

# CIT Annual Report 2011–2012

The Center for Instructional Technology supports academic excellence at Duke University by promoting innovation in teaching and learning.

CIT staff support the teaching and learning needs of individual faculty, academic programs, departments and schools. To advance Duke’s mission and strategic goals, CIT collaborates with librarians, technologists, administrators and many other staff across all of Duke’s schools and units on short-term projects and long-range initiatives.

## Updates on Key Priorities

<p><b>Supporting teaching effectiveness and innovation</b></p> <p><i>Promoting active learning and other effective teaching strategies through consulting, grants and faculty development opportunities</i></p>	<ul style="list-style-type: none"><li>• Over the past two years, CIT has consulted or provided training to nearly 1000 unique faculty and academic staff</li><li>• In the past 4 years, CIT has sponsored 10 Faculty Fellowships involving 80 faculty and 6 graduate students from 22 departments and programs</li><li>• 635 unique faculty and staff attended at least one CIT event in 2011–12</li></ul>
<p><b>Exploring new technologies</b></p> <p><i>Focusing on mobile, networked, and collaborative devices and tools</i></p>	<ul style="list-style-type: none"><li>• CIT sponsored intensive experiments in the use and publication of open educational resources and apps</li><li>• In the past two years, CIT’s iPad course loan program has enabled 28 courses to explore ways that mobile networked multimedia devices can enhance student learning</li><li>• The Duke Digital Initiative sponsored additional explorations including 3D video and interactive classroom polling</li></ul>
<p><b>Building Duke’s elearning infrastructure</b></p> <p><i>Providing campus leadership in academic technology</i></p>	<ul style="list-style-type: none"><li>• Over a thousand faculty migrated courses from Blackboard to Sakai during this academic year. By Spring 2012, Sakai had been home to nearly 14,000 users and the majority of Duke’s LMS-hosted course sites.</li><li>• CIT continues to support faculty in using a wide range of tools including WordPress, Panopto, YouTube, social media tools, and a host of other options</li></ul>
<p><b>Contributing to the conversation at Duke and beyond about teaching and technology</b></p> <p><i>Promoting exemplary teaching practices and innovative and effective uses of technology at Duke and beyond</i></p>	<ul style="list-style-type: none"><li>• Research and reporting by CIT staff fueled active discussions within the Duke community on fast-moving developments in higher education around online learning and open courses</li><li>• With over 80,000 visits annually, including 2/3 from outside the local area, the CIT web site has continued to serve as a valued resource to the campus community and beyond</li><li>• CIT’s monthly e-newsletter was circulated to over 1600 subscribers each month</li></ul>

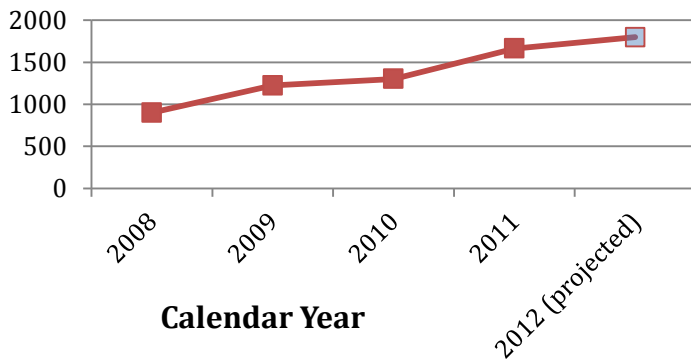
# Supporting Teaching Effectiveness and Innovation

In 2011–12, CIT worked on over 1500 inquiries, requests, consultations and projects with over 1000 faculty, staff and students from Duke and beyond. In addition, CIT staff handled nearly 1000 faculty requests for help related to the Sakai transition.

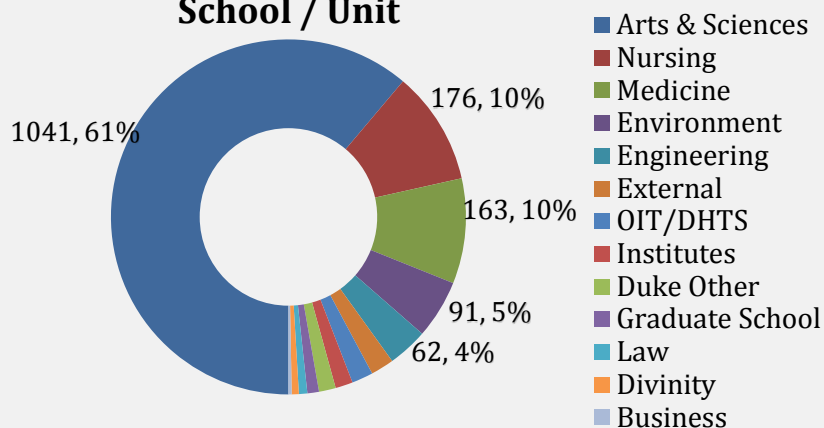
CIT’s support for faculty and courses take many forms, including:

- Personal consultations with faculty to assist with course planning or design
- Office visits and office hours
- Training, including 1:1: support, open sessions and customized sessions for individual departments and groups
- Referrals to other groups and services on campus

