grants for professional development received by Sara Ahbel-Rappe and Donka Markus
- *Communication Studies*
 - * Outreach meeting with department administration about GSI training needs
- *Comprehensive Studies Program*
 - * Design and facilitation of an active learning workshop for undergraduate peer tutors at the Peer Tutor Summit
- *Dean's Office*
 - * Co-sponsorship of Foundational Course Initiative seminars: "Students as Partners in Redesigning Foundational Courses," "Lessons from a Course Transformation Program at a Large Research Intensive University," "Exploring Student Reasoning to Support Better Teaching," and "Introducing First-Year Undergraduates to Authentic Research in a Dynamic Genome Course"
 - * Collaboration with Center for Engaged Academic Learning and Ginsberg Center for Community Service and Learning to offer series of three community engagement workshops
 - * Consultation on student rating comparison groups with dean and associate deans
 - * Coordination and facilitation of LSA Large Course Initiative
 - * Coordination and facilitation of lunch and separate teaching circle for faculty who teach courses fulfilling the Race & Ethnicity requirement
 - * Development and facilitation of teaching academy for all new assistant professors, including a two-day orientation, facilitation of midterm student feedback sessions, facilitation of peer observation of senior colleagues, fall and winter meetings and final dinner with dean
 - * Development of learning community to support 9 LSA departments in building their assessment and learning outcomes
 - * Facilitation of a workshop on incivility in the classroom for LSA seminar series
 - * Interactive theatre performance about responding to student climate concerns for faculty across campus
 - * Multiple interactive theatre presentations on how gender and faculty rank influence dynamics and the decision-making process of tenure committees

- * Planning and facilitation of CRLT Players performances for LSA Seminar Series
- * Planning and facilitation of workshop for junior faculty on preparing for the third-year review
- * Session for faculty GSI coordinators and GSMs to share strategies on GSI training

GSI-related services

- * Collaboration with English Language Institute to develop and facilitate a three-week intensive course in August 2016 and a winter 2017 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
 - * Dissemination of GSI Training Models in LSA
 - * Facilitation and hosting of monthly brownbag series for GSMs and GSI Coordinators to discuss issues related to training and consulting with GSIs in their departments
 - * Facilitation of teaching circle for GSIs teaching R&E courses
 - * Lunch session for GSIs offering concrete strategies for facilitating discussions in R&E courses and cultivating a teaching community to connect and support R&E GSIs in their professional development
 - * Organization and facilitation of GSI orientation training programs prior to fall 2016 and winter 2017 terms, including theatre performances
 - * Planning and facilitation of NextProf session on developing a statement of teaching philosophy
 - * Presentation for graduate coordinators on CRLT Players performance offerings
 - * Training for all first-year graduate students about sexual harassment, using interactive theatre performances
 - * Workshop for GSMs and GSI Coordinators on consulting with GSIs
 - * Workshops for Graduate Student Mentors and GSI coordinators about running practice teaching sessions
- *Earth and Environmental Sciences*
 - * Consultations about evaluation of learning outcomes from field placement, including an overview of pre- and post-instruments
 - * Consultations about field placement assessment
 - * Grant for teaching innovation received by Tomasz Baumiller and Adam Simon
 - * Outreach meeting with department administration about GSI training needs
 - * Overview of assessments for summer session at biostation (NSF funded)
 - *Ecology and Evolutionary Biology*
 - * Participation in REBUILD faculty committee meetings
 - *Economics*
 - * Consultations with chair and faculty on inclusive teaching options for GSIs
 - *English Language and Literature*
 - * Grants for professional development received by Russell Brakefield, Jeremiah Chamberlin, Stephanie Moody, and Megan Sweeney
 - * Interactive theatre performance for English Department Writing Program faculty, lecturers, and GSIs about responding to student climate concerns
 - * Interactive theatre performance for faculty about responding to student climate concerns

- *English Language Institute*
 - * Collaboration with English Language Institute to develop and facilitate a three-week intensive course in August 2016 and a winter 2017 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
 - * Consultations with Director and faculty regarding review of curriculum and outreach
 - * Evaluation of Preparing for Graduate Success, a new online pre-arrival course for newly admitted international graduate students
 - * Grant for professional development received by Christine Feak
 - * Presentation on U-M Graduate Teacher Certificate program for ELI 584
- *Environment*
 - * Grant for professional development received by Margot Finn
- *Global Scholars Program*
 - * Consultation on program assessment
- *Germanic Languages and Literatures*
 - * Grant for professional development received by Karl-Georg Kederhofer
- *Growing STEM*
 - * Planning and facilitation of reflection activity as part of the Growing STEM sponsored talk by Michael McKibben
- *History*
 - * Design and facilitation of workshop for GSIs on social identity in the classroom
 - * Design and facilitation of workshop for History 195 GSIs on syllabus design
 - * Facilitation of midterm check-in meeting for History 195 instructors
 - * Interactive theatre performances for faculty and graduate students (separately) on mentoring grad students
 - * Planning and facilitation of a workshop for GSIs on inclusive teaching
- *History of Art*
 - * Planning and facilitation of a workshop for GSIs on inclusive teaching and teaching philosophy statements
- *Instructional Support Services*
 - * Assessment of pedagogical challenges and strengths of Chem A859 team learning space
 - * Consultations on assessing active and team-based learning spaces
- *Korean Studies*
 - * Presentation of workshop on developing your teaching philosophy for graduate students
- *Mathematics*
 - * Grant for professional development received by Nina White
 - * Interactive theatre performance and workshop about inclusive teaching for orientation program for instructors teaching introductory calculus; followed by debrief with faculty additional consultations about CRLT support for GSI training around diversity
 - * Participation in REBUILD faculty committee meetings
 - * Presentation of workshop on teaching philosophies for graduate students

