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This report was compiled by Ryan Hudson, Matt Kaplan, Meg Bakewell, Amy Hamermesh, Jeri Hollister, and Laura Gonzalez-Garcia.
Letter From Interim Director Matthew Kaplan

The 2013-2014 academic year was one of significant transitions at CRLT, with the retirement of Connie Cook, CRLT’s Executive Director since 1993, and the return of Senior Vice Provost Lester Monts to the faculty. During her 21-year tenure, Connie helped establish CRLT’s reputation as one of the finest teaching centers in the country and a model for centers around the world. CRLT reported to Senior Vice Provost Lester Monts for the past two decades. He was an enthusiastic supporter of CRLT’s work and an important proponent of teaching excellence, undergraduate education, diversity efforts, and the arts on campus. I feel very fortunate to have had the opportunity to work with both Connie and Lester and to serve as Interim Director for an organization that is so well respected on campus and nationally, thanks in large part to their efforts.

I am also pleased that CRLT is now reporting to James Hilton, Vice Provost for Digital Education and Innovation, who has been an excellent partner in helping us manage these transitions. Under his leadership, CRLT underwent an external and an internal review, and we look forward to collaborating with him to implement the strategic advice we will receive from our colleagues at U-M and nationally.

Remaining constant in the face of these and numerous other changes on campus is CRLT’s commitment to our core mission: using an evidence-based approach to create a culture of teaching on campus in which students and instructors from all backgrounds can succeed. CRLT enacted that mission by providing the range and quality of services the campus has come to expect and depend on, which are detailed in the following pages.

Our work in three areas was particularly noteworthy. First, CRLT saw an increase in demand for resources and expertise on creating inclusive classrooms (p. 9), a response to the renewed focus on diversity sparked by the Being Black at U-M Twitter campaign (#BBUM), a student initiative focused on the chilly climate for students of color in classrooms and beyond. Second, CRLT was engaged in ongoing discussions among the administration, faculty, and staff about the role of digital and engaged learning in the future of the university. Finally, CRLT’s expertise in assessment and evaluation has led to a larger role in helping evaluate the $25 million Transforming Learning for a Third Century Initiative.

We at CRLT are excited about the potential for these and other, related initiatives to create a model for 21st-century education at a research university. We look forward to collaborating with the administration, faculty, and other units at U-M in the coming year to help more fully develop and implement that vision, while continuing to provide the core services that support teaching excellence on campus.

Matthew Kaplan, Interim 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.

Professional Development
CRLT promotes the professional development of all members of the teaching community. CRLT’s services include individual consultations on teaching, midterm student feedback (MSF) sessions, and orientations for new faculty, graduate student instructors (GSIs), and undergraduate instructional aides. CRLT presents seminars and conferences for campus-wide audiences and customized programming for departments, schools, and colleges. CRLT also provides services tailored to various stages of an academic career, including teaching academies for new, tenure-track faculty, Provost’s Campus Leadership Program for department chairs and associate deans, and Preparing Future Faculty programs for graduate students and post-doctoral scholars. 2013-2014 highlights: new Ross Teaching Academy, GTC+ certificate for teaching with digital media, events with peer instruction innovator Eric Mazur (see p. 12)

Assessment and Research
CRLT advances evidence-based learning and teaching practices. From survey design to large-scale projects involving data collection, analysis, and facilitation of faculty conversations, CRLT focuses on projects that can inform course and curricular improvement. 2013-2014 highlights: Exploring Learning Analytics Grant, completion of four-year evaluation of Art & Design international experience, Investigating Student Learning grants, work with 12 schools and college on assessment projects, 10 CRLT research Projects (see p. 28)

Diversity and Inclusion
CRLT advances a University culture that respects and supports individual differences and creates learning environments in which diverse students and instructors can excel. Diversity and inclusion are integral elements of CRLT’s core programming, such as orientations for academic administrators and instructors, as well as retreats and workshops for academic units. CRLT participates on university-wide multicultural committees and foregrounds inclusive teaching strategies for faculty members and departments. 2013-2014 highlights: learning communities on dialogue skills (for faculty) and facilitation skills (for grad students), resources for responding to #BBUM, provost’s seminars on community engagement and on engaging difference (see p. 24)

Digital Education
CRLT promotes excellence and innovation in teaching. Starting with faculty goals for student learning, we help instructors integrate promising technologies into their teaching through consultations, workshops, and web resources. We collaborate with other units to evaluate the pedagogical utility of emerging technologies and to disseminate effective teaching practices that leverage technology. 2013-2014 highlights: Flipped Classroom web resources, evaluations of Media Gallery and global videoconferencing tools, participation on Digital Innovation Advisory Group (DIAG) committee (see p. 22)

Theatre
The CRLT Players Theatre Program further promotes an inclusive university culture and the success of diverse learners and instructors. Performances and sketches are designed to promote dialogue around difficult issues, including sketches on experiences of underrepresented students and instructors, institutional climate, and faculty worklife. 2013-2014 highlights: new sketch Critical Differences, revised sketch Great Expectations, research for College of Engineering mental health vignettes (see p. 26)
SUMMARY of CRLT SERVICES

Total Services Provided 16,986
(Some individuals receive multiple services)

Total Services for U-M Clients 15,049
Campus-wide programs 8,148
Customized programs for departments, schools, & colleges 4,196
Consultations 2,254
Instructors receiving midterm student feedback (MSF) sessions 451

Total Services for External Clients 1,937
Presentation and workshop participants 646
Audience members at external theatre performances 732
Consultations and other services 559

4,695 Unique Individuals
- Graduate Students & Postdoctoral Scholars 2,194
- Faculty 1,779
- Staff 497
- Other 225

Faculty by Rank
- Assistant Professor 419
- Professor 333
- DDC (Deans, Directors, Department Chairs) 306
- Lecturer 293
- Associate Professor 255
- Other 173

SERVICES BY SCHOOL/COLLEGE

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<th>School or College</th>
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<tr>
<td>Art &amp; Design</td>
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<tr>
<td>Business</td>
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<tr>
<td>Dentistry</td>
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<td>Education</td>
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<td>Engineering</td>
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<tr>
<td>Information</td>
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<tr>
<td>Kinesiology</td>
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<td>Law</td>
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<td>LSA</td>
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<td>Medical School</td>
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<tr>
<td>Music, Theatre &amp; Dance</td>
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<td>Natural Resources &amp; Environment</td>
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<td>311</td>
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<tr>
<td>Nursing</td>
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<td>Social Work</td>
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<td>Administration</td>
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<td>Libraries (U-M)</td>
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<td>Other</td>
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<td>U-M Flint</td>
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<td>Individuals, Unit Unknown</td>
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<td>Services, Unit Unknown</td>
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<td>1,855</td>
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<td><strong>TOTAL:</strong></td>
<td><strong>4,695</strong></td>
<td><strong>15,049</strong></td>
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**CONSULTATION SERVICES**

- 2,254 Consultations
- 451 Midterm student feedback sessions (MSFs)
- 15,195 Students served by MSFs
- 24 U-M offices advised
- 28 Committees with CRLT representatives

**FACULTY GRANTS & AWARDS**

- 4 Award competitions
- 7 Grants competitions
- 117 Faculty recipients
- $390,000 Distributed by CRLT

**RESEARCH & PUBLICATIONS**

- 12 Schools and colleges using CRLT assessment services
- 22 Investigating Student Learning grantees
- 10 CRLT action research projects
- 40 Publications and presentations

**CONSULTATION SERVICES**

- 47 Performances at U-M
- 5 External performances
- 20 Different sketches performed
- 2,700 Audience members

**PROGRAMS FOR GRADUATE STUDENTS/POSTDOCS**

- 4 Preparing Future Faculty (PFF) programs
- 330 Participants in PFF programs
- 2 Teaching certificate programs
- 730 Enrollees in certificate programs
- 29 Graduate teaching consultants

**GLOBAL REACH**

- 84 U.S. educational institutions
- 30 other U.S. organizations
- 138 foreign institutions
- CRLT presented a 4-day program in Beijing for 77 Chinese universities

**ONLINE**

- 550,000 Visits to CRLT website from 218 Countries
- 36 Blog posts
- 1,337 Twitter followers
CRLT Community

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

Management Team
Constance Cook
Matthew Kaplan
Crisca Bierwert
Deborah Meizlish
Mary Wright

CRLT-Engin
Cynthia Finelli
Carol Lagemann
Steve McKenzie
Tersia Pinder-Grover

CRLT Consultants
Meg Bakewell
Theresa Braunschneider
Rachel Niemer
Laura Schram
Amber Smith
Erping Zhu

Theatre Program
Sara Armstrong
Courtney Riddle
Jessica Von Hertsenberg

Administrative Staff
Lori Dickie
Ryan Hudson
Carolyn Parker

Project Staff
Gina Aylward
Pam Fisher
Laura Gonzalez-Garcia
Amy Hamermesh
Jeri Hollister
Kathryn Pamula
Melinda Thompson

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

Sara Crider
Steve Engel
Tim Green
Ronit Greenberg
Annie Harmon

Warren Herold
Dana Jackman
Trevor Kligore
Danielle Lillge
Chris Meade

Karen Nielsen
Melody Pugh
George Smith
Claire Whitlinger
Timeka Williams

Engineering Teaching Consultants  (see p. 20 for a description of the ETC program)

Abhishek Kumar
Justin Li
Bill Lloyd
Sara Lu
Elizabeth Stewart
Bryce Wiedenbeck

Winter 2014
Eric Bumbalough
Laura Chang
Kevin Dahlberg
Sakib Elahi

Davoud Jamshidi
Abhishek Kumar
Sahar Rahmani
Elizabeth Stewart
Bryce Wiedenbeck
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.
New and Noteworthy

Transitions in Leadership

After two decades of exceptional service, two leaders associated with CRLT stepped down in 2014. CRLT’s executive director, Connie Cook retired at the end of January, and Lester Monts, the person to whom she reported in the provost’s office, returned to a faculty position. Under their leadership, CRLT assumed a central role in faculty development, both within the university and nationally, as described in the aptly named 2011 book, Advancing the Culture of Teaching on Campus: How a Teaching Center Can Make a Difference.

In February 2014, CRLT’s managing director Matt Kaplan took over as interim director, and CRLT now reports to James Hilton, vice provost for digital education and innovation.

National Recognition and Awards

In November 2013, CRLT staff enjoyed three-fold recognition at the annual meeting of the Professional and Organizational Development Network (POD). First, the CRLT Players captivated an audience of more than 500 with a performance of 7 into 15 at the conference’s opening plenary session.

Next, a CRLT project was selected as the winner of the POD Innovation Award. “Any Content, Any Time:

A Flexible Template for Online Professional Development” was successfully piloted at U-M in 2013, as a way to recreate key benefits of face-to-face workshops in an online environment.

Finally, the Spirit of POD award was presented to Connie Cook, in recognition of her many contributions and long-time professional service to the field of faculty development.

In addition, at its June conference, the American Society for Engineering Education (ASEE) conferred the Grade of Fellow on Cindy Finelli for her outstanding contributions to ASEE.

Transforming Learning for a Third Century (TLTC) Grants and CRLT

As faculty and units prepared applications for TLTC grants, many turned to CRLT for input on their plans at an early stage and/or for collaboration in carrying out their projects. First, as the university community responded to multiple calls in 2013-2014 for proposals to “enhance engaged, action-based learning for U-M students” through Quick Wins and Discovery grants, CRLT found itself mentioned in 28 projects that received up to $50,000 in funding. CRLT staff played a range of roles in these projects, from service on project planning committees to provision of workshops or collection of data as part of the grant. Second, CRLT has been asked by the provost’s office
to lead the overall evaluation of the TLTC grants program, and applicants for the Transformation grants ($100,000 to $3 million) were encouraged to consult CRLT staff regarding assessment plans for their proposed projects. Third, CRLT was invited to plan a November 2014 event that will bring together all TLTC grantees for cross-fertilizing discussions and the identification of key markers of success five years down the road.

Concerns About Campus Climate Increase Demand for Services

In 2013-2014, CRLT’s expertise on inclusive teaching, engaging diversity effectively, and teaching multicultural courses was drawn on extensively. The U-M campus gave heightened attention to issues of climate, including classroom climate, in light of very prominent statements of concern made by U-M student leaders. The students’ Twitter campaign (#BBUM, Being Black at UM) reached a national audience, naming issues that had been articulated at smaller forums earlier in the year and in recent years. U-M administrative leaders urged all members of the campus community to learn more and do more to improve climate.

CRLT blog posts responded with strategies that instructors can use to improve inclusion and climate. We also added seminars and workshops to our existing campus-wide schedule (including the rollout of a new CRLT Players sketch; see p. 27), and we responded to requests by 11 department chairs for workshops or presentations at faculty meetings. Finally, the winter provost’s seminar on teaching focused on engaging difference and reimagining learning. It began with a keynote address by Carol Schneider, president of the Association of American Colleges and Universities (AAC&U). The 144 participants then chose breakout sessions to hear panels and discuss various approaches to leveraging student diversity to amplify opportunities for engaging productively across difference.

Expanding Audiences With Video

CRLT completed over 50 video productions of various lengths in 2013-2014 with the help of one-time funding from the senior vice provost’s office. Funds for equipment and a part-time videographer allowed CRLT to undertake the extensive planning and collaboration needed to capture great teaching on video. As a result we accomplished several goals: increasing the reach of CRLT programs through the creation of more effective and accessible recordings of CRLT events, providing local examples of engaged pedagogies (e.g., peer learning and flipped classrooms), and showcasing U-M faculty at a four-day faculty development program in Beijing (p. 11).

Expert on Engaged Classroom Learning Visits U-M

In collaboration with a broad coalition of science and engineering units, CRLT coordinated a visit by Eric Mazur, a Harvard physicist and internationally recognized founder of peer instruction. Professor Mazur presented three programs: an introduction to peer instruction, a demonstration of Learning Catalytics software, and a

Thanks for leading the multicultural teaching workshop yesterday. I found your presentation very instructive and the discussion was lively and useful. You have helped us build a foundation for talking with each other about diversity, particularly in the context of classroom instruction—and that is a significant accomplishment.

Department Chair
workshop on incorporating active learning into engineering courses. Three hundred forty-six faculty and GSIs attended these sessions.

In addition CRLT recorded the first two presentations —each of which attracted more than 500 online viewers. A coordinated CRLT blog post identified strategies used by Mazur and pointed to research explaining the power of his approach to engaging students. A CRLT follow-up workshop kept the conversation going among U-M instructors wishing to implement Mazur’s ideas in their own courses.

Flipped Classroom Resources

In 2012-2013 CRLT began working with U-M faculty interested in flipping their classrooms, sponsoring a faculty learning community and later a campus-wide provost’s seminar on the topic. Aiming to more widely distribute locally generated knowledge and best practices, CRLT staff experimented with creating an array of web resources in lieu of a printed occasional paper. In February 2014, in conjunction with the Eric Mazur event, a set of online multimedia resources for creating a flipped classroom (http://www.crlt.umich.edu/node/58368) was launched. These resources include an introduction to what the flipped classroom can be, videos of U-M faculty describing their flipped classrooms, and research-based suggestions for how to effectively flip a class. In addition, a Frequently Asked Questions section guides U-M faculty to additional resources around campus and explores how different disciplines conceptualize flipped classrooms. The availability of these resources has sparked consultations with faculty seeking to apply flipped classroom techniques to their own courses.

Teaching Academy for the Ross School of Business

CRLT collaborated with the dean’s office to create a teaching academy for new faculty in the Ross School of Business. The August program focused on preparation for teaching, while two later meetings allowed faculty to discuss common pedagogies, such as case-based teaching and effective use of PowerPoint in the classroom. Each participant also received a classroom observation during their first term of teaching. The program was highly rated and will be repeated on an annual basis.

CRLT now offers teaching academies for new faculty in 10 of U-M’s schools and colleges. See Programs for New Faculty, p. 15.