**CIT projects, consults and inquiries**



**Projects, Consults and Inquiries by School / Unit**



## Sample Consulting Questions

*I'd like to publish an open access textbook that I wrote. Where should I begin?*

*I have some high definition video that I'd like to share with my students. How can I reduce the file size without sacrificing too much in terms of quality?*

*Can you help me build an e-portfolio in WordPress?*

*How would I go about transitioning a project-based course to a team-based learning model?*

*What options are there for incorporating digital maps into the course that I will be teaching next semester?*

*I want to record my lectures so I can use my class time differently. Can you help me with lecture recording and implementing some ideas I have for new ways to use class time?*

*I want my students to collaborate more. Are there technologies or activities I can try?*

*I'm teaching online for the first time. How do I get started?*

*I know there are blogs, wikis and discussion boards in Sakai. Which of these is right for the activities I had in mind?*

# CIT Faculty Fellows

As CIT's signature program for supporting teaching effectiveness and faculty innovation, our Faculty Fellows program provides sustained support over a semester or full year for groups of faculty as they implement changes in curriculum or pedagogy. CIT offers instructional design, technology and assessment consulting to help faculty improve teaching and learning. Since 2008, CIT has sponsored 10 Fellowship Groups with 87 Total participants from 22 Departments. Active and recently completed Fellowships are outlined below.

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## Recently completed

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### Teaching Research with Writing (2011-12)

Led by the Thompson Writing Program's Jennifer Ahern-Dodson, seven faculty explored new approaches to teaching research with writing to undergraduates.

#### Participants

Jennifer Ahern-Dodson, Instructor, Thompson Writing Program  
(Faculty program lead)  
Leslie Babinski, Child and Family Policy  
Nick Carnes, Sanford School of Public Policy  
Corinna Kahnke, Germanic Languages  
Craig Roberts, Duke Institute for Brain Sciences  
Karin Shapiro, History Department  
Melissa Simmermeyer, Romance Studies



See Melissa Simmermeyer's guest post on the CIT blog for an example of a Fellows project, "[Scaffolding the writing process: Framing a space for critical thinking in L2.](#)"

### Sustainability Fellows (2011-12)

Led by NSOE's Charlotte Clark, seven faculty built on prior work from a 2011 workshop in exploring sustainable teaching practices such as paperless grading and reduction of energy use in classrooms, as well as including sustainability content in their course. For an example of their work, see "[Paperless writing course](#)" by Michael Ennis, "From Paper Survey to Google Forms" by Linda Franzoni, "[To Print or Not to Print](#)", and other Fellows posts on the Duke University Trillium Project web site.

#### Participants

Charlotte Clark, Lecturer, NSOE (co-convener and faculty lead)  
Sandra Cooke, Lecturing Fellow, Thompson Writing Program  
Michael Ennis, Lecturing Fellow, Thompson Writing Program  
Linda Franzoni, Professor of the Practice, Mechanical Engineering  
Martha Reeves, Visiting Professor, Markets and Management Studies, Sociology and Women's Studies  
Craig Roberts, Asst Director of Education, Duke Institute for Brain Sciences  
Melissa Simmermeyer, Lecturer, Romance Studies  
Shana Starobin, Graduate Student, Nicholas School of the Environment



## *New Fellowships in 2012–13*

### **Duke Environmental Leadership Program Fellows (2012)**

A 2003 CIT Fellowship supported the initial design and launch of the DEL program. This year, Fellows will work with CIT to explore how the program can improve and build on best practices for distance teaching that have been established in DEL and revise an online faculty handbook and formats of teaching modules.

#### **Participants**

Nicolette Cagle, Thompson Writing Program  
Deborah Rigling Gallagher, Assistant Professor of the Practice; Executive Director of the Duke Environmental Leadership Program  
David E. Hinton, Nicholas Professor of Environmental Quality  
Lynn Maguire, Professor of the Practice  
Brian Murray, Research Professor  
Elizabeth Shapiro, Assistant Professor of the Practice  
Rebecca Vidra, Lecturer  
Christopher Wedding, Lecturing Fellow  
Don Wells, Consultant in Leadership



Read more about our Fellows' projects  
<http://cit.duke.edu>

### **TBL Fellows (2012)**

Seventeen faculty from a variety of departments and programs will work intensively for six months on course design, effective group formation, peer evaluation strategies and assessments and assignment design for team-based learning.