- *Molecular, Cellular, and Developmental Biology*
 - * Grant for professional development received by Kenneth Balazovich
 - * Grant for teaching innovation received by Janine Maddock
 - * Participation in REBUILD faculty committee meetings
- *Near East Studies*
 - * Grant for teaching innovation received by Behrad Aghaei, Adi Raz, and Nilay Sevinc
- *Newman Advising Center*
 - * Interactive theatre performance for Newman and departmental advisors about responding to student climate concerns
- *Organizational Studies*
 - * Assessment plan for Barger Leadership Institute
- *Philosophy*
 - * Coordination with Graduate Student Mentor about aligning departmental workshops by guest presenters on teaching and learning in philosophy with credit toward U-M Graduate Teacher Certificate
 - * Workshop for GSIs on inclusive syllabus design
- *Physics*
 - * Participation in REBUILD faculty committee meetings
- *Program in the Environment*
 - * Grant for professional development received by Margot Finn
- *Psychology*
 - * Consultation on NSF IUSE proposal
 - * Design and facilitation of workshop for Psychology Teaching Academy on Social Identities in the Classroom
 - * Grants for professional development received by Ioulia Kovelman and Sarah Jonovich
- *Residential College*
 - * Grants for professional development received by Seder Burns, Angela Dillard, and Elizabeth Goodenough
 - * Grant for teaching innovation received by Lolita Hernandez, Craig Regester, and Stephen Ward
- *Romance Languages and Literatures*
 - * Grants for professional development received by Juan de los Santos, Mar Freire Hermida, Victoriano Garre Leon, Janaya Lasker-Ferretti, and Susanna Coll Ramirez
 - * Grant for teaching innovation received by Ann Hilberry and Tatiana Calixto
 - * Planning and facilitation of a workshop for faculty on preventing and responding to student disrespect and disruption
 - * Presentation about graduate teacher certificates and CRLT services for ROMLANG 681 grad students
- *Science Learning Center*
 - * Design and facilitation of workshops on active learning for the undergraduate Peer Tutor Summit
- *Screen Arts and Cultures*
 - * Consultations on Audio Visual Essay workshop and conference
 - * Grants for professional development received by Robert Rayher and Matthew Solomon

- *Sociology*
 - * Evaluation of Dynamic Systems Science Modeling for Public Health workshop curriculum
- *South and Southeast Asian Studies*
 - * Grant for professional development received by Christi-Anne Castro
- *Statistics*
 - * Evaluation of HyFlex model of blended learning in Stats 250
 - * Grant for professional development received by Brenda Gunderson
- *Sweetland Center for Writing*
 - * Design and facilitation of an active learning workshop for the undergraduate Peer Tutor Summit
 - * Facilitation of Sweetland Fellows Seminar discussion of writing and metacognition
 - * Grant for professional development received by Shuwen Li and Simone Sessolo
 - * Planning and facilitation of workshop on "hot moments" for faculty retreat

Medicine

- * Consultation on identity-related improv theatre for scientific communication
- * Consultation about creation of standardized patient encounters
- * Consultations with Academy of Medical Educators on expanding peer review program, including presentation of peer observation survey data, and planning and facilitation of workshop
- * Development, provision, and evaluation of faculty development for two cohorts of Interprofessional Leadership Fellows, including recruitment of fellows, meetings with project teams, and facilitation of monthly dinner meetings of faculty learning community
- * Facilitation of reunion dinner for Health Science Teaching Academy cohorts (2011-2016)
- * Grants for professional development received by Adnan Ajmal, Robert Ike, Kevin Kuo, and Vijay Singh
- * Grants for teaching innovation received by Adam Baruch, Sandro Cinti, Michael Cole, Michelle Daniel, Suzanne Dooley-Hash, Robert Duncan, Michael Engelsbe, David Fessell, Cindy Hsu, Samantha Kempner, Ross Kessler, Stephanie Kukora, Johnmarx Patton, Mark Prince, Deborah Rooney, Caren Stalburg, Jen Stojan, Marc Thorne, Sage Whitmore, and David Zopf
- * Interactive theatre performances on breaking bad news for first- and second-year medical students
- * Organization, implementation, and evaluation of a 2-day teaching academy before fall term for newly hired faculty, including follow-up consultations and reunion meeting in winter term
- * Presentation on Graduate Teaching Certificate Program for CDB801
- * Presentation to Medical Education Scholars Program about CRLT services
- * Provision of resources on CRLT programs and services at new faculty orientation
- * Provision of tailored professional development opportunities to IRACDA postdoctoral fellows, assessment of impact on teaching and professional goals, and planning and facilitation of a workshop for community college faculty partners
- * Support for multiple assessment-related projects (see pp. 33-34 for detail)
 - Ongoing support for 1 Whitaker and 2 ISL projects
 - *Pharmacology 603* Year Two
 - ULAM postdoctoral clinical training
- * Workshop for Microbiology and Immunology Postdoctoral Association on teaching philosophies