GTC+ Digital Media Certificate Program

In collaboration with the Institute for the Humanities and Rackham Graduate School, CRLT was pleased to officially launch the Graduate Teacher Certificate Plus (GTC+) program in May 2014 (see p. 18). An augmentation to the current GTC program, the GTC+ allows graduate students to document additional professional development experiences around the integration of digital media into college instruction.

I just wanted to let you know how appreciative I am for the training CRLT provided (Provost’s Seminar) at the end of last term on using the flipped classroom. Even though we’ve only had three classes so far, the classes are active, students are engaged and alert, they come prepared with having done the out-of-class assignments, and I feel more confident, at ease, and excited. So again - thank you all!

Faculty Member
The Report of the MLA Task Force on Doctoral Study in Modern Language and Literature cites the GTC+ among thirteen programs that exemplify the ongoing transformation in doctoral education in the humanities. In the report, MLA recommends that doctoral students engage more deeply with technology, strengthen teaching preparation, and expand professionalization opportunities. The GTC+ program is well aligned with all of these recommendations.

**Strengthening U-M’s Engineering Education Research (EER) Community**

In 2013-2014, CRLT-Engin offered 23 separate sessions related to engineering education research with a total of 363 participants (representing 163 individuals). Highlights included presentations by external speakers from Purdue and Virginia Tech, seven sessions of a new seminar series inviting U-M presenters to share works in progress, five networking sessions for CoE recipients of Investigating Student Learning grants, and a reading group to explore engineering education research. Another milestone moment was the graduation of the first recipient of a Rackham Certificate in Engineering Education Research, who noted that the certificate set her apart from other applicants and landed her a tenure-track job.

**CRLT Faculty Development Programs for China**

Since 2006, CRLT has supported President Coleman’s China initiative with programming for academic administrators from top Chinese research universities. In late August 2013, CRLT hosted a three-week China Fellows Program for three visiting scholars who are running teaching centers on their own campuses. The backbone of the program consisted of 17 seminars offered by CRLT staff. In addition, fellows attended CRLT faculty and GSI orientations, observed classes taught by outstanding U-M faculty, and made presentations about their plans for implementing what they learned at their own teaching centers.

In December 2013, CRLT developed and offered, in collaboration with China’s Ministry of Education (MoE) and National Academy of Education Administration (NAEA), a program to train directors and staff of Chinese teaching centers. The four-day seminar was held at the NAEA campus in Beijing and brought together 150 directors and staff members from recently established teaching centers at nearly 80 universities from across China. Topics covered core teaching center services and offered participants multiple opportunities to gain hands-on practice. Attendees’ ratings of the overall program and of individual sessions were uniformly outstanding.
Professional Development Services

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 almost 2,300 individual consultations, some brief and some extensive, with U-M clients during the 2013-2014 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 2013-2014 academic year, CRLT staff conducted 451 midterm student feedback sessions for faculty and GSIs across campus. These sessions provided an opportunity for 15,195 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

“Thank you so much for these resources and for your insightful assessments. It was extremely helpful having you visit my class and talking about the observations you made and those from students.”

“This is a wonderful service. The consultant was affirming while suggesting specific strategies to address concerns of students.”

“I gained ideas about how to transform lectures into more participatory exercises.”

“It was a great opportunity to hear about my students’ reactions to the course. I would recommend it, especially for those who are developing new courses.”

“I had an MSF for the second time for this particular class, and I received great feedback and suggestions. It’s definitely worth it!”
Orientations

New Faculty Orientation

In conjunction with the provost and executive vice president for academic affairs, CRLT organized and facilitated the campus-wide New Faculty Orientation. In August 2013, 147 faculty members registered for this event. During the program, the provost and the associate vice president for research welcomed the new faculty and described various services. Participants attended sessions that focused on teaching, including the following topics:

- Facilitating Discussion by Leveraging Student Diversity
- The CRLT Players Present (7 into 15) + 1
- Research-Based Practices for College Teaching
- Student Teams in the STEM Classroom
- Using Instructional Technology to Enhance Teaching
- Teaching Critical Thinking in the Clinic

The New Faculty Orientation concluded with an information fair that featured exhibits and representatives from 48 U-M offices and programs.

GSI Teaching Orientations

CRLT organized and facilitated a university-wide Graduate Student Instructor Teaching Orientation at the beginning of the fall 2013 and winter 2014 terms. This past year, 356 GSIs attended the fall program and 91 GSIs attended the winter program. During these orientations, 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:

- Classroom Communication at U-M
- Dealing with Controversy During Classroom Discussion
- Evaluating Student Writing
- Facilitating Discussions in the Social Sciences
- Facilitating Discussions in the Humanities
- Facilitating Group Work to Maximize Learning in Labs and Discussions
- Grading in Quantitative Courses and the Sciences
- Identity and Authority in the Classroom
- Interactive Theatre: TBD: Welcome to Teaching
- Leading Problem-Solving Sessions
- One-to-One Teaching in Music, Art, Dance, and Architecture
- Preparing for the First Week of Teaching Undergraduate Students
- Preparing for the First Week of Teaching Graduate Students
- Strategies for Teaching Foreign Language Courses
- Teaching Effectively with Technology

CRLT also organized a customized teaching orientation program for new GSIs in the college of engineering in fall 2013 and winter 2014. 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) each semester. The GSI orientations in engineering served 227 attendees and the IA orientations, 151.

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 2013, 31 international graduate students participated in the course, and during winter 2014, 18 more students participated.
Seminars

Campus-Wide 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 2013-2014, 1,480 faculty, graduate students, and postdocs attended all seminars, including the following programs:

(* faculty only, ** graduate students and postdocs only)

- CRLT Players: (dis)Ability in the Classroom
- Emerging Tech: CTools Test Center*
- Emerging Tech: Lesson Builder*
- Emerging Tech: M+Box*
- Emerging Tech: Piazza*
- Engaging Students in Learning: An Online Workshop**
- The Engaged Classroom: Skills for Facilitating Discussions for Faculty*
- Five Ways of Using Screencasting
- The Flipped Classroom*
- Leading Classroom Discussions in the Social Sciences and Humanities** (fall and winter)
- Leveraging Student Diversity in the Classroom** (2 sessions)
- Next Steps with IT** (2 sessions)
- The Nuts and Bolts of Peer Instruction in Your Own Classroom
- Peer Instruction: Confessions of a Converted Lecturer (Eric Mazur, Harvard University)
- Six-Session Training for Multicultural Classroom Facilitation**
- Speaking Skills in Classroom Settings*
- Student Learning Analytics at Michigan (SLAM, 13 sessions):
  - Learning Analytics at U-M: 2013-15
  - Evaluation of Teaching at U-M
  - Teaching 150K+ Students at a Time: The Power of MOOCs
  - Massive Michigan: A First Look at the Analytics of U-M’s 2012-13 MOOC Courses
  - Video Analytics: From Keywords to Keyframes
  - Online Learning Resources in the Humanities and Engineering: Making and Measuring
  - Digital Badges
  - Artisan Analytics: eBook Lessons from Small Datasets
  - Learning Analytics Projects in U-M Electrical Engineering and Spanish
- Embedded Learning Analytics: Integrating Tools and Pedagogy
- Catalyzing Learning Using Learning Catalytics
- Using Learning Analytics to Measure Out-of-Class Learning
- Learning Analytics Fellows’ Projects at U-M
- Teaching In, With, and About Museums: Engaging Students in Materially Different Ways, a Workshop for Faculty and GSIs
- Teaching With Digital Collections in the Humanities
- Using Technology to Check Student Understanding and Provide Feedback: An Online Workshop
- What’s It Like to Be a Teaching Postdoc??
- What’s It Like to Teach at a Community College??
- What’s It Like to Work at a Liberal Arts College??

CRLT in Engineering Seminar Series

During the fall 2013 and winter 2014 terms 487 engineering faculty, graduate students, and postdocs attended the following programs and seminars offered by CRLT in Engineering:

(* faculty only, ** graduate students and postdocs only)

- Developing an Engineering Teaching Philosophy Statement for Your Academic Job Application**
- Engineering Education Research (EER) Day
- EER: Works in Progress (7 sessions)
- Getting Started With the Scholarship of Teaching and Learning
- How Do You Motivate Engineering Students to Want to Learn in Your Class?*
- “If I Only Knew Then”: Lessons from Experienced GSIs**
- Improving the Design Skills of Future Engineers*
- The Influence of Gender Stereotypes on Role Adoption in Student Teams
- It’s Time for Action: Generating an Active Learning Plan (2 sessions per term)
- Peer Instruction: A Workshop (Eric Mazur, Harvard University)
- Seven (Simple) Strategies to Improve Your Teaching**
- Spicing Up Teaching to Improve Student Learning**
- Student Persistence, Performance, and Disciplinary Pathways: The Effects of Race, Class, Gender, Institution, and Discipline
- Teaching for Student Retention in Engineering: What Can GSIs Do?**
- Tools for Managing Student Teams: The Team-Maker and CATME Systems (and Why They Work)
- What’s Wrong? Navigating Concerns About Student Mental Health
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 familiarize themselves with course management and other instructional technologies, and to deliver a practice lesson and receive feedback on their teaching from colleagues. Additional topics at the LSA Teaching Academy address pedagogies for teaching undergraduate students and strategies for teaching and mentoring graduate students. 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 2013-2014, 36 assistant professors took part in the LSA Teaching Academy, and the Health Sciences Teaching Academy served 21 faculty on the tenure and clinical tracks.

**Ross Teaching Academy:** In 2013, CRLT collaborated with the dean’s office to launch a third teaching academy focused on the specific needs of new faculty in the Ross School of Business. (See New & Noteworthy, p. 10.)

**College of Engineering Programs:** Immediately following the campus-wide new faculty orientation (p. 13), CRLT in Engineering provided additional programming for faculty new to the college. A panel of experienced faculty discussed teaching in the college, and new faculty had the opportunity to deliver a practice lesson and receive feedback on their teaching. The program also featured a faculty panel on starting a research group, a discussion on mentoring graduate students, a panel of U-M students in engineering, and an overview of both instructional technology and research computing and software. Subsequent programs covered strategies for new faculty success.

**Provost’s Campus Leadership Program (PCLP)**

On behalf of the provost, CRLT coordinates an academic leadership program with two parts: a day-long orientation for new department chairs and associate deans, and ongoing professional development for all chairs and associate deans with periodic roundtable sessions. Roundtable topics in 2013-2014 included how to create a feedback culture, mentoring junior faculty, difficult conversations, and learning from academic leaders. Additionally, Provost Pollack shared her priorities and her perspective on U-M’s strengths amid the challenges facing higher education.

The programs were well attended, with 71% of new department chairs and 87% of new associate deans and directors participating in at least one of the leadership events.

**Professional Development**

It enabled me to think systematically about the very salient topic matter and get insights from a variety of colleagues in other departments.

It was nice to hear senior leaders reflect on both concrete management issues and the challenges to higher education, and the ways both these things have to be integrated into daily life.

The format of the program was a nice blend of activities, along with an opportunity for participant breakout discussions… I believe these programs are highly effective.

PCLP Participants
Faculty Grants and Awards

In 2013-2014, 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, Internationalizing the Curriculum (ITC), 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 101 faculty received grants or awards totaling almost $353,000. (See Appendix A for lists of grantees.)

For these competitions, CRLT staff prepared and sent guidelines, consulted with grant applicants, prepared applications for internal and external review, reviewed and rated applications, facilitated faculty review panel meetings, sent letters to applicants, created accounts for grant recipients, guided grant recipients on their projects when requested, consulted with applicants who did not receive awards, and collected project reports.

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 Internationalizing the Curriculum and 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 three 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 two external awards for which U-M runs an internal competition to select nominees, the U.S. Professors of the Year, and the Michigan Distinguished Professor of the Year.

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 2013, 165 faculty, staff, and administrators from three campuses attended a provost’s seminar on community engagement, endorsed by the provosts from Michigan State University and Wayne State University, as well as by the provost of the University of Michigan. In March 2014, 144 faculty members from U-M attended “Engaging Difference.”

Faculty Learning Communities (FLCs)

Dialogues Institute: CRLT, in collaboration with The Program on Intergroup Relations (IGR), planned and presented a three-day institute for 15 faculty who teach multicultural content in a wide range of departments: Afroamerican and African studies, American culture, anthropology, comparative literature, English, environment, history, Michigan Community Scholars Program, organizational studies, psychology, residential college, romance languages and literatures, screen arts and cultures, sociology, women’s studies, art & design, music, and theatre. Sponsored by the office of the associate dean of LSA, the institute included “seminaring,” short lectures, and workshops based on research about how best to mobilize social diversity for effective teaching and learning. Goals
included developing dialogue strategies and skills that faculty can use in class, especially in discussions of power and equity; encouraging movement from the analytical to the personal; and fostering inquiry and exchange among faculty participants on issues of pedagogy. Participants applied new knowledge and skills by facilitating dialogues of their own design and role-playing ways to handle difficult situations, such as student resistance and challenges to authority. In the 2014-2015 academic year, participants will reconvene to discuss what strategies they have used in their classes. The institute was very highly rated, receiving a 4.7 average evaluation (on a 5-point scale) for the overall value of the program.

**Large Course Initiatives:** CRLT sponsored learning communities for faculty who teach large enrollment courses in LSA and in the College of Engineering. In LSA, the Large Course Initiative (LCI) was offered in both fall and winter terms, and participants met four times per term. A total of 21 faculty read and discussed research on student learning and explored a range of instructional technologies 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, 16 of the faculty received small grants from LSA to revise their courses.

A fourth iteration of the Teaching Circle for Large Engineering Classes was offered in winter term. Six faculty participated, and sessions were co-facilitated by CRLT-Engin staff and senior faculty who teach large courses. Topics included rapport building, active learning, student motivation, and instructional technology. Research articles were integrated with local data to help participants identify useful strategies for their own classes. In addition to meeting regularly, participants observed colleagues’ classes and got hands-on experience with technologies particularly useful for large classes. The program was co-facilitated by CRLT in Engineering Faculty Associate Mark Moldwin.

A reunion meeting of four teaching circle cohorts provided another opportunity to network and share best practices. Analysis of participant feedback and teaching behaviors resulting from participation in the teaching circles has been disseminated beyond U-M in a presidential panel at the 2014 Annual Meeting of the American Educational Research Association and a keynote address at the 2014 Chalmers Conference on Learning and Teaching in Gothenburg, Sweden.

**International Faculty Dinner**

With support from the office of the senior vice provost for academic affairs, CRLT hosted the thirteenth annual International Faculty Dinner in March 2014. This event provided an opportunity for 87 faculty with international backgrounds to socialize and exchange perspectives on teaching at U-M.

**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 assist GSIs with marketing their professional development as college-level instructors.
October 2007, this program has offered graduate students an advantage in the academic job market by helping them document their preparation for their junior faculty teaching roles. The program also emphasizes the importance of teacher preparation in helping graduates gain faculty positions. Graduate students who wish to participate submit required documents and track their progress toward completion of the program on a web-based interface designed by CRLT. Program requirements include participation in a teaching orientation and ongoing seminars on teaching, classroom teaching experience, a teaching mentorship, and the submission of a statement of teaching philosophy.

Participation continued to increase during the 2013-2014 academic year. Specifically, 176 more graduate students enrolled, bringing the total number of participants to 906. This year 72 students completed the certificate requirements. Since the program’s inception, CRLT has awarded a total of 319 certificates.

**GTC+Digital Media Teacher Certificate Program**

Launched in May 2014, the new GTC+ program goes beyond the 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.

Although designed with particular needs of humanities graduate students in mind, enrollment is open to all graduate students. At the end of the winter term, 13 graduate students were enrolled, and numbers are expected to grow in the fall.

**Preparing Future Faculty (PFF) Programs**

In 2013-2014, CRLT offered four programs in collaboration with Rackham.

The sixth iteration of the eight-session *Postdoctoral Short-Course on College Teaching in Science and Engineering* was conducted in fall 2013 for 32 postdoctoral scholars. The course modeled “the flipped classroom” by emphasizing advance preparation using video podcasts and readings so that time during sessions is devoted to active learning and reflection. Each participant had multiple opportunities to present a lesson to colleagues, develop a lesson plan for an inquiry-based lab exercise, and design a syllabus for a course to be taught in the future.