Music, Theatre & Dance

- * Design and facilitation of faculty workshops: "Hot Moments in the SMTD Classroom" and "Hot Moments in the Dance Classroom"
- * Grants for professional development received by Matthew Bengtson, Amy Chavasse, Kate Fitzpatrick, Michael Gurevich, Nancy King, Christianne Myers, and Sile O'Modhrain
- * Grants for teaching innovation received by Amy Chavasse, Christian Matijas-Mecca, and Stephen Rush
- * Planning and facilitation of follow-up workshops for faculty on creating inclusive climates
- * Workshop for faculty on social identities and climate

Natural Resources and Environment

- * Collaboration on NRE 667 seminar and subsequent *Act on Climate* MOOC development
- * Consultation with DEI Project Manager about climate and possible CRLT Players Performance
- * Design and co-facilitation of "How to Teach With Cases" workshop funded by Michigan Sustainability Cases and open to all university members
- * Grant for teaching innovation received by Michela Zint
- * Support for multiple assessment-related projects (see p. 34 for detail)
 - biostation program and new accreditation postdoc
 - Michigan Sustainability Cases
 - SEAS curriculum

Nursing

- * Development, provision, and evaluation of faculty development for two cohorts of Interprofessional Leadership Fellows, including recruitment of fellows, meetings with project teams, and facilitation of monthly dinner meetings of faculty learning community
- * Evaluation of library course offerings
- * Facilitation of reunion dinner for Health Science Teaching Academy cohorts (2011-2016)
- * Grants for teaching innovation received by Patricia Abbott, Matthew Davis, and Elizabeth Kuzma
- * Organization, implementation, and evaluation of a 2-day teaching academy before fall term for newly hired faculty, including follow-up consultations and reunion meeting in winter term
- * Planning and facilitation of a workshop for faculty on learning objectives and course design
- * Planning and facilitation of a workshop for faculty on preventing and responding to student disrespect and disruption

Pharmacy

- * Consultations and planning of feedback workshop, including discussion of options for using Players
- * Development, provision, and evaluation of faculty development for two cohorts of Interprofessional Leadership Fellows, including recruitment of fellows, meetings with project teams, and facilitation of monthly dinner meetings of faculty learning community
- * Facilitation of feedback session for IPE Adapter Toolkit
- * Facilitation of reunion dinner for Health Science Teaching Academy cohorts (2011-2016)
- * Grant for professional development received by Karen Farris and Jolene Bostwick
- * Planning and facilitation of workshop for residents and faculty on facilitating discussions

Public Health

- * Assistance with exit survey for new department (Nutritional Sciences)
- * Consultation on alumni survey for Department of Health Management and Policy
- * Consultation on identity-related improv theatre for scientific communication
- * Consultation on two-year evaluation of short-term goals of Integrated Training in Microbial Systems program (grant from Burroughs Wellcome Fund)
- * Design and facilitation of workshop for Public Health 200 GSIs, "Strategies for Facilitating Classroom Discussion & Utilizing Active Learning"
- * Development, provision, and evaluation of faculty development for two cohorts of Interprofessional Leadership Fellows, including recruitment of fellows, meetings with project teams, and facilitation of monthly dinner meetings of faculty learning community
- * Discussion of assessment for new Public Health undergraduate course on obesity
- * Discussion of evaluation plan and survey results for HBHE 720 and CRECH program (part of NSF training grant)
- * Evaluation of Dynamic Systems Science Modeling for Public Health workshop curriculum (see p. XX)
- * Evaluation of Genome Science Training Program (GSTP)
- * Evaluation of Integrated Training in Epidemiology and Microbiome Sciences (ITiMS) program
- * Facilitation of reunion dinner for Health Science Teaching Academy cohorts (2011-2016)
- * Focus groups for Big Data Summer Institute
- * Focus groups for Genome Science Training Program
- * Focus groups on Integrated Training in Microbial Systems (ITiMS)
- * Grants for professional development received by Olivia Anderson, Susan Aronson, Ella August, Paul Fleming, Gary Harper, Roshanak Mehdipanah, and Emily Youatt
- * Interactive theatre performance for faculty about responding to student climate concerns
- * Organization, implementation, and evaluation of a 2-day teaching academy before fall term for newly hired faculty, including follow-up consultations and reunion meeting in winter term
- * Planning and facilitation of a workshop for PUBHLTH 200 GSIs
- * Planning and facilitation of FCIT inclusive teaching workshop for nutritional sciences faculty
- * Planning and facilitation of workshop for graduate students on developing a statement of teaching philosophy
- * Planning of proposed focus groups for statistical genomics certificate
- * Presentation on inclusive teaching for HBHE 720

Public Policy

- * Grant for professional development received by Alan Deardorff
- * Interactive theatre performance for faculty about responding to student climate concerns
- * Planning and facilitation of customized microaggressions workshop for faculty