> Just being able to say I’ve had professional development around teaching is a huge asset.

*Postdoc Short-Course Participant*
The Intercampus Mentorship Program connects faculty at nearby colleges with U-M graduate students and post-doctoral scholars. Twelve students and postdocs were funded to take part in a mentorship, which involved activities such as campus visits, discussions of the academic job search, and guest teaching. The participants were from five schools and colleges (kinesiology; LSA; medicine; music, theatre and dance; and pharmacy) and represented six LSA departments.

The eleventh annual Preparing Future Faculty Conference, co-sponsored by Rackham and the Career Center, took place in September 2013. More than 400 graduate students registered for this one-day conference, which included the following break-out sessions:

- Building Communities of Support Toward a Successful Academic Job Search
- Designing an Effective Teaching Demonstration
- Developing Your Teaching Philosophy
- Faculty Success off the Tenure Track
- Interviewing for Academic Positions: Arts, Humanities, and Social Sciences
- Interviewing for Academic Positions: Science, Technology, Engineering, and Math Fields
- Life After Michigan: Adjusting to a New Institutional Context
- Negotiating an Academic Job Offer: Arts, Humanities, and Social Sciences
- Negotiating an Academic Job Offer: Science, Technology, Engineering and Math Fields
- Pursuing a U.S. Academic Career: Strategies for International Students
- Starting and Running Your Research Lab at a New Institution
- Starting and Running Your Faculty Research Agenda: Humanities and Non-Lab Social Sciences
- Strategies, Tools, and Resources for Productivity
- The Tenure-Track Process and Faculty Worklife
- What’s It Like To Be a Teaching Postdoc?
- What’s It Like To Teach at a Community College?

The fifteenth annual Rackham-CRLT Seminar on College Teaching: Preparing Future Faculty took place in May 2014, with funding provided by the provost’s office and Rackham. CRLT’s assistant directors taught the seminar and invited faculty from across the campus to speak. Eighty-five advanced graduate students applied, and CRLT accepted 60 as participants. The applicants represented 13 schools and colleges (architecture and urban planning; education; engineering; information; kinesiology; LSA; medicine; music, theatre and dance; natural resources and environment; nursing; pharmacy; public health; and social work) and included 18 LSA departments and programs.

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)
- Discussion of effective and reflective teaching, including meetings with University of Michigan junior faculty, conversations about multicultural teaching and learning, and demonstration of and reflection on the use of instructional technology

"I’m in my second year now as an assistant professor, and I just had a successful department review. I can’t begin to express how much my experiences in PFF have helped me make the transition into this new role. The teaching and time-management skills I learned in PFF have allowed me to hit the ground running, and I feel more informed and better prepared than many of my other junior colleagues to navigate the day-to-day challenges of my job.

PFF Seminar Participant"
The seminar also included an introduction to different types of institutions through a trip to one of four local 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 campus-wide 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.

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 semester.

**Engineering Teaching Consultants Program**

Engineering teaching consultants (ETCs) are selected in a college-wide competition each semester, and CRLT prepares them to consult with engineering GSIs. They conduct midterm feedback sessions for several hundred undergraduate engineering students. They also plan and conduct sessions at the fall and winter engineering GSI teacher trainings, as well as workshops in the CRLT in Engineering Seminar Series.

**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. Within departments, both faculty GSI coordinators and graduate student mentors (experienced GSIs) develop, facilitate, and assess departmental training programs for new GSIs and also consult with individual GSIs on a one-to-one basis. During summer 2013, fall 2013, and winter 2014, CRLT developed and conducted several sessions to help faculty coordinators and GSMs prepare for their 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. CRLT also organized gatherings for graduate student mentors to exchange ideas about on-campus resources for undergraduate students (e.g., CAPS, Sweetland Center for Writing, Spectrum Center, etc.). Sessions for GSI trainers provided resources for preparing GSIs to teach inclusively and promote a productive classroom climate.

**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, 2013, and May 31, 2014, the website received over 608,600 visits, representing 500,500 unique visitors (a 14% increase over the previous year) from 218 countries. Approximately 3.8% of visitors were from U-M, and 46% were from the United States. CRLT’s web resources are continuously updated and expanded. For example, in 2013-2014, we added a set of multimedia web pages on the flipped classroom (see p. 10).
CRLT Social Media

Many of CRLT’s pages are highly ranked by search engines such as Google, and about 68% of all visits to CRLT’s website come from such search engines. Top search terms include “teaching strategies,” “teaching philosophy,” “lesson plan,” “curriculum design,” and “active learning.” Overall, the “Strategies for Effective Lesson Planning” page received the most visits, over 179,000, or about 17% of total visits. Other popular pages include the CRLT home page, “The Teaching Philosophy/Teaching Statement,” “Teaching Strategies,” and “Active Learning,” each with over 30,000 visits.

The homepage at www.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 also reaches 78 subscribers, and each post generates a Tweet to CRLT’s 1,337 Twitter followers. In the past year, we updated the blog 36 times, publishing posts that highlight CRLT resources as well as innovative teaching by U-M faculty. While some posts announce events or news, the majority (following the advice of our faculty advisory board) contain timely discussion of teaching strategies for U-M instructors. For example, around Veterans Day, we featured a post about the experiences of student veterans in the classroom. After the #BBUM (Being Black at Michigan) Twitter campaign gained national recognition, we posted guidance for instructors on addressing students’ experiences of race-based marginalization. And we often feature strategies for opening and closing the semester (e.g., “Breaking the Ice with Your Students” or “Reflecting on Learning at the End of the Term”). Most individual posts average a few hundred pageviews, but our most popular posts have been read by thousands: e.g., “Motivating Students to Learn” has received 3,994 pageviews, “Handling Wrong Answers” 1,972, and “Breaking the Ice” 1,740.

Online Workshops

In addition to using the CRLT website to deliver resources and timely strategies to instructors, we have begun offering 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, recreating 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. This model for online faculty development received an innovation award. (See p. 8.)

Multimedia Productions

Thanks to funding from the provost’s office, CRLT was able to add over 50 multimedia productions to its website and the CRLT YouTube channel, offering significantly expanded video examples of excellent teaching and excerpts from CRLT programs and events.
Through consultation services, faculty development programs, and service on university- and unit-level committees (see Committee Work, p. 57), CRLT staff help individuals and academic units explore, integrate, and evaluate the use of instructional technology. Several programs from the 2013-2014 academic year are highlighted below.

**Campus-Wide Committees and Initiatives**

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

CRLT staff were part of the Digital Innovation Advisory Group (DIAG), which provides guidance and leadership to advance the institution’s digital education strategy and ensure engagement of faculty, staff, and students in innovative experimentation and knowledge sharing across U-M. The group is advisory to the Vice Provost for Digital Education and Innovation (DEI). CRLT staff also serve on two DIAG subcommittees: The Tools and Technology Pipeline Subcommittee, which aims to promote the efficient development of tools and technology at the university, and the Digital Ecosystem Subcommittee, which will focus on tactical operational IT issues (such as the transition to a new learning management system), as well as larger strategic issues around IT.

As a charter member of the Teaching and Technology Collaborative (TTC), CRLT co-sponsored the 17th Annual Enriching Scholarship Conference, along with ITS, the LSA Language Resource Center and Instructional Support Services, and the Medical School Instructional Services–Instructional and Multimedia Development. This weeklong event features seminars, open houses, and demonstrations on the use of technology in teaching and learning. CRLT staff co-organized the opening event, which included a poster fair that highlighted the work of the recipients of the annual U-M Provost’s Teaching Innovation Prize, CRLT’s Investigating Student Learning Grant, and projects from the Student Learning and Analytics at Michigan (SLAM) Fellows. The keynote session featured EDUCAUSE President and CEO Diana Oblinger’s talk “From Disruption to Design: Technology and Residential Education.” CRLT also sponsored six seminars on teaching with technology as part of the conference.

To help U-M make data-driven decisions about which applications to support centrally, CRLT continued
its collaborations with Information and Technology Services (ITS) and other technology support units to evaluate emerging technologies. Evaluation projects in 2013-2014 focused on the use of video and videoconferencing to engage students with course material and with peers around the world. (For a full description of these evaluation projects, see p. 29.)

**Discipline-Specific Services for IT**

CRLT responds to the specific needs of individual departments, schools, and colleges by creating customized programs on instructional technology. Designed with input from faculty steering committees, these programs are particularly effective in helping faculty think carefully about the pedagogical variables affecting the success of incorporating new IT into their courses and curricula. CRLT staff consult also with faculty academic administrators on ways to incorporate and evaluate IT innovations. In 2013-2014, CRLT staff worked on IT programs and assessments in dentistry, kinesiology, communication, physics, natural resources and environment, and nursing. (For a full list of customized services, see pp. 46-56.)

**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. 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., CTools, clickers, screen-casting) they wish to explore in more depth. (See pp. 13-14 for more on orientations and academies.)

Each fall and winter term, CRLT’s Seminar Series features several programs on IT topics. This year, for example, the series included a faculty learning community on the flipped classroom, “Five Ways of Using Screencasting,” “The Nuts and Bolts of Peer Instruction in Your Own Classroom,” and “Using Technology to Check Student Understanding and Provide Feedback” (an online workshop). (See p. 14 for a full list of seminars.)

CRLT’s grant program funds a wide-range of IT projects. In 2013-2014, over one-third of the funded grants and awards involved IT projects such as blended courses, digital resources for students and instructors, online student projects, and multimedia production. (See p. 39 for a full list of grants.)

CRLT’s Preparing Future Faculty (PFF) programs, which are open to graduate students and postdocs, model effective use of instructional technology and include sessions that focus on IT that participants may use in their own future teaching. For example, the May PFF Seminar includes presentations by faculty using innovative pedagogies that incorporate technology, and the Postdoc Short Course is run in a “flipped” environment, with participants watching screencasts beforehand and then spending meeting time actively engaged in applying what they learned.

In 2013, CRLT launched the GTC+Digital Media Teacher Certificate Program, developed in collaboration with the Institute for the Humanities and Rackham, to provide 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. GTC+ participants experience an online workshop and create an online portfolio of their GTC+ experiences as part of the requirements for the certificate. (For more information, see p. 18.)
CRLT staff develop and facilitate programs and services to help individual instructors, departments, and schools and colleges address multicultural issues, promote learning that draws on social and intellectual diversity, and promote inclusive teaching. These elements are embedded in all the work we do. In addition, we have programs to promote effective teaching in those areas of knowledge where social differences are explicitly part of the curricula, and we help instructors develop and teach skills needed to navigate differences and promote social justice.

In 2013-2014, U-M student leaders made very prominent statements of concern about climate on campus, including classroom climate, and U-M administrative leaders urged all members of the campus community to learn more and do more to improve climate. CRLT responded with web-based information, campus-wide seminars and customized workshops for departments. (See New and Noteworthy, p. 9.)

Following are some additional, specific ways in which CRLT staff promoted multicultural teaching and learning at U-M during the 2013-2014 academic year:

• Direction of a learning community, in collaboration with The Program on Intergroup Relations (IGR), and sponsored in part by the LSA associate dean’s office, for faculty teaching multicultural content to develop skills in facilitating student dialogue and to promote deeper student engagement in class discussion (See Faculty Learning Communities, pp. 16-17.)

• Creation of new blog posts and website materials to foreground inclusive teaching strategies, partly in response to U-M students’ public concerns about classroom climate, through a Twitter campaign (#BBUM) and other forums

• Organization of a provost’s seminar on engaging difference with faculty panels addressing both teaching strategies and institutional strategies for engaging student diversity and promoting student success across social differences

“\nI greatly appreciated the forward looking challenge to U-M made by the keynote speaker, and the breakout session I attended was superb. The panelists brought specific, historical, and real-life experience to the question of student success.

“\nIt was great to link the broader higher education work from AAC&U to our campus community. I also really appreciated the small group discussion of problems and also solutions. This shared sense of commitment was really important.

PSOT Participants

• Collaboration on development of learning analytics programs that have the goal, in part, of

Diversity and Inclusion

It was great to link the broader higher education work from AAC&U to our campus community. I also really appreciated the small group discussion of problems and also solutions. This shared sense of commitment was really important.

PSOT Participants
promoting student success across demographic differences

- Creation of new templates for customized workshops on inclusive teaching to suit different lengths of time available in departmental meetings and to make it more feasible for departments to tap CRLT expertise on inclusive teaching

- Support for individual instructors, and for departments and units on campus, on addressing diversity issues arising in instructional contexts

- Organization of a Tri-Campus Provosts’ Seminar on Community Engagement that brought together faculty working on community-based engagement from Michigan State University, Wayne State University, and the University of Michigan to discuss shared interests, purposes, and potential cross-campus collaborations

- Dissemination of information and resources about multiculturalism and diversity during the New Faculty Orientation and GSI Teaching Orientations, meetings in specific departments, and other campus-wide events

- Presentation of workshops for faculty to help students engage more deeply in issues of diversity and social justice, and to help students better navigate social differences

- Presentation of workshops for graduate students and for postdoctoral students on strategies for teaching and assessing multicultural material, leading discussions about diversity, handling issues of identity and authority, and multicultural facilitation

- Presentation of workshops for faculty to teach more effectively across international differences

- Support for departments and units on campus interested in developing outreach programs to recruit and retain underrepresented students

- Assistance with multicultural aspects of curricular reform and academic program development across the university

- Service on university-wide or college committees that address issues of diversity, including the President’s Diversity Council and the Academic Services Board

- Development of a new CRLT Theatre script and facilitation for faculty to more fully examine the ways student backgrounds affect classroom dynamics, and to think about what is not said, as well as what is said, in class
CRLT Players Theatre Program

What people are saying about the CRLT Players

“Just a short note to thank the incredible CRLT Players for the thoughtful, beautifully performed, and utterly captivating job you did at the department retreat yesterday. Your work is so important, and I was so happy to learn that you will be taking this sketch, or a version thereof, elsewhere in the university.”

“We continue to hear good things about the CRLT workshop you did for us. Staff tend to measure all of our trainings against that one and none of them seem to measure up!”

“We would like to take a moment to thank you so much for the wonderful performance and facilitation of No Offense at Florida International University! As you will see, faculty responded with comments such as ‘Great performance that triggers a lot of issues to think about!’ and ‘Excellent session! I have learned so much from this session.’”

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, campus-wide events (such as New Faculty Orientation); at workshops and retreats for academic departments, schools, and colleges; and at special events, such as a dinner organized by the dean of LSA for faculty serving on executive committees in the college. In addition, the Players are in demand nationally, performing for campuses and conferences around the country.

In 2013-2014, several units consulted the theatre program about developing performances to address specific needs, ranging from mental health to unwelcoming climate. Attending to both particular contexts and
larger trends across campus and around the country is resulting in the creation of work that both anticipates broadly felt needs and remains persuasive as it is shared with new audiences. For example, as units across campus grappled with climate issues raised in the wake of the fall 2013 #BBUM (Being Black at U-M) Twitter campaign, the theatre program was pleased to have a relevant new sketch available to help facilitate necessary, but difficult conversations within campus communities. Originally commissioned by and previewed in the Department for Afroamerican and African Studies (DAAS), Critical Differences was particularly timely.

Watching a group of students wrestle with a text that asks them to think critically about race, gender, and ability invites instructors to explore questions of how identities affect the ways students engage with course content, each other, and instructional methods. Premiered successfully at a DAAS faculty retreat in May 2014, the sketch is being requested by other departments for performances in 2014-2015.

Great Expectations: Graduate Student Mentoring enjoyed a similar trajectory; rewritten for one LSA department, the new version was subsequently hosted by another LSA department and will be hosted by Rackham in the coming winter term.

Another notable feature of 2013-2014 was the increasing extent to which colleges embedded Players sketches in their own programming. For the third year in a row, Navigating Departmental Politics was included in LSAs seminar series for junior faculty, and The Fence was performed once again for members of LSA executive committees. The College of Engineering also made use of The Fence for orienting casebook committees. As part of its efforts to further their student health and wellness initiatives, engineering also commissioned the theatre program to develop vignettes for faculty audiences on how to respond effectively to student mental health issues. To create vignettes that accurately reflect these issues, CRLTs artistic director interviewed stakeholders from more than 10 units, including Counseling and Psychological Services (CAPS), Services for Students with Disabilities (SSD), and the Depression Center. Previews and performances of the resulting vignettes will take place in 2014-2015.

In the 2013-2014 academic year, the CRLT Players performed 47 times on campus for approximately 2,500 audience members. The Players also performed at the following campuses and conferences:

- Florida International University
- Montana State University
- Professional and Organizational Development Network in Higher Education Conference (POD)
- University of North Texas
Services for Assessment of Student Learning
www.crlt.umich.edu/assessment

During the 2013-2014 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 using data for improvement, facilitation of faculty discussions, and provision of funds through CRLT’s various grants programs. All of CRLT’s assessment projects have two defining characteristics: 1) they are initiated by faculty responsible for the curriculum or the courses being assessed, with CRLT providing support and expertise as necessary; 2) they are action oriented, generating data that can be used by faculty and faculty committees to improve their courses or curricula. CRLT’s assessment work included more than 30 projects.

Campus-Wide and Multiple Unit Assessment Initiatives and Services

Student Learning and Analytics at Michigan (SLAM)

Learning analytics is an emerging approach to assessment that aims to improve student learning through the analysis of “big data” collected from a variety of sources (e.g., registrar data on student backgrounds, or data from a course management system like CTools that digitally tracks student behaviors in a given course). As part of U-M’s Third Century Initiative, the provost charged a Learning Analytics Task Force with “designing a program of activities to draw out, support, and execute the best ideas in learning analytics at Michigan.” To promote this approach to the assessment of student learning, CRLT collaborated with task force chair Professor Tim McKay on two programs during the 2013-2014 academic year.

The first was a SLAM Speaker Series designed to provide examples of ongoing analytics work being pursued by practitioners at U-M and at other institutions. For example, U-M instructors Mika LaVaque-Manty and David Cottrell spoke about their analysis of U-M teaching evaluations. (See p. 14 for a full list of topics.) The second initiative was a winter 2014 Learning Analytics Fellows Program for a select group of U-M faculty, graduate students, and staff who wished to explore ways of pursuing assessment using learning analytics approaches. In addition to meeting weekly to discuss readings about current themes in learning analytics, the participants engaged in hands-on analysis of existing data, and they developed analytics projects of their own with the support of small grants. These projects are described more fully below by unit.

The overall attendance at the SLAM seminars and learning analytics fellows sessions was 662 and 18, respectively (compared to 595 and 31 last year). This year’s attendance represents participa-
tion from most (15) U-M schools and colleges, including 22 LSA and eight engineering units. Additionally, the SLAM website, which is housed at CRLT and offers links to video recordings and slide presentations, received over 9,000 hits this past academic year (compared to about 7,000 the previous year). The evaluations for both initiatives were extremely positive, with participants expressing strong agreement about the usefulness of the SLAM Speaker Series and the fellows program.

"This was a really fantastic experience! The diversity and range of projects was a real bonus: I simply had no idea how much I was missing out on, in terms of pedagogical theory, learning technologies, etc."

Learning Analytics Fellow

**Evaluation of U-M Sponsored Technology Tools**

ITS requested a rapid evaluation of instructors’ use of Media Gallery to support decision making regarding U-M’s contract renewal with Kaltura. Media Gallery allows users to upload, publish, and share videos in CTools, and it is part of the larger MiVideo content management service. CRLT emailed surveys to 320 instructors who had activated Media Gallery in CTools to identify instructors who used Media Gallery as an integral part of their course. Interviews with six instructors revealed that most were using the platform to stream full-length films outside of class in order to free up class time for discussion. Students could watch when convenient, and instructors did not have to devote time to scheduling synchronous viewings outside class. Surveyed students found video to be an engaging way to learn content, and instructors reported that video deepened the level of in-class discussion about concepts. Technical support from library or Language Resource Center staff for finding videos, obtaining copyright permission, and uploading videos to CTools was critical to four instructors’ successful use of Media Gallery.

CRLT collaborated with the Language Resource Center and LSA Instructional Support Services to conduct an evaluation of courses supported by the Global Teaching with Videoconferencing grant. The evaluation was sponsored by the Vice Provost for Global and Engaged Education. In these courses, U-M instructors partner with a faculty member at an international institution to incorporate videoconferencing in their courses. This technology allows students at the two institutions to collaborate with each other. CRLT interviewed U-M and international partner faculty and conducted feedback sessions with U-M and/or international students in six courses. Both faculty and students reported that the international exchanges helped students find new ways to look at the course material and developed their listening skills, empathy, collaboration and communication skills, curiosity, and independent learning. Additionally, faculty identified many personal and professional benefits they experienced from the global videoconferencing collaboration, including new research directions, development of an important relationship with their international partner, and reaching with new and satisfying methods. Key challenges identified include working across institutions with different academic calendars, access to quality cameras and wireless connections, and technical difficulties that arose during class time. Overall, this evaluation suggests that global videoconferencing collaborations offer significant value to both faculty and students.

**Investigating Student Learning (ISL)**

CRLT coordinates this annual grant competition, consults at least twice with project teams, and works even more intensively with many. About 10 projects each year are led by teams of faculty and graduate students or postdocs who are participating in the body of research known as 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. Among other avenues, grantees share their results at a poster fair held in conjunction with the keynote address for Enriching Scholarship each May. CRLT provides significant assistance in the design of projects, presentation of findings and the design of posters. For titles of 2014 grant recipients’ projects, please see p. 42. Descriptions of how CRLT worked with ISL grant winners can be found below.

**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 2013-2014, CRLT conducted MSFs for 451 instructors, allowing more than 15,000 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 Mellon Foundation, the National Science Foundation, the National Institutes of Health, and Echo360 (learning management software). 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 in Asian languages and cultures; dentistry; information; kinesiology; linguistics; molecular, cellular, and developmental biology; the International Institute; physics; and sociology.

**Exploring Learning Analytics Grant**

In collaboration with LSA, CRLT received an Exploring Learning Analytics Grant from the Provost’s Learning Analytics Task Force for the purpose of improving data available to departments concerning student learning and experience in the major. CRLT staff validated in summer 2013 the University of Michigan Asks You (UMAY) survey and shared a report with the task force and associate dean Phil Deloria. (Part of this project focusing on quantitative reasoning assessment has been submitted to *Numeracy*.) A new, online assessment toolkit for LSA administrators and faculty has been developed and will be rolled out in fall 2014.

**Department, School, and College Assessment Projects**

**Art & Design**

Evaluation of the school’s international experience requirement entered its final year. Results from a student survey, focus groups, and analysis of artists’ statements were reported to the school, presented at the 2014 Forum on Education Abroad Conference in San Diego, and will be further disseminated in 2014-2015. Key findings of this project were that students required to complete an international experience demonstrated higher levels of global perspective-taking and reflection, compared to students for whom such travel was not requisite. A likely explanation for this difference is the requirement cohort’s greater rate of study abroad. However, even comparing students who did choose to study abroad (whether required or optional), students required to complete an international experience continued to show gains compared to students for whom international travel was optional. These gains likely can be attributable to the requirement cohort’s increased utilization of U-M affiliated travel experiences that have academic scaffold-
ing, more frequent travel to culturally dissimilar locations (compared to Europe or Australia), and post-trip writing organized by the school that prompts reflection.

Additionally, CRLT staff consulted on two other Art & Design projects: curriculum mapping and assessment of a new “Intersections” course to develop first-year students’ intercultural awareness and competencies.

Dentistry
CRLT staff provided feedback on surveys addressing the motivational interviewing curriculum in dental hygiene and consulted with two graduate students about their thesis projects in this subfield.

CRLT staff consulted with recipients of 2013-2014 Investigating Student Learning Grants and highlighted their projects at the poster fair opening U-M’s 2014 Enriching Scholarship conference. Margherita Fontana and Carlos Gonzalez-Cabezas’ project on measurement of critical thinking in the dental school curriculum will be submitted as a poster for the 2014 American Dental Education Association’s annual meeting.

In collaboration with Marita Inglehart and Stephanie Munz, CRLT staff collected student feedback through a series of online surveys to assess the effectiveness of a new course for providing dental care to patients with special needs. Results from this project were presented at the Special Care Dentistry Association annual meeting in April 2014.

2013-2014 Learning Analytics Fellows projects receiving CRLT support included an exploration of the relevance of big data for student learning in the school conducted by Vidya Ramaswamy and Janée Tyus.

Engineering
CRLT staff consulted on five projects from the 2013-2014 Investigating Student Learning Grants cohort and highlighted them at the poster fair opening U-M’s 2014 Enriching Scholarship conference. Brent Gillespie examined the impact of haptic activities in system dynamics and controls engineering education. Jamie Phillips and Justin Foley’s project evaluated the influence of online modules on learning and retention in “Introduction to Semiconductor Devices.” Alexander Ganago’s project investigated how specific teaching strategies affect student motivation in a large, introductory electrical engineering course. Ann Jeffers and Beverly Strassman assessed how participation in engineering service learning courses in developing countries affected U-M students’ critical thinking and leadership skills and their ability to interact in a complex social and global environment. Finally, Kathleen Sienko explored how student design teams collect, synthesize, and use stakeholder data during an international immersion experience. Results from each of the last three projects were presented (separately) at the 2014 Annual Meeting of the American Society for Engineering Education.

Members of six projects funded through the 2014-2015 Investigating Student Learning Grants competition participated in the May 2014 ISL Symposium and had individual consultations with CRLT staff about their projects. Amy Cohn and Michelle Macy are assessing the impact of cross-disciplinary, project-focused, action-based immersive learning experiences in healthcare and engineering. Matthew Collette is evaluating ways to most effectively teach mental synthesis models in naval architecture and marine engineering. Aline Cotet is assessing the impact of the international professional organization, Society of Women Engineers, and how an international partnership of student organizations can influence the experience and international perspective of U.S. and Liberian students. Brian Gilchrist, and Gail Hohnen, and Joy Adams are investigating the impact of individualized performance appraisals to motivate and facilitate student learning of necessary professional skills. Frank Marsik is evaluating the effectiveness of Engineering 290, “Professional Skills for Engineers” on improving the technical communications proficiency, and
overall self-efficacy, of first-term undergraduate engineering transfer students. **Dimitrios Zekkos** is assessing the impact of incorporating web-based class projects on learning of civil and environmental engineering (CEE) students.

2013-2014 Learning Analytics Fellows projects receiving CRLT support included an exploration by **Robin Fowler** and **Stephanie Sheffield** into gender effects on student performance in Engin 100, an investigation by **Brian Noble** into the frequency with which novice computer science students use compilers in their coding assignments and any relationship with performance in a gateway course, and a cluster analysis by **Perry Samson** of students’ click data captured by Echo360 Lecture-Tools in his extreme weather course.

Two student initiatives sought advice from a CRLT consultant in order to assess a) the development of supplementary instruction modules for software such as MATLAB, Mathematica, and Excel, and b) FEMMES (Females Excelling More in Math, Engineering and Science), a student-run program dedicated to closing gender and racial divides in computer science and science, technology, engineering, and math fields.

**Information**

2013-2014 Learning Analytics Fellows projects receiving CRLT support included an investigation by **Chris Brooks** and **Stephanie Wooten** into video usage by MOOC students, the development of a course recommender system for SI master’s students by **Eric Koo** and **Michelle Fiesta**, and a sentiment analysis of student-to-instructor feedback in end-of-course evaluations, as well as of instructor-to-student feedback on assignments conducted by **Kevyn Collins-Thompson** and **Adam Levick**.

In support of a TLTC Discovery Grant application, “Citizen Experience Design,” CRLT staff helped develop an assessment plan and discussed possibilities for its implementation.

**Kinesiology**

CRLT staff engaged in multiple consultations with the chair of the movement science program to plan curriculum revisions, retreats, and program objectives.

**Law**

CRLT continued its evaluation of the Michigan Access Program (designed to promote multicultural leadership skills among first-year law students) by conducting a survey after the pre-orientation session. Similar work by **Christine Gregory** appeared in the *Journal of Legal Education* in November 2013.

Two evaluation plans to assess the outcomes of two new curricular change initiatives for first-year students were developed by CRLT for the associate dean.

**LSA: Asian Language & Cultures**

CRLT staff assisted **Kyongmi Park**, recipient of a 2013-2014 Investigating Student Learning Grant, with data analysis and poster design for her project assessing the effectiveness of a two-step, self-evaluation process for learners of Korean. The project was presented at the 2013 American Council on the Teaching of Foreign Languages Annual Convention, as well as at the poster fair opening U-M’s 2014 Enriching Scholarship conference.

The new master’s curriculum, “Reimagining the Master of Arts in Japanese Studies,” was evaluated by CRLT staff through interviews with MA fel-
allows and feedback from students in new courses. Results from Year 1 of a multi-year grant were reported to the Japan Foundation.

**LSA: Dean’s Office**

CRLT’s evaluation of the program involved two large surveys of alumni and current students, four focus groups with current students, one discussion with alumni, four discussions with staff and instructors, and analysis of registrar’s data. A report to the CSP Task Force supported their comprehensive review of the program for the dean’s office.

CRLT staff are developing online resources to support evaluation of learning objects (interactive web resources designed to support a learning objective, include such things as animations, simulations, tutorials, case studies and games). The resources will be housed at the MELO website.

**LSA: Judaic Studies**

CRLT conducted surveys in four large courses about students’ decisions about which courses to take and their academic plans. The department’s executive committee received a report for use in curricular planning.

**LSA: Linguistics**

CRLT staff consulted on an LSA Instructional Technology New Initiatives/New Infrastructure (NINI) Grant for evaluating a flipped classroom in Linguistics 111. Specific assistance included the development of an assessment plan and a survey and help with the IRB application.

**LSA: Mathematics**

Nina White and Daniel Visscher received a 2014-2015 Investigating Student Learning Grant to compare oral and traditional assessments in math content courses for pre-service elementary teachers. They participated in the 2014 ISL Symposium and had individual consultations with CRLT staff about their project.

**LSA: Molecular, Cellular, and Developmental Biology**

CRLT assisted with an evaluation plan for the broader impacts section of an NSF CAREER grant application.

**LSA: Michigan Learning Communities**

2013-2014 Learning Analytics Fellows projects receiving CRLT support included an investigation by Helen Morgan and Jennifer Maltby into the long-term impact on student success of two U-M learnings communities: the Health Science Scholars Program and the Michigan Research Community. The study looks at 10 years of student performance data for students who participated in a learning community, as compared to a matched group of similar students who did not.

CRLT also consulted on survey design and incentives for program assessment in the Health Science Scholars Program.

**LSA: Philosophy**

2013-2014 Learning Analytics Fellows projects receiving CRLT support included analyses by Robin Zheng and Sarah Aronowitz of registrar’s data to assist the department in understanding undergraduate students’ course-taking patterns.

**LSA: Physics**

CRLT assisted with the external evaluation section of the application for the NSF WIDER grant that is funding the REBUILD project.

CRLT staff wrote a manuscript about the e2Coach student support system that was published in *Change: The Magazine of Higher Learning* in 2014.

**LSA: Political Science**

CRLT staff consulted with Mika LaVaque-Manty, recipient of a 2013-2014 Investigating Student Learning Grant, on his project examining what effects significantly increased student autonomy in a large introductory course has for student learning, learning styles, and future success, as well as how this autonomy shapes stu-
students’ course and academic career choices. CRLT highlighted this project at the poster fair opening U-M’s 2014 Enriching Scholarship conference. This project was further recognized at the American Political Science Association (APSA) Teaching and Learning Conference by the 2014 CQ Press Award for Teaching Innovation, which referred to it as “innovative and well-documented work.”

**LSA: Science Learning Center (SLC)**
CRLT staff helped with data analysis for an evaluation of the interview process for selection of SLC study leaders.