Rackham Graduate School

- * Collaboration on planning a workshop on writing diversity statements for the job market
- * Consultations with associate deans on collaborations on Preparing Future Faculty programs
- * Debrief of Rackham Short Term Immersive Participants -- Faculty Development Careers
- * Development and multiple presentations of online workshop, "Developing Your Teaching Philosophy"

- * Meeting with Conflict Resolution Officer to discuss possible Players involvement in sexual harassment training for Rackham
- * Meetings to discuss possible CRLT Players performances in 2017-18
- * Organization and implementation of an eight-session Postdoctoral Short-Course on College Teaching in Science and Engineering, winter 2017
- * Organization and implementation of online version of Postdoctoral Short-Course on College Teaching in Science and Engineering, summer 2016
- * Organization, implementation, and evaluation of 10-session Rackham-CRLT Seminar on College Teaching: Preparing Future Faculty for advanced doctoral students and postdocs, including interactive theatre performance on productively addressing classroom conflict while attending to student diversity
- * Organization, implementation and evaluation of 4-session program on diversity and inclusive teaching for GSIs, with The Program on Intergroup Relations
- * Participation as a site for students participating in Rackham's Mellon Immersives Experience
- * Participation in New Graduate Student Orientation Resource Fair, fall and winter terms
- * Participation in the Rackham Mellon Immersives Program
- * Planning and facilitation of session about CRLT Players services for the Graduate Coordinators Forum

Social Work

- * Development, provision, and evaluation of faculty development for two cohorts of Interprofessional Leadership Fellows, including recruitment of fellows, meetings with project teams, and facilitation of monthly dinner meetings of faculty learning community
- * Evaluation of *SW 503*
- * Facilitation of reunion dinner for Health Science Teaching Academy cohorts (2011-2016)
- * Planning and facilitation of full-day retreat for faculty on inclusive teaching strategies
- * Planning and facilitation of inclusive teaching workshop for faculty and GSIs
- * Workshop on inclusive teaching for field instructors

Customized Services for Other Units at U-M

Academic Innovation

- * Collaboration on Intro to IPE module (with IPE Center)
- * Consultations on how to assess reach and impact of MOOCs and Teach Outs
- * Consultations on potential collaborations between AI and CRLT theatre program
- * Coordination of rapid evaluation of Course Monitor (formerly Snapshot)
- * Evaluation of GradeCraft
- * Organization and facilitation of 4-session faculty community of practice for gameful learning
- * Planning and facilitation of workshop on inclusive teaching for staff

ADVANCE

- * Consultations and planning for CRLT Players performances for 2016-17 and 2017-18 seasons
- * Design and facilitation of workshop for chairs and full professors about associate professors' experiences and resources for better supporting them

- * Interactive theatre performance about graduate student mentoring for faculty (part of LSA's seminar series)
- * Interactive theatre performance about responding to student climate concerns for faculty across campus
- * Planning and facilitation of Faculty Leading Change program
- * Planning and facilitation of LIFT workshops on transitioning to associate and full professor
- * Preview and multiple interactive theatre presentations on how gender and faculty rank influence dynamics and the decision-making process of tenure committees (with LSA dean's office)

Center for the Education of Women

- * Discussion of university-wide efforts to connect data about (and define) non-traditional students, including classroom experiences
- * Participation in Council for Nontraditional Students
- * Participation in post-election event for women faculty

Central Student Government

- * Meetings with Central Student Government representatives to discuss the Players work on student mental health challenges, the CSG taskforce's report, and feedback on presentation of their survey results

Information Technology Services

- * Coordination of rapid evaluation of Course Monitor (formerly known as Snapshot)
- * Meeting to review results of CRLT survey of Canvas instructors
- * Workshop on Canvas for GSIs included in CRLT Seminar Series

Institute for the Humanities

- * Collaboration on Digital Pedagogies Lightning Talks and Workshop
- * Planning and development of activities to support the GTC+ program, as well as administering the program

Life Sciences Institute

- * Workshop for postdocs on developing a teaching philosophy statement

Libraries

- * Grant for teaching innovation received by Stephanie Rosen
- * Workshop on active learning strategies and flipping the classroom

Michigan Center for Interprofessional Education

- * Collaboration on Introduction to IPE Module (with Academic Innovation)
- * Collaboration on IPE "opportunity" offering approval form (webpage)
- * Consultations on Curriculum Workgroup meetings and planning and facilitation of visioning retreat

- * Development, provision, and evaluation of faculty development for two cohorts of IP Leadership Fellows, including recruitment of fellows, meetings with project teams, and facilitation of monthly dinner meetings of faculty learning community (FLC)
 - Cohort 1 FLC topics: seed funding and mentorship of Cohort 2, assessment essentials, and project team discussion and work time (October-December 2016)
 - Cohort 2 FLC topics: introduction and project brainstorming, team formation and planning, campus resources and assessment, and team presentations (January-April 2017)
 - Cohort 1 & 2 FLC topic: change leadership session with Bridgeport Consulting (May 2017)
- * Evaluation reports for HPE Day 2016 and 2017
- * Facilitation of feedback session for IPE Adapter Toolkit
- * Participation in meetings of the Curriculum Workgroup for Interprofessional Education
- * Presentation on Curriculum Workgroup survey results at Executive Committee meeting
- * Provision of CRLT resource table at June 2016 and April 2017 Health Professions Education Days, as well as participation in a panel about the IP Leadership Fellows program at the later event