**LSA: Sociology**
In support of an application for NIH R25 grant, CRLT staff helped develop an evaluation plan.

**LSA: Statistics**
Two faculty received 2014-2015 Investigating Student Learning Grants: Brenda Gunderson is expanding the current Problem Roulette database by getting students to create the problem documents while defining a process where the students develop and maintain a subset of the problem library themselves in their discipline, and Jackie Miller is examining a flexible blended model of instruction in a large enrollment undergraduate statistics course. These faculty participated in the 2014 ISL Symposium and had individual consultations with CRLT staff about their projects.

**Medicine**
Mary Blazek received two 2014-2015 grants (Faculty Development Fund and Investigating Student Learning) to develop a series of emails relating key psychiatric concepts to other medical fields, and distribute them during non-psychiatric clerkships to third-year medical students. She participated in the 2014 ISL Symposium and had individual consultations with CRLT staff about her project.

In addition, CRLT staff consulted with recipients of 2013-2014 ISL grants and highlighted these projects at the poster fair opening U-M’s 2014 Enriching Scholarship conference. Michael Engelsbe, Seth Waits, and Bradley Reames developed a Twitter feed (MLearnSurgery) with nearly 500 followers. A manuscript will be submitted to a medical journal about the impact of the feed on students’ knowledge of, engagement with, and interest in surgery. Arno Kumagai, Jennifer Stojan, and Eleanor Sun investigated the long-term impact of patient narrative-based learning on physician attitudes regarding patient care. This project has been submitted to the American Association of Medical Colleges annual meeting.

CRLT staff began working with the education executive committee in anesthesiology to assess faculty development needs with respect to clinical teaching. A presentation to the committee was made after surveying faculty. Department of Psychiatry.

**Music, Theatre & Dance**
CRLT staff consulted with Mark Clague, recipient of a 2013-2014 Investigating Student Learning Grant, on his project examining the design and efficacy of dynamic, multi-media learning texts with interactive study and assessment tools.

**Nursing**
CRLT staff consulted with Michelle Aebersold and Dana Tschannen, recipients of a 2013-2014 Investigating Student Learning Grant, on their project investigating the use of blogs in nursing education. CRLT highlighted this project locally at the poster fair opening U-M’s 2014 Enriching Scholarship conference. It will also be presented at the Annual Sloan Consortium International Conference on Online Learning in October 2014.

CRLT staff evaluated the Second Career Nursing Program by conducting a student survey, a focus group with students and another with faculty. In
a separate project, feedback on survey design and assistance with the development of an assessment plan were provided for the Clinical Learning Center, where students gain hands-on practice through online and in-person simulations. CRLT helped to disseminate the center’s best practices through a blog post and assistance with a multimedia TEDx presentation.

**Pharmacy**
Barry Bleske received a 2014-2015 Investigating Student Learning Grant to determine if learning outcomes are significantly different between lecture and team-based learning in a prospective randomized crossover study. He participated in the 2014 ISL Symposium and had individual consultations with CRLT staff about his project.

**Provost’s Office**
CRLT staff began assisting with evaluation of Transforming Learning for a Third Century (TLTC) grants. (See p. 9.)
In support of the learning analytics task force’s subcommittee on student ratings, CRLT gathered data from faculty and administrators through multiple focus groups and interviews. Portions of the summary report were presented in the fall 2013 SLAM Speaker Series. (See p. 14).

**Public Health**
CRLT staff conducted three focus groups in support of an evaluation of the Genomic Sciences Training Program.
CRLT staff provided feedback on a manuscript and assistance with a poster to Kelley Kidwell, recipient of a 2013-2014 Investigating Student Learning Grant. Her project validated a survey that measures student learning of statistics concepts. The manuscript is under review for the *Journal of Clinical and Translational Science*, and the research will be presented at the 2015 Joint Statistical Meetings. CRLT highlighted this project at the poster fair opening U-M’s 2014 Enriching Scholarship conference.

**Public Policy**
CRLT staff consulted with the dean and conducted focus groups to gather detailed information about student experiences with climate and diversity in the classroom and community. Information from these focus groups framed discussions with faculty, staff, and students.

**Social Work**
CRLT staff consulted with three recipients of the 2013-2014 Investigating Student Learning Grants and highlighted their projects at the poster fair opening U-M’s 2014 Enriching Scholarship conference. Berit Ingersoll-Dayton evaluated the experiential learning of social work students as they engage in an aging-related research intervention as part of the Couples Life Story Project. Katherine Richards-Schuster and Mary Ruffolo analyzed eportfolios and civic engagement for their assessment of the school’s minor, Community Action Social Change. The research was presented at the annual conference of the Association for Authentic, Experiential and Evidence-Based Learning.

In support of Leslie Hollingsworth’s 2013 Council on Social Work Education Conference presentation, “Teaching an Africentric Approach to Practice,” CRLT staff assisted with statistical analysis.

**CRLT Research**
Over the past several years, CRLT has expanded its research efforts, and CRLT staff members (including associate and assistant research scientists and a research associate professor) are pursuing several projects on teaching and learning topics of particular relevance to faculty and graduate students at U-M.

**Image-Based Active Learning**
CRLT staff worked with Arthur F. Thurnau Professor Melissa Gross (kinesiology and art and design) on a research project for the Echo360 Active Learning Grants Program that compared the effects of image- and text-based activities on exam performance. By controlling for a previously
overlooked variable of cognitive processing time, the researchers found image-based active learning to be significantly correlated with improved exam performance. Further, students reported that in-class image-based activities presented less cognitive load than text-based exercises, although both types of practice were found to be helpful for exam preparation. The research was presented at the 2013 Learning Analytics and Knowledge Conference, and a manuscript is being prepared for submission to the *Journal of College Science Teaching*.

**Impact of Student-Generated Tests**

In a research project for the Roy H. Roberts Award for Excellence and Innovation in Teaching Grant, CRLT staff worked with professors Carlos Gonzalez-Cabezas and Margherita Fontana in dentistry to evaluate tests generated by students using Google Docs. They found that student-developed tests resulted in higher-level cognitive questions and improved student performance compared to instructor-generated exams. The project was presented at the 2014 American Dental Association conference, and a manuscript is under preparation for the *Journal of Dental Education*. This project has broader implications for faculty who want to use Google collaborative tools or student-generated assessments.

**Administrative Supports for Successful Faculty Team Pedagogy Transitions**

Since 2010, CRLT has been collaborating with pharmacy regarding the pedagogy used in the therapeutics course sequence. Initial consultations led to the gathering of mid-semester student feedback from the first cohort of students experiencing team-based learning. Selection of topics for continuing professional development for faculty in this course sequence was guided by student feedback. After the initial cohort completed the curriculum, CRLT staff conducted focus groups with pharmacy faculty who used team-based learning. The researchers sought to identify best practices for supporting a cohort of faculty as they convert to a pedagogy that is new to them. In addition to consistent communication from the college’s administration about the importance of the initiative, the facilitation of periodic, customized workshops over three years gave faculty time and a supportive structure for collaborating with their peers to develop new materials. As a result of the program, more than 20 instructors who do not otherwise see their colleagues on a regular basis are now using the same pedagogy across five courses. An article has been accepted for publication in the journal *Currents in Pharmacy Teaching and Learning*.

**Impact of Provost’s Teaching Innovation Prize (TIP)**

Teaching awards have become part of institutional reward systems as one strategy for promoting teaching excellence. However, results are at best mixed when it comes to assessing how effectively teaching awards accomplish this aim. Part of the problem may be that the goals and selection criteria for most teaching awards are very broad, and thus usually end up recognizing instructors’ overall teaching excellence, rather than encouraging them to innovate in ways that can be replicated by others.

Over the past six years, CRLT has administered a teaching award competition that is atypical in that each year it honors five original, specific projects to improve student learning. Additionally, care is taken to publicize the winning innovations in campus newspapers, through a poster fair, and on the web. In 2013-2014, CRLT staff surveyed and interviewed faculty members and teams behind the 25 winning innovations in order to learn what impact the $5,000 prize had on recipients’ teaching, research, and professional growth.

Findings indicate that TIP sends a strong message to the university community that U-M values teaching and positively impacts faculty members’ professional growth. One faculty member stated, “When you get an article published in a peer-reviewed journal, everyone acknowledges it. So this
is the equivalent of that kind of peer review for teaching.” With respect to professional growth, winning the prize supports further exploration of new and innovative approaches to teaching, and about half of the faculty recipients now engage in scholarly inquiries about teaching and student learning and publish educational research studies, along with their disciplinary work.

Student Mental Health
As part of the development of a new CRLT Players sketch commissioned by the College of Engineering, CRLT staff conducted research on the challenges instructors face in responding responsibly to student mental health concerns. Research included interviews with representatives of various groups at U-M: mental health professionals, support staff, university administrators, and faculty. The results led to the creation of a series of trigger vignettes which depict a range of ways instructors might encounter student mental health concerns in academic settings. Through engagement with these scenarios, instructors will be asked to: 1) proactively consider how they might respond to students facing mental health challenges, 2) assess their own comfort in engaging students in conversations about mental health, 3) familiarize themselves with information important to understanding how mental health issues affect students, 4) learn how to most effectively connect students with campus and community mental health resources, and 5) discuss strategies for cultivating classroom climates that reduce stigma around mental health issues. These vignettes will be previewed for audiences in engineering and LSA in December 2014, with plans for a broader roll-out in 2015.

Impact of Rackham-CRLT Preparing Future Faculty (PFF) Seminar
Using aggregated job placement data from Rackham Graduate School and survey data, this research looked at the career trajectories and attitudes of two groups of U-M graduate students and postdocs. It compared graduate students who participated in an annual, intensive, 10-session PFF seminar between 2007 and 2013 with applicants who were not accepted to the program. The study explored the following three research questions: 1) Does participating in the PFF seminar increase the likelihood that participants will secure an academic position? 2) Does the exposure to a variety of institutional types in the PFF seminar lead to a greater appreciation of and openness to job opportunities at diverse institutional types? 3) Does the PFF seminar assist graduate students in their job searches and their chosen career paths and if so, how?

Assessing the PFF seminar at the University of Michigan contributes to understanding what universities can do to effectively prepare graduate students for their future careers. Findings will be shared with Rackham and submitted for publication in 2014-2015.

Active Learning, Student Resistance, and Faculty Change
A three-year grant from the National Science Foundation’s Widening Implementation and Demonstration of Evidence-Based Reports (WIDER) program is funding a study of the ways that engineering students’ expectations regarding classroom pedagogy may be violated by innovative teaching approaches. Methods used in this multi-institution collaboration with Virginia Tech, Western Michigan University, Bucknell University, and North Carolina Agricultural and Technical State University include a series of faculty and student focus groups, classroom observations, and faculty and student surveys. The end goal of the work is a set of best practices to aid instructors in aligning their own expectations with those of their students, thereby lowering student resistance.

Faculty Teaching Practices That Support Student Success
In its fourth year, this NSF-funded project is designed to promote substantive and sustained changes in teaching practices in order to improve student success and support a diverse student
body in engineering. Work on the project in 2013-2014 consisted of data analysis and dissemination. Based on an analysis of student surveys, a paper was presented at the 2013 ASEE conference on factors that influence faculty motivation to adopt effective teaching practices in engineering. Additionally, an article was published in the *Journal of Engineering Education’s* special issue on the complexities of transforming engineering higher education. The research also informs the evidence-based teaching circles organized by CRLT-Engin. (See p. 16 for more information about CRLT’s faculty learning communities.)

**Engineering Education Research Taxonomy**

Funded by NSF, this two-year project is bringing together members of the engineering education research community to develop and refine a taxonomy (i.e., a keyword outline) for engineering education research. The final taxonomy is designed for use by researchers (as they identify their areas of research and plan future work), by funding agencies like NSF (as they consider their portfolio and identify priority areas), and by journal editors (as they decide how submitted articles align with their journal’s interests). Work on the grant in 2013-2014 included maintenance of a project website and successive refinements of the draft taxonomy during workshops held at four major conferences in 2013: the American Society of Engineering Education (ASEE) in Atlanta, the Research in Engineering Education Symposium (REES) in Malaysia, the European Society for Engineering Education (SEFI) in Belgium, and the Frontiers in Education (FIE) in Oklahoma City. To date, more than 220 participants from 30 different countries have engaged with the taxonomy. The sixth and current version includes 14 categories and five levels of organization for 452 terms and is considerably streamlined from the initial version that consisted of 1,079 keywords arranged in 13 branches and seven levels.

**Engineering Graduate Student Instructors’ (GSIs’) Perceptions of Ongoing Professional Development**

This study looks at the impact of three different types of pedagogical professional development opportunities on new engineering GSIs’ satisfaction with their required training and confidence in their teaching abilities. After an initial orientation that provides training on best practices for learning and teaching and creates awareness of classroom climate issues, new GSIs have three choices for ongoing professional development training during the ensuing semester: 1) participating in advanced practice teaching (APT), which entails viewing short, online podcasts about active learning and preparing a 10-minute lesson for presentation to a small group of peers; 2) attending an eligible seminar offered by CRLT-Engin or CRLT and submitting a written reflection; or 3) scheduling a midterm student feedback (MSF) and submitting a written reflection.

Regardless of the option chosen, almost all GSIs (90%) agreed their choice was helpful. Electing the MSF option resulted in higher confidence in preparing teaching materials, while choosing APT resulted in higher confidence in ability to promote student participation. GSIs in both groups reported stronger beliefs that their teaching influences student learning than did GSIs who attended a seminar.

Quantitative results of the research were presented at the annual CRLT-Engin engineering education research poster fair. Qualitative coding is ongoing.
Appendix A: Grants and Awards

Competitions

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 2014, five teaching innovations were chosen from among 75 faculty nominees. Winning faculty received a $5,000 award for their original approaches to teaching and creativity in the classroom.

Provost’s Teaching Innovation Prize Recipients, Winter 2014

1. Davoren Chick, Internal Medicine
   Caringwithcompassion.org: A Comprehensive Training Portal for Clinicians Serving At-Risk Populations

2. Sherif El-Tawil, Civil and Environmental Engineering
   Dancing with Steel Girders: Interacting with 3-D Representations of Buckling Columns in Virtual Reality

3. Mark Moldwin, Atmospheric, Oceanic and Space Sciences
   Doing Science Firsthand Through Dorm-Room Labs

4. Steve Yalisove, Materials Science and Engineering
   Dropping Lecture and Summative Exams to Accelerate Deep Learning

5. Anne McNeil, Chemistry
   Trailblazing With Wikipedia: Improving Student Learning and Easing Implementation

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 revisions to courses or innovative course development (e.g., interdisciplinary courses) or who initiate other projects that improve the learning of a relatively small number 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.

Faculty Development Fund Recipients, Winter 2014

1. Mary Blazek, Psychiatry
   Keep Psychiatry in Mind: Integrating Psychiatry into the General Medical Curriculum with Emails

2. Eric Cook and Judy Lawson, Information
   Building Active and Multicultural Teaching Strength for Student Learning Today and Future Faculty Tomorrow

3. Timothy Corvidae, Center for Global and Intercultural Study
   Leveraging Online Technologies to Facilitate Intercultural Learning with Students Studying Abroad
4. Susan Dynarski, *Education Policy Initiative*  
   Action-Based-Learning Redesign: Quantitative Methods of Program Evaluation

5. Melissa Gross, Peter Bodary, and Scott McLean, *Movement Science*  
   Muscle Function as Thread: Stitching Together the Kinesiology Curriculum Using Shared Digital Resources in Required Core Courses

6. Susan B. King, *Health Behavior and Health Education*  
   Change Agents for Transforming Society (CATS)

7. Joshua Mergos, *Movement Science*  
   Creation of Integrated Surgical & Neurophysiologic Video Data Streams to Enhance Student Visual Learning

8. Dana Muir, *Business Law*  
   Ross - Integrative Core Course Semester

9. Sonal Owens and David Werho, *Pediatrics*  
   Observed Structured Teaching Encounters (OSTEs) to Improve Pediatric Cardiology Faculty and Fellow Teaching Skills

10. Petros Papagerakis, *Dentistry*  
    Integrating Case Studies into the Dental School

11. Becky Peterson and Fred Terry, *Electrical Engineering and Computer Science*  
    Advanced Modeling of Electronic Devices to Enhance Student Learning in EECS

    Interactive Web-Based Module Creation to Improve the Social Work Evaluation Course

**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. Through Fall 2012, the competition entailed two stages. After securing Stage I funding, grantees had a two-year window to compete for Stage II awards. The last Stage II competition for grants of up to $15,000 will be held in Fall 2014, honoring the terms of competition for the Fall 2012 Stage I grantees.