Office of the Provost and Executive Vice President for Academic Affairs

- * Interactive theatre performance for President Schlissel and invited provost's staff about responding to student climate concerns
- * Collaboration with Center for Educational Outreach on opening address by Michigan State University's Hiram Fitzgerald for series of community engagement workshops
- * Consultations on potential collaborations between Academic Innovation and CRLT theatre program
- * Coordination of rapid evaluation of Course Monitor, a new Unizin tool
- * Design and co-facilitation of "How to Teach With Cases" workshop funded by Michigan Sustainability Cases (TLTC project) and open to all university members
- * Facilitation of public workshop for Investing in Abilities Week on universal design and active participation of all students
- * Meeting to discuss possible Players performances in 2017-18 for Big Ten Academic Alliance's Academic Leadership Program
- * Organization and facilitation of New Faculty Orientation, including interactive theatre performance
- * Organization of lunches and collection of feedback from TLTC grantees about assessing entrepreneurship, critical reflection skills, and global learning
- * Organization, facilitation, and evaluation of Provost's Campus Leadership Program (both orientation and monthly roundtables) for chairs and associate deans, including "Practical Strategies for Handling Difficult Conversations with Faculty," "Conversation with the Provost," "The Chair's Role in Hiring - A STRIDE Workshop," and "Approaching Difficult Conversations With Faculty"
- * Participation in university-wide discussion of teaching evaluation platform RFP, development of rubric for assessing bid, attendance at vendor demos, and review of eXplorance Blue platform
- * Participation in Vice Provost and Associate Dean Group
- * Planning and co-facilitation of university-wide Assessment Community of Practice (see also pp. 16-17)

- * Planning and facilitation of Provost's Seminars on Teaching:
 - *Transformed: Foundational Courses for a Third Century*, fall 2016 (with REBUILD group)
 - *Teaching at the Bicentennial: Building the Evidence Base for Engaged Learning*, winter 2017
 - *Life Beyond Grades*, fall 2017 (early planning)
- * Regular meetings with the Vice Provost for Global Engagement and Interdisciplinary Academic Affairs on TLTC initiatives, teaching awards, and accreditation
- * Support for teaching award and grant competitions, including
 - Administration of Gilbert Whitaker Fund for the Improvement of Teaching grants competition
 - Administration of Lecturers' Professional Development Fund program for LEO lecturers
 - Coordination of campuswide Provost's Teaching Innovation Prize, including creation of posters for sharing innovations, and organization of poster fair before opening keynote of the Enriching Scholarship Conference
 - Coordination of Investigating Student Learning grant competition, including symposium, consultations with grantees, and poster fair
 - Organization of competition to select Thurnau Professors and dinner honoring 2017 recipients
- * Support for Diversity, Equity, & Inclusion (DEI) efforts including
 - Administration of Faculty Communities for Inclusive Teaching program, including organization of poster fair disseminating projects by 2016 grantees, and luncheon for 2017 grantees
 - Consultation with Chief Diversity Officer and the Vice Provost for Academic Innovation to discuss options for expanding professional development around DEI for GSIs and faculty
 - Coordination and facilitation of Inclusive Teaching @ Michigan series of 17 workshops (with six co-sponsors)
 - Participation on committee developing university-wide DEI climate survey
 - Planning and facilitation of gatherings of Faculty Liaisons for Inclusive Teaching
 - Presentation of poster about CRLT's DEI strategic plan

Office of Student Life

- * Consultation about aligning leadership curricula among U-M leadership centers, including possibilities for documenting evidence of learning for accreditation
- * Consultations regarding assessment-related projects (see p. 35)
 - administration of CIRP data
 - connecting community service learning to outcomes identified by Student Life and Engaged Michigan
 - MPortfolio
- * Participation in nontraditional student (COUNTS) planning and meetings

Spectrum Center

- * Meeting with Advisory Committee, including discussion of research and inclusive teaching
- * Review of future learning goals with Council of Advisors

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, including opening and closing keynotes and the following sessions: "Teaching With Technology: How Can I Include All Students?" "Paperless Teaching," "Let's Make a Screencast With Jing," "Everyday Technology in Teaching," and "Canvas for Instructors and GSIs in Multi-Section Courses," "Managing Academic Identities In Digital Spaces"
- * Coordination of ninth, 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

U-M Flint (see Michigan Center for Interprofessional Education, p.59)

University of Michigan Museum of Art

- * Consultation on possible inclusive teaching programs for UMMA staff

Appendix C: Collaborations and Committee Work

Collaboration with Other Units

Collaboration with other U-M offices is a key component of CRLT services. During 2016-2017, CRLT worked with all schools and colleges on teaching improvement projects. Additionally, CRLT collaborated with:

- * Academic Innovation
- * Academy of Medical Educators
- * ADVANCE
- * Assessment Community of Practice
- * Center for Educational Outreach, Office of Diversity, Equity & Inclusion
- * Center for Engaged Academic Learning
- * Center for Engineering Diversity & Outreach (CEDO)
- * Center for Global and Intercultural Study
- * Central Student Government Mental Health Taskforce
- * CEW (Center for the Education of Women)
- * Digital Innovation Greenhouse
- * English Language Institute (ELI)
- * Foundational Course Initiative
- * Gameful Learning Lab
- * Ginsberg Center for Community Service and Learning
- * GradeCraft Team
- * Growing STEM
- * Information Technology Services
- * Institute for the Humanities
- * IGR - The Program on InterGroup Relations
- * ISS - LSA Instructional Support Services
- * Language Resource Center
- * Life Sciences Institute
- * LSA Dean's Office
- * LSA Student Academic Affairs
- * Michigan Center for Interprofessional Education
- * News Service
- * Office of the General Counsel
- * Office of the Provost
- * Office of the Vice President for Student Life
- * Rackham Graduate School
- * REBUILD
- * Sweetland Center for Writing
- * Teaching and Technology Collaborative
- * University Career Center
- * University Library
- * University Musical Society
- * University of Michigan Biological Station
- * University of Michigan Institutional Learning Analytics (faculty group)
- * Women in Science and Engineering (WISE)

Committee Work

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

- * Academic Innovation Advisory Council
- * Academic Reporting Toolkit (ART or CourseProfile) Steering Committee
- * Academy of Medical Educators Advisory Committee
- * Accreditation Coordinating Committee
- * Accreditation Evidence Workgroups
- * Association of U-M Chinese Professors
- * College of Engineering Towner Prize for Outstanding GSIs
- * Council of University Non-Traditional Students (COUNTS)

- * DEI University-Wide Climate Study Working Group
- * DEI-LG (Diversity, Equity and Inclusion Implementation Leads Group)
- * DEI/RCRS (Responsible Conduct of Research and Scholarship) Working Group, College of Engineering
- * Diversity Scholars Network, National Center for Institutional Diversity
- * Enriching Scholarship Keynote Committee
- * Evaluation System Replacement Project, Registrar's Office
- * Faculty Leading Change Planning Committee, ADVANCE
- * Integrity Roundtable Committee
- * Intergroup Relations Advisory Board
- * Interprofessional Education (IPE) Fellows
- * Liaisons for Inclusive Teaching
- * Michigan Center for Interprofessional Education--Curriculum Workgroup
- * Michigan Center for Interprofessional Education--Executive Committee
- * Michigan Center for Interprofessional Education--Scholarship Workgroup
- * Michigan Sustainability Cases Curriculum Advisory Group
- * Provost's Teaching Innovation Prize Selection Advisory Committee
- * Rackham Outstanding Graduate Student Instructor Awards Committee
- * SACUA-CIU (Faculty Senate Committee for an Inclusive University)
- * Spectrum Center Council of Advisors
- * Teaching and Technology Collaborative (TTC) Committee
- * Thurnau Professorship Selection Advisory Committee
- * Vice Provost and Associate Dean Group (VPADG)

External Committee Participation

- * Big Ten Academic Alliance (formerly CIC) Teaching Center Directors Group
- * Ivy Plus Assessment Coordinators
- * Ivy Plus Teaching Center Directors
- * POD Graduate Student, Professional Student, and Postdoctoral Scholar Development (GPPD) Special Interest Group
- * POD GPPD Working Group on Assessment and Evidence-Based Practice (AEBP)
- * POD Innovation Award Selection Committee
- * Unizin Teaching and Learning Group
- * Unizin Faculty Development Subcommittee

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 2016-2017, CRLT provided 1,410 services to external clients who represent 89 colleges and universities, and 9 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, 502 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.

Albion College	New York University
Baldwin Wallace University	Northeastern Illinois University
Brandeis University	Oakland University
Brown University	Oberlin College
California Institute of Technology	Otterbein University
California State University, Sacramento	Portland State University
Carnegie Mellon University	Princeton University
Central Michigan University	Purdue University
College of William and Mary	Rochester Institute of Technology
Colorado State University	Skidmore College
Columbia College Chicago	St. Joseph's University
Columbia University	St. Mary's College of Maryland
Dartmouth College	St. Norbert College
Drexel University	Stanford University
Eastern Michigan University	Temple University
Florida State University	The Ohio State University
Grand Rapids Community College	The Pennsylvania State University
Grand Valley State University	The University of Maine
Henry Ford Community College	The University of North Carolina at Chapel Hill
Indiana University	The University of Tennessee, Knoxville
Indiana University–Purdue University Indianapolis	University of California, Davis
Kalamazoo College	University of California, Los Angeles
Lawrence Technological University	University of Colorado Boulder
Lehman College	University of Delaware
Massachusetts Institute of Technology	University of Illinois
Michigan State University	University of Iowa
Mt. San Antonio College	University of Maryland, Baltimore County

University of Massachusetts Boston
University of Minnesota
University of Nebraska
University of Nebraska Lincoln
University of Saint Francis
University of Seattle
University of South Carolina
University of Southern California
The University of Texas at Austin
University of Texas at El Paso

University of Toledo
University of Virginia
University of Washington
University of Wisconsin
University of Wisconsin–Madison
Vanderbilt University
Wayne County Community College District
Wayne State University
Western Michigan University
Yale University

Colleges and Universities outside the U.S.