Fall 2013 marked the transition to a single-stage competition offering two levels of funding. Faculty can apply for up to $6,000 for smaller-scale projects or $10,000 for larger-scale, collaborative projects.

**Gilbert Whitaker Fund Recipients, Stage II, Fall 2013**

1. Catherine Walker Adams, *Musical Theatre*  

2. David Chesney, *Electrical Engineering and Computer Science*  
   Further Development of Games for Children with Cognitive and Physical Disabilities

3. Catherine Reischl and Debi Khasnabis, *Teacher Education*  
   Culturally Relevant Pedagogies for ESL Teachers: Refining, Extending and Disseminating Promising Practices in the Scarlett Middle School Summer ESL Program
Gilbert Whitaker Fund Recipients, Fall 2013

1. Glenn Fox and Kathleen Alsup, Medical Education
   A Better Anatomy Experience Through Small Team Multimedia Production
2. Pinderjeet Gill, Asian Languages and Cultures
   Using Film to Teach Language and Culture: Punjabi
3. Lesli Hoey and Harley Etienne, Urban and Regional Planning
4. Megan Holmes, History of Art
   Course on Interdisciplinary Approaches to the Mediterranean
5. Michael Hortsch, Cell and Developmental Biology; Kelli Sullivan and John Stribley, Medical Education
   Developing SecondLook Computer Tablet Applications – Interactive Self Evaluation Tools for Learning the Anatomical Sciences
6. Victor Li, Civil and Environmental Engineering; Kathy Velikov, Architecture; and Daniel Soltan, Macromolecular Science and Engineering
   Experiential Learning in a Class with Diverse Audience
7. Kenn Oldham, Mechanical Engineering; Thomas Bowden and Kelly Rohan, Technical Communication
   Increasing and Assessing Technical Argument Integration into Mechanical Engineering ME395 Laboratory 1 via Writing Workshops and Report Review
8. Marianetta Porter and Michael Rodemer, Art and Design
   Flipping Foundations
9. Haiqing Yin, Asian Languages and Cultures
   Instructional Technology Tools for Strengthening Listening, Speaking, and Writing Skills in Second-Year Chinese

Internationalizing the Curriculum Grant

The University of Michigan prepares its students for lives of significant international engagement. In line with this mission, and with support from the offices of the vice provost for international affairs and the senior vice provost for academic affairs, CRLT awards two-year grants for courses and curricular initiatives that expand and enrich international themes. Grant awards up to $10,000 are made to individuals or groups of faculty for course or curricular development. Funded courses must be taught in two sequential academic years. Grantees collaborate with a CRLT consultant to gather feedback and assess the course.

Internationalizing the Curriculum Grant Recipients, Winter 2014

1. A. Oveta Fuller, Microbiology and Immunology
   Global Impact of Microbes: Fieldwork
2. Larry Gant, Social Work
   Internationalizing Cohort-based Community Practice Programs in the School of Social Work: The Case of the Community Based Initiative
3. Anita Gonzalez, *Theatre*
   Program Enhancement and Curriculum Integration for Global Theatre and Ethnic Studies Minor

4. Angela Kane, *Dance*
   Transatlantic Connections: Restaging Richard Alston’s Choreography

5. Jason Villano, *Unit for Laboratory Animal Medicine*
   Achieving Competency in Global Laboratory Animal Science

**Investigating Student Learning Grant**

Now in its seventh year, 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 spring 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 $3,000 are available to individual faculty members, and awards of $4,000 are available to faculty member-graduate student/postdoc teams.

**Investigating Student Learning Grant Recipients, Winter 2014**

1. Mary Blazek, *Psychiatry*
   Keep Psychiatry in Mind: Integrating Psychiatry into the General Medical Curriculum with Emails

2. Barry Bleske, *Pharmacy*
   A Randomized Comparison Between Team Based Learning and Standard Lecture Format on Learning Outcomes

   Assessing the Impact of Cross-Disciplinary, Project-Focused, Action-Based Immersive Learning Experiences in Healthcare and Engineering

4. Matthew Collette, *Naval Architecture and Marine Engineering*
   Student Synthesis of Complex, Virtual Design Artifacts: What Factors Make a Difference

5. Aline Cotel, *Civil and Environmental Engineering*
   Towards a Global Virtual Community of Female Engineering Students and Professionals

6. Brian Gilchrist, *Electrical Engineering and Computer Science* and *Atmospheric, Oceanic and Space Sciences*
   Evaluating the Pre-Professional Engineer: Project Team and Individual Performance

7. Brenda Gunderson, *Statistics*
   Extension of the Problem Roulette Library to Include Student Contributed/Generated Solutions in Stats 250

8. Frank Marsik, *Atmospheric, Oceanic and Space Sciences*
   Evaluating the Effectiveness of “Engineering 290: Professional Skills for Engineers” on Improving the Technical Communications Proficiency, and Overall Self-Efficacy, of First-Term Undergraduate Engineering Transfer Students

9. Jackie Miller, *Statistics*
   ENgaging and Adapting Blended LEarning (ENABLE)
   Comparing Oral and Traditional Assessments in Math Content Courses for Pre-Service Elementary Teachers

11. Dimitrios Zekkos, *Civil and Environmental Engineering*
   Opening the Classroom to the Profession: Assessment of Web-Based Class Projects on Student Learning

**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 2013**

1. Philip D’Anieri, *Program in the Environment*
   Benton MacKaye and the Appalachian Trail

2. Vicki Dischler, *Germanic Languages and Literatures*
   Internship and Conference Attendance for New Course Proposal, *The Birth of Psychology*

   To Map a Hidden World: African American and Jewish Cooperation During the Age of Jim Crow -- Research Trip for a Forthcoming Book

4. Henry Greenspan, *Residential College*
   A Video of *Remnants*, My Play--Post-Production

5. Nick Harp, *English Language and Literature*
   “Mess, Wildness, and New Sight: Using the Journal in the Classroom.” A Panel Discussion to Occur at the Association of Writers and Writing Programs (AWP) Annual Conference in Seattle, WA, 2/14

6. Joseph Horton, *English Language and Literature*
   Diné Bizaad and English Composition

7. Peter Gavin LaRose, *Mathematics*
   Teaching with Technology, in the Presence of Life’s Challenges

8. Kathleen Lopez, *Social Work*
   Social Work in a Global Setting: Learning from the Hong Kong Model

9. Farzin Lotfi-Jam, *Architecture*
   [Collect], [Sort] + Plot

10. Okeoma Mmeje, *Obstetrics and Gynecology*

11. Kyongmi Park, *Asian Languages and Cultures*
    Improving Student Pronunciation: A Two-Step Self Evaluation for Non-Heritage Learners of Korean
12. Terri Sarris, *Screen Arts and Cultures*
   UFVA Conference

13. Stephanie Sheffield, *Technical Communication*
   Presenting at the Conference on College Composition and Communication Convention in March 2014 and the American Society of Engineering Education Annual Conference in June 2014

   Authenticy Reconsidered, II: Reconstructing a London Jewelers in the Shadow of the Rouge Plant

15. Nancy Thayer, *Art and Design*
   A Self Directed Residency in New Mexico and Arizona to do Creative Research and Curriculum Development Relating to Native American Traditions and Culture

16. Clark Thenhaus, *Architecture*
   Post-Military Infrastructure and Abandoned Sites: How to Re-Think, Re-Engage, and Re-Imagine

17. Matthew Thompson, *Voice and Music Education*
   Funding for Two Conferences: Wwise [sic] Software Training at GameSoundCon and Paper Delivery at the Inaugural North American Conference on Video Game Music

18. Cody Walker, *English Language and Literature*
   Funding for Two Conferences: Wwise [sic] Software Training at GameSoundCon and Paper Delivery at the Inaugural North American Conference on Video Game Music

   Professional Development at the Americas Hepato Pancreato Biliary Association Annual Meeting

20. Nina White, *Mathematics*
   Opportunities to Deepen Instructional Knowledge, Innovate Course Design, Discuss Pedagogy, and Form Professional Connections at the 2014 AMTE Conference

21. Claudia Wigger, *Architecture*
   High + LOw Dens(C)ities

22. Elaine Wisniewski, *Technical Communication*
   Attendance at Academic Conferences on Engineering Education and Technical Communication

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**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, 2013-2014**

1. Shandra Caylor, *Nursing*
   Enhancing Interprofessional Education Through a Virtual Simulation Pilot Study

2. Amy Chavasse, *Dance*
   Travel to Buenos Aires to Research Performance Practices, Dance Pedagogy and Attend Performances, Rehearsals and Lectures
3. Daniel Eisenberg, Health Management and Policy
   Enhancing Presentation Skills of Health Policy MPH Students

4. Andrew Herscher, Slavic Languages and Literatures
   Non-Governmentality: Designs, Cultures, Politics

5. Michael Hopkins, Music Education
   21st Century Music Education Clinics with Julie Lyon Lieberman

6. Jamie Jones, Sweetland Center for Writing and English Language and Literature
   Interpreting Maritime History Through Performance: Hosting Classroom Guest Performer & Speaker
   Glenn Gordinier

7. Heidi Kumao, Art
   Professional Practices Workshop with Curator Julie Lazar

8. Dae Hee Kwak, Sport Management
   Collaboration with a Professional Sports Organization: Creating new Sponsorship Inventory for the
   Detroit Tigers

9. Sara McClelland, Women’s Studies
   Development of a Course Assignment Using the Labadie Collection

    Joint Community Project to Assess Food Availability and Procurement in Southeast Grand Rapids

11. Markus Nornes, Screen Arts and Cultures
    New Course on Film Translation

12. Andrea Siegel, Judaic Studies
    Guest Participants in "Medical Humanities and Jewish Studies" (JUDAIC 318/517)

13. Lisa Steichmann, Art and Design
    Photographic and Encaustic Processes Workshop

14. Melanie Tanielian, History
    Holocaust Memorial Center Field Trip

15. Matthew Thompson, Voice and Music Education
    Video Game Music Industry Expert Interview Honoraria

16. Annemarie Toebosch, Germanic Languages and Literatures
    Anne Frank Tree Exhibit

17. Martin Walsh, Residential College
    Corsica Project (7-12 November)

    The History and Evolution of Hip Hop

19. Claudia Wigger, Architecture
    Vertical Cities Asia Competition "Everyone Connects"

20. Emily Wilcox, Asian Languages and Cultures
    Workshops in Chinese Medicine and Chinese Opera for First-Year Seminar "China in Ten Words"
Appendix B: Customized Services for Schools, Colleges, and Other Units at U-M

CRLT responds to units based on their particular teaching and learning needs. Services include support for assessment of student learning, customized seminars and retreats, support for unit-wide graduate student instructor (GSI) training, consultations offered to individual faculty at the request of a specific unit, and consultations with deans and chairs focusing on unit-wide activities. CRLT provided close to 5,000 services for 18 of U-M’s schools and colleges, as well as 17 other units, including the president’s and provost’s offices.

Discipline-Specific Services for U-M Schools, Colleges, and Departments

Architecture and Urban Planning

* Facilitation of workshop on teaching collaboration effectively with student groups
* Grants for professional development received by Lotfi-Jam, Thenhaus, and Wigger
* Grants for teaching innovation received by Etienne, Hoey, Velikov, and Wigger

Art and Design

* Assessment of and reporting on Stamps School of Art & Design international experience requirement for undergraduates, involving student surveys, focus groups, and analysis of artist statements. Results were distributed to Stamps leadership and presented externally at Forum on Education Abroad Conference.
* Grant for professional development received by Thayer
* Grants for teaching innovation received by Kumao, Porter, Rodemer, and Steichmann
* Provision of resources on curriculum mapping

Business

* Consultations with associate dean on course planning resources for faculty
* Grant for teaching innovation received by Muir
* Planning, facilitation, and evaluation of a teaching academy for newly hired faculty, in consultation with associate dean, including classroom observations, workshop on case-based teaching, and reunion meeting in the winter term
* Organization, implementation, and evaluation of a teaching academy for newly hired faculty

Dentistry

* Assistance with Roy H. Roberts Award for Excellence and Innovation in Teaching Grant examining the impact of student-generated assessments
* Assistance with the Education Innovation Grant (orthodontics) and designing an active learning training session after receiving the grant
* Consultation with master’s students about thesis projects
* Consultations on evaluation of D1 cariology sequence and assistance with data collection and analysis.
* Evaluation of online learning modules on diabetes and oral health
* Grant for teaching innovation received by Papagerakis
* Multiple consultations and development of surveys to assess alignment between pre-clinical and clinical teaching in the prosthodontics curriculum
* Presentation of a workshop on facilitating discussions and small group teaching
* Teaching academy for newly hired faculty in health science disciplines

**Education**

* Consultation on diversity initiatives
* Grant for teaching innovation received by Khasnabis and Reischl
* Hiring and mentoring of a graduate student intern from the Center for the Study of Higher and Postsecondary Education (CSHPE)
* Meetings with prospective and current graduate students
* Participation in CSHPE faculty meetings
* Participation in CSHPE orientation for new students

**Engineering**

* Assistance with evaluation of teaching initiative that gives graduate students the opportunity to develop and implement curriculum on fundamental engineering skills
* Coordination of presentation on research for the Engineering Education Research: Works in Progress series
* Development and facilitation of one-and-a-half day teaching orientation program for new engineering faculty
* Grants for professional development received by Sheffield and Wisniewski
* Grants for teaching innovation received by Bowden, Chesney, Cohn, Collette, Corel, El-Tawil, Gilchrist, Li, Marsik, Moldwin, Oldham, Peterson, Rohan, Soltan, Terry, Yalisove, and Zekkos
* Hiring, training, and supervision of engineering teaching consultants (ETCs)
* Interactive theatre performance for faculty on navigating departmental politics
* Interactive theatre performance for fall and winter GSI orientations on how gender influences teaching and learning in an introductory science course
* Interactive theatre performance on climate issues as they emerge between graduate students and faculty advisors for the Expect Respect Program
* Interactive theatre performance on how gender and faculty rank influence dynamics and the decision-making process of tenure committees for chairs
* Interactive theatre performance on navigating departmental politics for faculty
* Ongoing consultation with the associate deans about CRLT-Engin initiatives for faculty and GSIs
* Organization and facilitation of a customized GSI training program prior to the start of classes for the fall 2013 and winter 2014 terms, including theatre performance, and advanced practice teaching sessions
* Organization and facilitation of a customized training program for instructional aides (IAs) in the fall 2013 and winter 2014 terms
* Organization of an annual poster fair for faculty and GSIs showcasing scholarship and research in engineering education
* Organization of the college’s Richard and Eleanor Towner Prize for Outstanding Graduate Student Instructors, including the nomination, selection, and publicity processes
* Organization of two iterations of a teaching circle on teaching large courses
* Oversight of the Rackham Certificate in Engineering Education Research program
* Presentations on ethics and student teams for ENG 580, Teaching Engineering
* Workshop for faculty: Design skills of future engineers
* Workshops for ETCs on observing classes, midterm student feedback, practice teaching, strategies for working with GSIs, consulting with GSIs, and research in engineering education
* Workshops for faculty: getting started with scholarship of teaching and learning, motivating students to want to learn, improving design skills of future engineers, peer instruction, student teams and gender stereotypes, tools for managing student teams, navigating concerns about student mental health
* Workshops for graduate students and postdoctoral scholars: generating active learning plans, teaching philosophy statement, advice from experienced GSIs, seven simple strategies to improve teaching, spicing up teaching to improve student learning, teaching for student retention in engineering

**Information**

* Consultation on GSI/lecturer training
* Design and implementation of a faculty workshop on teaching with cases
* Development of evaluation plan for Third Century Initiative Discovery Grant, "Citizenship Design Experience"
* Facilitation of workshop on engaging student diversity as an asset
* Grant for teaching innovation received by Cook and Lawson

**Kinesiology**

* Assistance accessing data about course grade correlations for key course pairs in the movement science curriculum
* Collaboration on research supported by the Echo360 Active Learning Grants Program, “Effects of Image-Based and Text-Based Activities on Student Learning Outcomes”
* Consultations with movement science to plan curriculum revisions, retreats and program objectives
* Evaluation of Michigan Access Program pre-orientation for incoming 1Ls
* Grants for teaching innovation received by Bodary, Gross, Kwak, McLean, and Mergos
* Teaching academy for newly hired faculty in health science disciplines

**Law**

* Development of two evaluation plans for associate dean to assess outcomes of two new 1L curricular change initiatives
* Presentation for international teaching fellows on effective classroom communication

**Literature, Science, and the Arts**

- **Afroamerican and African Studies**
  * Creation and presentation of interactive theatre performance on the handling of classroom dynamics, especially as they relate to race
  * Faculty workshop on teaching community engagement
  * Grant for professional development received by Ellsworth
  * Grant for teaching innovation received by Ward
  * Organization of Faculty Dialogues Dinner

- **American Culture**
  * Organization of Faculty Dialogues Dinner
• **Asian Languages and Cultures**
  * Assistance with data analysis and poster design for ISL project on “A Two-Step Evaluation for Non-Heritage Learners of Korean”
  * Development and facilitation of workshop on exam design for language lecturers
  * Evaluation of Japan Foundation grant for creation of Japanese studies MA fellows programs and undergraduate immersive learning experiences
  * Facilitation of focus group for lecturers to plan professional development workshop
  * Grant for professional development received by Park
  * Grants for teaching innovation received by Gill, Wilcox, and Yin

• **Biology**
  * Training for undergraduate teaching assistants

• **Center for Global and Intercultural Study**
  * Grant for teaching innovation received by Corvidae

• **Chemistry**
  * Grant for teaching innovation received by McNeil
  * Organization of luncheon for REBUILD postdoctoral scholars

• **Classical Studies**
  * Workshop on leveraging student diversity and handling difficult moments for faculty and GSIs

• **Communication**
  * Coordination of early feedback for all new GSIs
  * Participation in a departmental brownbag discussion on the flipped classroom
  * Presentation and workshop on diversity and inclusion for departmental faculty meeting

• **Comparative Literature**
  * Workshop for GSIs on preparing to teach

• **Comprehensive Studies Program**
  * Evaluation of the program, involving two large surveys of alumni and current students, four focus groups with current students, one discussion with alumni, four discussions with staff and instructors, and analysis of registrar data; report submitted to the CSP Futures Task Force, in support of their comprehensive review for the LSA dean’s office

• **Dean’s Office**
  * Collaboration on Exploring Learning Analytics Grant to validate and develop U-M assessment tools (UMAY Survey) and to disseminate results to LSA departments
  * Collaboration with English Language Institute to develop and facilitate a three-week intensive course in August 2013 and a winter 2014 course for graduate students educated abroad in languages other than English who plan to have GSI appointments in LSA, including interactive theatre performances for GSIs about gender climate issues in the classroom
  * Consultations about assessment
  * Coordination and facilitation of the LSA Large Course Initiative
* Design and presentation of a faculty institute on dialogue and dialogue skills in collaboration with IGR for faculty in Afroamerican and African studies, American culture, anthropology, comparative literature, English, environment, history, Michigan Community Scholars Program, organizational studies, psychology, residential college, romance languages and literatures, screen arts and cultures, sociology, women's studies, art & design, music, and theatre
* Development and facilitation of a teaching academy for all new assistant professors in the college, including a two-day orientation, facilitation of midterm student feedback sessions, facilitation of peer observation of senior colleagues, and a final program on teaching issues arising in the first year of teaching
* Facilitation of session on classroom practice and discussion for LSA Diversity Institute
* Facilitation of session on testing and assessment issues for LSA Diversity Institute
* Interactive theatre performance on climate issues as they emerge between graduate students and faculty advisors for chairs and directors
* Interactive theatre performance on navigating departmental politics for faculty across ranks
* Interactive theatre performance on sexual harassment for chairs, directors, and associate graduate chairs
* Organization and facilitation of GSI orientation training programs prior to fall 2013 and winter 2014 terms, including theatre performances
* Planning and implementation of a faculty learning community for engaging students in large courses in fall 2013 and winter 2014 terms
* Session for faculty GSI coordinators and GSMs to share strategies on GSI training
* Training for all incoming GSIs about sexual harassment, using interactive theatre performances
* Workshop training practice teaching facilitators for GSI teaching orientations
* Workshops for GSMs and GSI coordinators about observing classes, midterm student feedback, practice teaching, strategies for working with GSIs, and consulting with GSIs, session for faculty GSI coordinators and GSMs to share strategies on GSI training

- **Economics**
  * Interactive theatre performance on climate issues as they emerge between graduate students and faculty advisors for faculty and graduate students

- **English Language and Literature**
  * Consultation on potential designs for an English Faculty Large Course Teaching Institute
  * Grants for professional development received by Harp, Horton, and Walker
  * Grants for teaching innovation received by Jones
  * Organization of Faculty Dialogues Dinner

- **English Language Institute**
  * Collaboration on 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, including interactive theatre performance on conflict in the classroom

- **Environment, Program in the**
  * Grant for professional development received by D’Anieri
  * Coordination of midterm student feedback for new GSIs

- **Germanic Languages and Literatures**
  * Grant for professional development received by Dischler
  * Grant for teaching innovation received by Toebosch
• **Health Sciences Scholars Program**  
  * Consultation on HSSP survey for program assessment

• **History**  
  * Facilitation of departmental faculty retreat session on diversity and climate in the department  
  * Grant for teaching innovation received by Tanielian  
  * Organization of Faculty Dialogues Dinner  
  * Participation in midterm check-in meeting with History 195 instructors  
  * Workshop for GSI for inclusive teaching  
  * Workshop for History 195 GSI for teaching introductory courses

• **History of Art**  
  * Grant for professional development received by Taylor  
  * Grant for teaching innovation received by Holmes

• **Institute for Research on Women and Gender**  
  * Interactive theatre performance on navigating departmental politics for female faculty group

• **Institute for the Humanities**  
  * Collaboration on development of a certificate for graduate student instructors on the use of digital media, including focus groups with humanities graduate students

• **International Institute**  
  * Assistance with evaluation plans for 15 Title VI grants

• **Judaic Studies**  
  * Grant for teaching innovation received by Siegel  
  * Survey of students’ course choices and academic plans; presentation of findings and recommendations to executive committee

• **Linguistics**  
  * Assistance with evaluation of NINJ Grant (Ling 111, flipped classrooms)

• **Mathematics**  
  * Grants for professional development received by LaRose and White  
  * Grant for teaching innovation received by Visscher and White  
  * Interactive theatre performance about gender in the classroom as part of the orientation program for instructors teaching introductory calculus

• **Michigan Community Scholars Program**  
  * Co-ordination to form planning and advisory committees to create a three-university community engagement corridor and consultation on design of an event to launch such a corridor

• **Near Eastern Studies**  
  * Interactive theatre performances on mentoring graduate students for faculty and graduate students  
  * Meeting with curriculum committee on engaging students effectively  
  * Organization of Faculty Dialogues Dinner  
  * Workshop on enhancing courses and student engagement

• **Philosophy**  
  * Assistance with analysis of students’ course-taking patterns using registrar data  
  * Workshop for GSI on course design
• **Physics**
  * Assistance with identifying resources on student mentoring
  * Collaboration on manuscript published in *Change* to disseminate Next Generation Learning Grant findings
  * Facilitation of learning community to explore expanding E2Coach system (tailored advice for undergraduates) beyond physics (Personalizing Education at U-M)

• **Psychology**
  * Organization of Faculty Dialogues Dinner
  * Presentation about CRLT services at departmental graduate student orientation

• **Residential College**
  * Grant for professional development received by Greenspan
  * Grant for teaching innovation received by Walsh
  * Presentation on diversity and inclusion and facilitation of discussion at departmental faculty meeting

• **Romance Languages and Literatures**
  * Organization of Faculty Dialogues Dinner

• **Science Learning Center**
  * Assistance with data analysis for evaluation of center

• **Screen Arts and Cultures**
  * Grant for professional development received by Sarris
  * Grant for teaching innovation received by Nornes

• **Slavic Languages and Literatures**
  * Grant for teaching innovation received by Herscher

• **Sociology**
  * Evaluation plan for NIH R-25 grant
  * Interactive theatre performance on mentoring graduate students for graduate students
  * Interactive workshop on conflict in the classroom for first-year graduate students
  * Organization of Faculty Dialogues Dinner
  * Presentation on diversity and inclusive teaching, facilitation of discussion at departmental faculty meeting, and consultation on follow-up plans

• **Statistics**
  * Grants for teaching innovation received by Gunderson and Miller

• **Sweetland Center for Writing**
  * Grant for teaching innovation received by Jones

• **Women’s Studies**
  * Grant for teaching innovation received by McClelland
  * Organization of Faculty Dialogues Dinner
**Medicine**

- Consultation on EM-PACE program, and collaboration to prepare and support PIBS students to develop university teaching skills in an international context
- Consultation with Englesbe ISL team
- Facilitation training for M4s regarding mistreatment in clinics (teaching policies, issues, and options)
- Grants for professional development received by Mmeje and Warner
- Grants for teaching innovation received by Alsup, Blazek, Chick, Fox, Fuller, Hortsch, Macy, Owens, Stribley, Sullivan, Villano, and Werho
- Interactive theatre performance for new faculty on critical thinking in the clinic
- Interactive theatre performance on breaking bad news for the Cancer Center
- Interactive theatre performance on climate issues as they emerge between graduate students and faculty advisors for graduate students in the Program in Biomedical Sciences
- Interactive theatre performances about faculty advising faculty
- Interactive theatre performances on breaking bad news for third-year medical students
- ITC grantee survey design and administration
- Provision of resources on CRLT programs and services at faculty orientation
- Teaching academy for newly hired faculty in health science disciplines

**Music, Theatre and Dance**

- Grant for professional development received by Thompson
- Grants for teaching innovation received by Adams, Chavasse, Gonzalez, Hopkins, Kane, and Thompson
- Presentation for DMA students on developing their teaching philosophies

**Natural Resources and Environment**

- Coordination of feedback for all new GSIs
- Facilitation of student focus groups and participation on a steering committee to support design of student website funded by a Quick Wins grant

**Nursing**

- Consultations on distance and online learning teaching strategies and technologies
- Grant for teaching innovation received by Caylor
- Teaching academy for newly hired faculty in health science disciplines

**Pharmacy**

- Grant for teaching innovation received by Bleske
- Teaching academy for newly hired faculty in health science disciplines
- Workshop for faculty on effective multiple choice questions

**Public Health**

- Grants for teaching innovation received by Eisenberg, King, and Meadows
- Teaching academy for newly hired faculty in health science disciplines
- Workshop on facilitating discussions for Public Health 200 GSIs
Public Policy

* Consultation with master’s policy requirement review committee
* Coordination of midterm student feedback for new faculty and faculty teaching in the core curriculum
* Facilitation of student focus groups on classroom climate
* Grant for teaching innovation received by Dynarski
* Planning and implementation of session on climate and diversity for faculty retreat

Rackham Graduate School

* Collaboration on development of a certificate for GSIs on the use of digital media
* Coordination and evaluation of the U-M Graduate Teacher Certificate Program, including reviewing portfolios and awarding certificates; leadership of advisory committee
* Facilitation of “What’s It Like?” a three-session series and website highlighting faculty worklife in different institutional contexts
* Facilitation of workshop “What’s It Like at CRLT?” as a requested follow up to Rackham’s “What Now?”
* Organization, implementation, and evaluation of the month-long Rackham-CRLT Seminar on College Teaching: Preparing Future Faculty for advanced doctoral students, including interactive theatre
* Organization, implementation, and evaluation of one-day Preparing Future Faculty conference
* Organization, implementation, and evaluation of the six-session program on Multicultural Facilitation for the Classroom for GSIs, with The Program on Intergroup Relations
* Organization, implementation, and evaluation of the Postdoctoral Short-Course on College Teaching in Science and Engineering
* Participation in Outstanding GSI Awards selection process and presentation of awards at ceremony
* Participation in program on alternative careers for graduate students
* Participation in Rackham New Graduate Student Orientation Resource Fair, fall and winter terms
* Participation in selection of U-M postdoctoral fellows at Oberlin and Kalamazoo Colleges and evaluation of the program

Social Work

* Consultation on options for supporting teaching skills of LEO faculty
* Grant for professional development received by Lopez
* Grants for teaching innovation received by Gant, Okasinski, and Ray
* Teaching academy for newly hired faculty in health science disciplines

Customized Services for Other Units at U-M

Career Center

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

Information Technology Services

* Collaboration on interactive session about rapid evaluation strategies for emerging instructional technology at the 2014 EDUCAUSE Learning Initiative Annual Meeting
* Debrief of Piazza evaluation results for participating faculty
* Evaluation of pedagogical use of Kaltura/Media Gallery tool including faculty interviews and student surveys
**Institute for Research on Women and Gender**

* Collaboration on planning for the Strategies Toward Excellent Practices in Departments program (STEP)
* Multiple interactive theatre presentations on how gender and faculty rank influence dynamics and the decision-making process of tenure committees
* Presentation at a faculty workshop, “Evaluating and Revising Challenging Courses”

**National Center for Institutional Diversity**

* Consultation with NCID on ways to address diversity issues on campus and beyond

**Office of the President**

* Organization and facilitation of three-week CRLT Fellows program for directors of teaching centers at three Chinese universities: Northwest University of Nationalities, Shandong University, and Sichuan University

**Office of the Provost and Executive Vice President for Academic Affairs**

* Collaboration on report and recommendations following the provosts’ seminar on community engagement corridor
* Consultation and review of faculty Internationalizing the Curriculum grant program applications
* Consultations on a plan to increase the number of community college transfer students
* Consultations on updating award materials given to Thurnau Professors
* Consultations with the student learning advisory committee (Provost’s Third-Century Initiative)
* Coordination of LPDF grants programs for LEO lecturers
* Coordination of meetings with a delegation from the Chinese Ministry of Education
* Coordination of reception honoring Lester Monts’ service as senior vice provost for academic affairs
* Coordination of sixth campus-wide Provost’s Teaching Innovation Prize in collaboration with the senior vice provost and the dean of libraries
* Discussion of diversity strategies with visitors from Chile
* Evaluation of Global Videoconferencing Program in collaboration with the Language Resource Center, including feedback sessions and faculty interviews in five courses
* Evaluation of Media Gallery video streaming tool
* Interactive theatre performance for the U-M community and the public about students with disabilities
* Meetings with campus stakeholders to discuss value of and possibilities for community engagement corridor
* Member, Diversity Council subgroups on climate issues raised at student town hall meetings
* Organization and facilitation of New Faculty Orientation, including interactive theatre performance
* Organization of campus-wide dinner for international faculty
* Organization of competition to select Thurnau Professorships
* Organization of competition to select U-M faculty for Michigan Distinguished Professor of the Year Award
* Organization of competition to select U-M faculty for U.S. Professors of the Year Award
* Organization of luncheon honoring 2014 Thurnau Professors
* Organization of Student Learning and Analytics at Michigan (SLAM) Seminar Series and Learning Analytics Fellows Program for Provost’s Learning Analytics Task Force, including event design, program evaluation, development of online resources, and writing of University Record article about SLAM series to publicize the initiative
* Organization, facilitation, and evaluation of Provost’s Campus Leadership Program (both orientation and monthly roundtables) for chairs and associate deans, including interactive theatre performances on working successfully with staff, handling difficult conversations, and mentoring junior faculty
* Participation in CEW’s campus-wide discussion of microaggression and strategies to improve diversity skills and campus climate
* Participation in committee developing strategies to maximize impact and input of “Citizen Alum” for U-M student learning, leading to TLTC grant application
* Participation in the discussion of creating and evaluating MOOCs
* Participation in Vice Provost and Associate Dean Group
* Participation on Diversity Council
* Planning and implementation of a Tri-Campus Provosts’ Seminar on the “Community Engagement Corridor,” a tri-campus collaboration among U-M, MSU, and Wayne State University (fall 2013)
* Planning and implementation of the Provost’s Seminar, “Engaging Difference” (winter 2014)