Beijing Foreign Studies University
Chongqing University
Harbin Institute of Technology
Huazhong University of Science & Technology
Karakoram International University
Makerere University
Norwegian University of Science and Technology
Renmin University of China

Shanghai Jiao Tong University
Shanghai University of Finance and Economics
The University of Tokyo
University of Melbourne
University of Santiago
University of Science and Technology of China
Vietnam National University Ho Chi Minh City

Other Organizations and Associations

Alan Alda Center
Bridgeport Consulting
Cross Movement Social Justice Consulting, L3C
First Presbyterian, Ann Arbor
Kardiagroup
Ministry of Education of the People's Republic of China
Morgridge Institute for Research
The National Academies of Sciences, Engineering, and Medicine
Unizin

Appendix E: Publications and Presentations

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>

In addition, CRLT authored timely blog posts on topics of interest to our campus community and beyond. For example, "Returning to the Classroom after an Election" may well have been our most widely read publication in 2016. Links to this post were shared on teaching center and diversity office websites at universities nationwide, including Alaska (Anchorage); Boston; Brown; California State - Monterey Bay; Georgetown; Indiana (IUPUI); Maryland, Baltimore County; Michigan State; North Carolina at Chapel Hill, Northeastern; Ohio State; UCLA; Vermont; Virginia; and Washington. It was also shared by vice chancellors at UC San Diego and North Carolina State. (See pp. 8-9 and 21 for more blog details.)

Publications by CRLT Staff

- Armstrong, S., & Braunschneider, T. (2016). Receive, reorganize, return: Theatre as creative scholarship. *To Improve the Academy*, 35, 229–248. doi:10.1002/tia2.20040
- Bartholomew, Tracy. (2016, Fall). Analysis of educational development position advertisements, June 1, 2015 – May 31, 2016. *POD Network News* (Special Column).
- Bartholomew, T., Wright, M. C., & Michaels, C. (in press). Partnering with teaching and learning centers for curricular assessment: A case study of best practices. In C. J. Stanny (ed.), *Assessment in action: Evidence-based discussions about teaching, learning, and curriculum*. New Directions for Teaching and Learning.
- Gross, M. M., Wright, M. C., & Anderson, O. S. (2017). Effects of image-based and text-based active learning exercises on student examination performance in a musculoskeletal anatomy course. *Anatomical Sciences Education*, 10(5):444-455. doi: 10.1002/ase.1684
- Remington, T. L., Bleske, B. E., Bartholomew, T., Dorsch, M. P., Guthrie, S. K., Klein, K. C., . . . Wells, T. D. (2017, April). Qualitative analysis of student perceptions comparing team based learning and traditional lecture in a pharmacotherapeutics course. *American Journal of Pharmaceutical Education*, 81(3) Article 55.
- Schram, L. N., Pinder-Grover, T., & Turcic II, S. (2017). Assessing the long-term impact of the Preparing Future Faculty Seminar. *To Improve the Academy*, 36(2), 101-116. doi: 10.1002/tia2.20063
- Wright, M. C., Bergom, I., & Bartholomew, T. (2017). Decreased class size, increased active learning?: Intended and enacted teaching strategies in smaller classes. *Active Learning in Higher Education*. doi: 10.1177/1469787417735607
- Wright, M. C., Goldwasser, M., Jacobson, W., & Dakes, W. C. (2017). Assessment from an educational development perspective. *To Improve the Academy*, 36(1), 39-49. doi: 10.1002/tia2.20051

Presentations

- Bakewell, M. (2016, November). *The Foundational Course Initiative (FCI): A Proposal for 21st-Century Support for Teaching at Scale*. Poster presented at the CRLT in Engineering Eleventh Annual Research and Scholarship in Engineering Education Poster Session, Ann Arbor, MI.