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
* Organization of Provost’s Teaching Innovation Prize and Investigating Student Learning poster session (for Enriching Scholarship)
* Seminars and workshops on technology and teaching

University Musical Society
* Consultation on UMS faculty development learning community
Appendix C: Collaborations and Committee Work

Collaboration with Other Units

Collaboration with other U-M offices is a key component of CRLT services. During 2013-2014, CRLT worked with all schools and colleges on teaching improvement projects. Additionally, CRLT collaborated with:

* Arts at Michigan
* The Career Center
* Center for Educational Outreach
* Division of Student Affairs
* Dual Career Services (Office of the Provost)
* English Language Institute (ELI)
* Ginsberg Center for Community Service and Learning
* Information Technology Services
* Language Resource Center
* LSA Instructional Support Services (ISS)
* LSA Student Academic Affairs
* Michigan Education Through Learning Objects (MELO) Community
* Multi-Ethnic Student Affairs (MESA)
* National Center for Institutional Diversity (NCID)
* Native Scholars Interdisciplinary Group
* News Service
* Office for Institutional Equity
* Office of Academic Multicultural Initiatives (OAMI)
* Sweetland Center for Writing
* Teaching and Technology Collaborative
* University Library

Committee Work

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

* Academic Services Board (ASB)
* Academy of Medical Educators Advisory Committee
* Advisory Board for Theatre Department’s production of Good Kids
* Arts at Michigan Course Connection Grant Review Committee
* Association of U-M Chinese Professors
* Collaborative Domain Group
* College of Engineering Towner Prize for Outstanding GSIs
* College of Engineering Undergraduate Education Team
* Committee in Support of First Generation Students
* Diversity Council
* Diversity Council Chairs Group
* Diversity Council Climate Data Working Group
* Diversity Council Co-Chairs Meetings
* Diversity Council Executive Committee
* Enriching Scholarship Keynote Committee
* Provost’s eLearning Task Force
* Provost’s Task Force on Engaged Learning
* Provost’s Teaching Innovation Prize Selection Advisory Committee
* Rackham Outstanding Graduate Student Instructor Awards Committee
* REBUILD
* School of Education Research Advisory Council
* STEP Planning Committee
* Teaching and Technology Collaborative Committee
* Teaching Evaluation Subcommittee of the Learning Analytics Task Force
* Thurnau Selection Advisory Committee
* Tri-Campus Provosts’ Seminar on Community Engagement Planning Committee
* U-M Graduate Teacher Certificate Advisory Committee
* U-M IT Alliance
* U.S. Professor of the Year Selection Committee
* Vice Provost and Associate Dean Group (VPADG)

External Committee Participation

* Committee on Institutional Cooperation (CIC) Assessment Group (M. Wright)
* Committee on Institutional Cooperation (CIC) Teaching Center Directors Group (M. Kaplan, M. Wright)
* External review committee for The Ohio State University Engineering Education Innovation Center (C. Finelli)
* Ivy Plus Consortium on Teaching (C. Cook, M. Kaplan)
* POD Core Committee (M. Wright)
* POD Electronic Communications and Resource Committee (R. Niemer)
* POD Finance Committee Chair (M. Wright)
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 2013-2014, CRLT provided 1,937 services to external clients who represent 179 colleges and universities, 31 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 multicultural teaching and learning into the work of a teaching center, and requests to use CRLT publications and web resources. Additionally, 732 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
† indicates institutions participating in CRLT’s faculty development program in Beijing

Colleges and Universities within the U.S.

Albion College*
American University
Arizona State University
Baypath College
Biola University
Brandeis University
Brown University
Cal Poly San Louis Obispo
Califonia Institute of Technology
Carnegie Mellon University
Central Michigan University
City University of New York
Columbia Basin Community College
Columbia University
Cornell University
DeVry University
Eastern Michigan University
Fairfield University
Florida International University
Georgia Institute of Technology*
Grand Rapids Community College
Grand Valley State University
Harvard University
Harvey Mudd College
Hunter College*
Indiana University*
Kansas State University
Kent State University
Kettering University*
Michigan State University*
Montana State University
New York University
Northeastern Ohio University of Medicine and Pharmacy
Northeastern University
Oakland University*
Oberlin College & Conservatory*
Olin College of Engineering*
Oregon State University*
Palm Beach Atlantic University
Pitzer College
Purdue College
Purdue University*
Rensselaer Polytechnic Institute
Rochester Institute of Technology
Rowan University
Siena Heights University
Stanford University
Syracuse University
Texas A&M University*
Texas A&M University–Corpus Christi
The Ohio State University
The Pennsylvania State University
University of Alaska
University of Arizona*
University of California, Berkeley
University of California, Irvine
Colleges and Universities within the U.S. (cont.)

<table>
<thead>
<tr>
<th>University of California, Los Angeles</th>
<th>University of San Diego</th>
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<tbody>
<tr>
<td>University of Colorado Boulder</td>
<td>University of Tennessee*</td>
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<td>University of Florida*</td>
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<td>University of Louisville</td>
<td>University of Wisconsin-Madison*</td>
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<td>University of Minnesota</td>
<td>University of Wisconsin-Stout*</td>
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<tr>
<td>University of North Carolina at Greensboro</td>
<td>Virginia Polytechnic Institute and State University*</td>
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<tr>
<td>University of North Texas</td>
<td>Wayne State University*</td>
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<tr>
<td>University of Oklahoma Health Science Center</td>
<td>Western Michigan University</td>
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<td>University of Pennsylvania*</td>
<td>Xavier University</td>
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<td>Yale University</td>
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Colleges and Universities outside the U.S.

| Beijing Foreign Studies University, China† | East China Normal University*† |
| Beijing Forestry University, China†       | Foreign Economic and Trade University, China† |
| Beijing Institute of Petrochemical Technology, China | Fudan University, China† |
| Beijing Institute of Technology, China    | Fujian Normal University, China† |
| Beijing Jiaotong University, China†       | German Sport University |
| Beijing Language and Culture University, China† | Guangxi Normal University, China† |
| Beijing University of Chemical Technology, China† | Guizhou Normal University, China† |
| Beijing University of Chinese Medicine, China† | Hainan Normal University, China† |
| Beijing University of Posts and Telecommunications, China† | Hefei University of Technology, China† |
| Beijing University of Science and Technology, China† | Hohai University, China† |
| Central Academy of Drama, China†          | Huaqiao University, China† |
| Central Academy of Fine Arts, China†      | Huazhong Agricultural University, China† |
| Central China Normal University†          | Hunan Normal University, China† |
| Central South University, China†          | Hunan University, China† |
| Central University of Finance and Economics, China† | Inner Mongolia Normal University, China† |
| China Agricultural University†           | Jiangsu Normal University, China† |
| China Pharmaceutical University†         | Jilin Normal University, China† |
| China University of Geosciences, Beijing† | Jilin University, China† |
| China University of Mining†              | KTH Royal Institute of Technology, Sweden* |
| China University of Mining and Technology, Beijing† | Kwame Nkrumah University of Science & Technology, Ghana* |
| China University of Petroleum, Beijing†  | Lanzhou University, China† |
| China University of Political Science†   | Nanjing Agricultural University, China† |
| China West Normal University†            | Nanjing Normal University, China† |
| Chongqing University, China*†            | Nanjing University, China† |
| Communication University of China†       | Nankai University, China† |
| Dalian University of Technology, China†  | North China Electric Power University† |
Northeast Normal University, China†
Northwest Agriculture and Forestry University, China†
Northwest Normal University, China†
Northwest University, China*
Northwest University for Nationalities, China†
Peking University, China†
PSG College of Technology, India*
PSG Institute of Management, India*
Renmin University of China†
Ritsumeikan University, Japan
Salokaya College of Nursing, India
Shaanxi Normal University, China†
Shandong University, China*
Shanghai JiaoTong University, China†
Shanghai Normal University, China†
Shanghai University, China
Shanghai University of Finance and Economics, China†
Shenyang Normal University, China†
Sichuan Normal University, China†
Sichuan University, China*†
Simon Fraser University, Canada
Singapore Institute of Technology, Singapore*
Southeast University, China†

Southwest JiaoTong University, China†
Southwest University of Finance, China†
Sun Yat-sen University, China†
Tianjin Normal University, China†
Tianjin University, China†
Tongji University, China†
Tuanku Sultanah Bahiyah Polytechnic, Malaysia
Universidad de Chile*
Universidad Nacional de Columbia
University of Bremen, Germany
University of Cape Coast, Ghana*
University of Electronic Science and Technology, China†
University of International Business and Economics, Beijing, China
University of the Witwatersrand, South Africa
Wuhan University, China†
Wuhan University of Technology, China†
Xi’an Jiaotong University, China†
Xi’an University of Electronic Science and Technology, China†
Xiamen University, China†
Zhejiang Normal University, China†
Zhejiang University, China†
Zhongnan University of Economics and Law, China†

Other Organizations and Associations
Altair
Association of American Colleges and Universities*
Canadian Journal of Higher Ed, Canada
The Chronicle of Higher Education
Course Gateway
Coursera
Graduate Employees’ Organization at the University of Michigan
Higher Education Technology
Intel
Ithaka
Kardia Group
Manipal Global, India
Mathworks
Ministry of Education, China
National Academy of Education Administration, China
NASA
National Archives
NBC News*
New York Times
POD Network
SAS
Sphinx Organization
St. Joseph Mercy Hospital
State of Montana
The Detroit Hispanic Development Corporation
Third Space Creative
University Musical Society*
University Research Corridor*
Urban Cyberspace
VA Health System
Vineyard Associates
Appendix E: Publications and Presentations

In the 2013-2014 academic year, CRLT developed alternative modes and timelines for delivering information about new teaching approaches and technologies to U-M instructors. These formats were designed to accommodate instructors’ busy schedules by offering brief print overviews or web resources that allow for easy browsing. Both entailed very careful curation, organization, and honing of content, as well as social media coordination to help users navigate to the new resources.

To encourage faculty to consider using the web application Piazza, CRLT developed a new two-page genre, the Tech Tools Update. The first issue’s title, *Crowdsource Student Q&A AND Improve Discussion Quality with Piazza*, immediately conveys key benefits that emerged from an evaluation of the tool’s pedagogical utility that CRLT conducted in winter 2013. Surveys and interviews with students and faculty in 10 pilot courses generated specific examples of how U-M faculty are using Piazza to solve common teaching challenges, such as handling large quantities of emailed questions and tracking participation. In addition to providing recommendations for successful integration of Piazza, the update identifies conditions for which the tool proved less useful. The brief update also served as a pointer to more extensive resources available on the CRLT website. These include nine short instructional videos on using Piazza in a course. The update was mailed to more than 5,000 faculty in fall 2013; since then, the videos have been viewed 100 times.

The teaching strategy of “flipping the classroom”—moving students’ first exposure to content outside of the lecture and devoting class time to active learning—was the subject of a faculty learning community in fall 2012 and a provost’s seminar on teaching in May 2013. To distill, organize, and make accessible the many insights generated by U-M instructors from these activities, CRLT developed a webpage titled “Flipping Your Class.” The site includes separate sections for the major components of a flipped class (first exposure, accountability, active learning), as well as faculty examples from a range of disciplines. Hyperlinks give readers the option of exploring the topic without being tied to the purely linear path of printed text. Having a web resource also allows CRLT to update the examples easily as more faculty adopt this new approach to teaching.

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 GSMs 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](http://crlt.umich.edu/resources/publications)

Publications by CRLT Staff

- Pinder-Grover, T. (forthcoming). Discovering the possibilities: Initiatives to explore the higher education landscape. In M. Hatcher & J. Gilmore (Eds.), *Studies in Graduate and Professional Student Development*. 


Presentations

• Armstrong, S. (2013, August). *Show or tell: Discussing diversity in graduate student and faculty orientations*. Presented at the 27th Annual Association for Theatre in Higher Education Conference, Orlando, FL.


• Finelli, C. J. (2013, October). *Refining a taxonomy for engineering education research*. Presented at the 43rd IEEE/ASEE Frontiers in Education Conference, Oklahoma City, OK.


• Finelli, C. J. (2014, March). *Factors influencing faculty adoption of effective teaching practices*. Presented at the Virginia Tech Engineering Education Department Seminar, Blacksburg, VA.

• Finelli, C. J., & Borrego, M. J. (2013, June). *Refining a taxonomy for engineering education research*. Presented at the ASEE Annual Conference & Exposition, Atlanta, GA.


• Gonzalez-Cabezas, C., Wright, M., Anderson, O., & Fontana, M. (2014, March). *Exam questions developed by students lead to higher cognitive level of learning*. Presented at the American Dental Education Association Conference, San Antonio, TX.


• Munz, S., Niemer, R., & Inglehart, M. (2014, April). *Development and implementation of a new course regarding patients with special health care needs.* Presented at the 26th Annual Meeting on Special Care Dentistry, Chicago, IL.


**Review and Editorial Work**

• Canadian Journal of Higher Education (M. Bakewell, T. Pinder-Grover, M. Wright)

• Higher Education (M. Wright)

• IEEE Transactions on Education (C. Finelli, T. Pinder-Grover)

• International Journal for the Scholarship of Teaching and Learning (M. Kaplan)

• The Journal of Faculty Development (M. Kaplan)

• International Journal of STEM Education (T. Pinder-Grover)

• Journal of College Science Teaching (A. Smith)

• Journal of Education Technology and Society (E. Zhu)

• Journal of Engineering Education (C. Finelli, T. Pinder-Grover)

• National Science Foundation TUES Program (C. Finelli)

• New Media & Society (E. Zhu)

• Professional and Organizational Development Network in Higher Education Conference (POD) (M. Bakewell, T. Braunschneider, R. Niemer, T. Pinder-Grover, A. Smith, M. Wright)

• To Improve the Academy (M. Wright)
## Appendix F: CRLT Regular Staff, 2013-2014

<table>
<thead>
<tr>
<th>Role</th>
<th>Names and Titles</th>
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<tbody>
<tr>
<td><strong>Interim Director</strong></td>
<td>Matthew Kaplan</td>
</tr>
</tbody>
</table>
| **Administrative Team**             | Crisca Bierwert, Associate Director and Coordinator of Multicultural Teaching and Learning  
Deborah Meizlish, Senior Assistant Director  
Mary Wright, Director of Assessment and Associate Research Scientist |
| **Director of CRLT in Engineering** | Cynthia Finelli (also Research Associate Professor)                             |
| **Assistant Directors and Instructional Consultants** | Meg Bakewell, Assistant Director  
Theresa Braunschneider, Instructional Consultant  
Rachel Niemer, Assistant Director  
Tershia Pinder-Grover, Assistant Director  
Laura Schram, Assistant Director  
Amber Smith, Instructional Consultant  
Erping Zhu, Assistant Director |
| **CRLT Theatre Program**            | Sara Armstrong, Artistic Director  
Courtney Riddle, Company Manager  
Jessica Von Hertsenberg, Performance Coordinator |
| **Administrative Staff**            | Lori Dickie, Budget Administrator  
Ryan Hudson, Administrative and Publications Specialist  
Carolyn Parker, Assistant to the Interim Director |
| **Project Staff**                   | Gina Aylward, Program Assistant  
Pam Fisher, Videographer  
Laura Gonzalez-Garcia, Program Assistant  
Amy Hamermesh, Computer Systems Specialist  
Jeri Hollister, Program Assistant  
Kathryn Pamula, Program Assistant  
Melinda Thompson, Administrative Assistant |
| **Staff in CRLT in Engineering**    | Shanna Daly, Instructional Consultant and Assistant Research Scientist  
Carol Lagemann, Program Assistant  
Steve McKenzie, Program Assistant |

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