- Bland, L. C., Kusano, S. M., & Johri, A. (2016, June). *Engineering Competitions as Pathways to Development of Professional Engineering Skills*. Presented at the 2016 ASEE Annual Conference (BME Division), New Orleans, LA, Paper #14519.
- Felten, P., Tapp, S., Artze-Vega, I., Craig, J., & Pinder-Grove, T. (2016, November). *Getting started: Workshop for new educational developers, Part 1*. Pre-Conference Workshop at the 41st Annual POD Conference, Louisville, KY.
- Felten, P., Tapp, S., Artze-Vega, I., Craig, J., & Pinder-Grove, T. (2016, November). *Getting started: Workshop for new educational developers, Part 2*. Pre-Conference Workshops at the 41st Annual POD Conference, Louisville, KY.
- Hatcher, M., & Greenberg, R. (2016, November). *Graduate student professional development*. Session facilitators at the 41st Annual POD Conference, Louisville, KY.
- Johri, A., Bland, L. C., & Kusano, S. M. (2016, June). *Informal Learning in Engineering*. Presented at the 2016 ASEE Annual Conference (BME Division), New Orleans, LA, Paper #14520.
- Kaplan, M. (2016, October). *How do we shape the future? Visions and trends in faculty development*. Presentation at the 3rd Annual Chinese Higher Education Developers Conference, Hefei, People's Republic of China.
- Kaplan, M. & Armstrong, S. K. (2017, May). *Starting an interactive theatre program on a research university campus*. Workshop for faculty and administrators at the University of Virginia.
- Kaplan, M., & Levesque-Bristol, C. (2017, March). *Redesigning curricula: Evidence-based approaches*. Plenary presentation at the University of Texas Conference on Changing Education: Redesigning the Undergraduate Experience, Austin, TX.
- Kaplan, M., & Wright, M. C. (2016, October). *Creating successful centers for teaching: The role of teaching centers in the new age(s)*. Keynote address presented at the 3rd Annual Chinese Higher Education Developers Conference, Hefei, People's Republic of China.
- Kaplan, M., Wright, M. C., Zhu, E. (2016, October). *Conversations with directors of teaching and faculty development centers*. Presentation at the 3rd Annual Chinese Higher Education Developers Conference, Hefei, People's Republic of China.
- Kusano, S., & Hallman, S. (2016, November). *Engaging faculty and students voices in discussions on engaged learning*. Presented at the 41st Annual POD Conference, Louisville, KY.
- Lande, Elaine. (2016, October 3). *Does student engagement matter? Teaching practices for encouraging student engagement*. Seminar on Teaching Mathematics, held jointly between the Mathematics Department and School of Education, University of Michigan, Ann Arbor, MI.
- Meizlish, D., Braunschneider, T. (2016, November). *Exploring what's possible in large courses: A faculty learning community*. Poster presented at the 41st Annual POD Conference, Louisville, KY.
- Pinder-Grover, T. (2016, June). *Enhancing engineering undergraduate education through faculty learning communities*. Poster presented at the SMTI NSEC National Conference. San Antonio, TX.
- Schmedlen, R., Kusano, S. M., Gosbee, J., Lee, J. C., & Stegemann, J. P. (2016, June). *The Medical Device Sandbox: A Creative Learning Experience for BME Students and Medical Learners*. Presented at the 2016 ASEE Annual Conference (BME Division), New Orleans, LA, Paper #16778.
- Takayama, K., Kaplan, M., Cook-Sather, A., & Felten, P. (2016, November). *Advancing diversity through strategic micro-, meso-, and macro-level leadership*. Presented at the 41st Annual POD Conference, Louisville, KY.

- Tuttle, N. (2017, April). *The landscape of learning analytics at UM*. Presented at the Unizin Innovation Summit, Denver, CO.
- Wright, M. C., & Bartholomew, T. (2016, June). *Assessing a curriculum using the midterm student feedback (SGID) process*. Workshop presented at AALHE Sixth Annual Conference, Milwaukee, WI.
- Wright, M., Kusano, S., Hallman, S. (2016, November). *The role of a teaching center in scaling engaged learning*. Presented at the 41st Annual POD Conference, Louisville, KY.
- Wright, M., Pinder-Grover, T., & Ortquist-Ahrens, L. (2016, November). *New directors of centers for teaching and learning*. Session facilitators at the 41st Annual POD Conference, Louisville, KY.

Review and Editorial Work

- *International Journal of the Scholarship of Teaching and Learning* (M. Kaplan)
- *Journal of Education Technology and Society* (E. Zhu)
- *Journal of Faculty Development* (M. Kaplan, D. Meizlish)
- National Science Foundation grant review panel for Improving Undergraduate STEM Education (IUSE) program (M. Kaplan)
- Professional and Organizational Development Network in Higher Education Conference (M. Bakewell, R. Greenberg, D. Meizlish)

Appendix F: CRLT Regular Staff, 2016-2017

Executive Director	Matthew Kaplan
Administrative Team	Deborah Meizlish , <i>Senior Associate Director</i> Sara Armstrong , <i>Senior Associate Director & 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 & Coordinator of Diversity Initiatives</i> Tazin Daniels , <i>Instructional Consultant</i> Victoria Genetin , <i>Instructional Consultant</i> Malinda Matney , <i>Director of Assessment</i> Gina Shereda , <i>Instructional Consultant</i> Nicole Tuttle , <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> Michelle Getchell , <i>Conference & Event Manager</i> Ryan Hudson , <i>Assistant to the Executive Director & Publications Specialist</i>
Project Staff	Laura Gonzalez-Garcia , <i>Senior Events Coordinator & Grants Assistant</i> Jeri Hollister , <i>Events Coordinator & Graphic Designer</i> Hitomi Katsumi , <i>Events Coordinator & Graphic Designer</i> Katie Neu , <i>Events Coordinator</i> Melinda Thompson , <i>Administrative Assistant</i> Matthew Yettaw , <i>Events Coordinator</i>
Staff in CRLT in Engineering	Tershia Pinder-Grover , <i>Director</i> Audra Baleisis , <i>Instructional Consultant</i> Carol Lagemann , <i>Financial Specialist & Event Planner</i> Steve McKenzie , <i>Graphic Designer & Event Planner*</i>

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

*No longer at CRLT

Notes