#### **Participants**

Nicholas Carnes, Assistant Professor, Sanford School of Public Policy  
Mine Cetinkaya-Rundel, Assistant Professor of the Practice, Statistical Science  
Dennis Clements, Professor of Pediatrics, Community and Family Medicine, and Global Health  
Daniel Gauthier, Professor of Physics  
Henry Greenside, Professor of Physics  
Michelle Hartman, Assistant Professor, Nursing  
Alison Hill, Lecturer, Biology  
Katie Kretovich, Graduate Student, Cell and Molecular Biology  
Cory Krupp, Associate Professor of the Practice of Public Policy  
Laura Lieber, Associate Professor for the Department of Religion  
Richard Lucic, Associate Professor of the Practice and Associate Chair, Department of Computer Science; Curriculum Director, Information Science and Information Studies  
Yuvon Mobley, Graduate Student, Department of Molecular Genetics and Microbiology  
Dick MacPhail, Associate Professor of Chemistry  
Alyssa Perz-Edwards, Assistant Dean of Trinity College and Lecturer in Biology  
Chantal Reid, Assistant Professor of the Practice in Biology and Environmental Sciences & Policy  
Rebecca Vidra, Lecturer, Environmental Sciences & Policy

# Exploring New Technologies

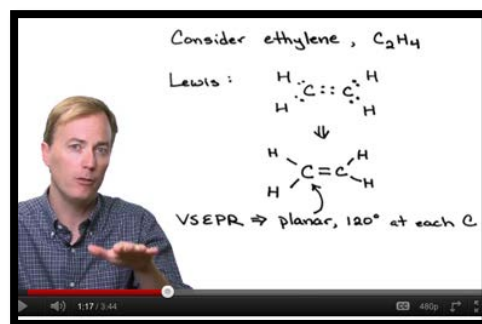
The landscape of tools available to support teaching and learning continues to evolve rapidly. In addition to the campus LMS, faculty and students use and combining a variety of elearning tools to meet different needs. A few key trends and developments at Duke over the past few years are highlighted below.

## Interest and availability of classroom capture technologies continues to grow.

- ✓ In July 2010, DukeCapture was introduced as a replacement to earlier lecture capture technologies in use across campus. The transition to this mobile-friendly system for recording lectures, classes and events was completed in summer 2012.

## Experiments in digital publishing, open education and e-textbooks

- ✓ A few experiments in this rapidly evolving area include: Steve Craig's Open Chemistry course (*screenshot, right*), published in January 2012 via iTunesU; a marine science digital multimedia textbook app from Dave Johnston (Nicholas School of the Environment), developed in collaboration with Duke computer science students; and explorations of enhanced e-textbooks for clinical education using iPads in the School of Nursing, such as in a Nurse Anesthesia program [project led by Sharon Hawks](#).



## Growing use of academic use of social media tools to engage broader audiences

- ✓ A small 2009 WordPress pilot which began with 43 sites and a few hundred users had grown by summer 2012 into a campus-wide service hosting nearly 3000 sites and 10,000 users.
- ✓ Twitter, Facebook, social photo-sharing sites and YouTube have been increasingly popular with Duke's faculty and students for engaging with broader audiences and extending learning time. Duke now has more than 100 official Facebook and Twitter accounts, as well as presences on YouTube, iTunesU, Foursquare and Flickr.<sup>1</sup>

*Interested in social technologies? See the CIT web site for [Six ways to use social media in education](#)*

## Across many disciplines, web-based tools add interactivity to the classroom experience

- ✓ At least 40 Duke courses experimented with Piazza for social Q&A this year; since 2010, Poll Everywhere has become an increasingly popular online device-neutral way to integrate instant feedback and polling into classes and events.

<sup>1</sup> "Social Media Use Growing At Duke," Working@Duke, February 17, 2012

# Building Duke's eLearning Infrastructure

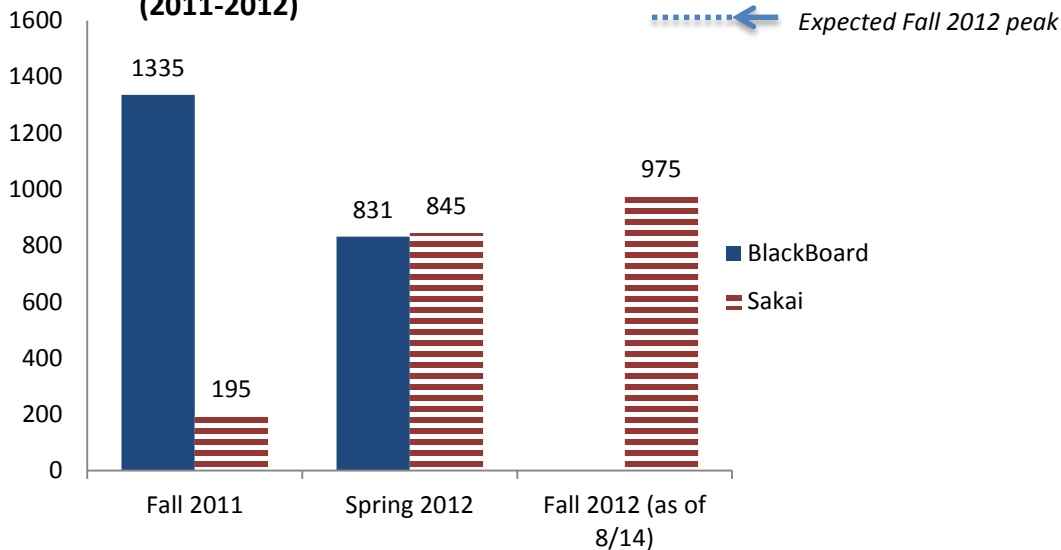
## A successful campus-wide LMS transition

A successful Sakai pilot in 2011 was followed by the launch in Fall 2011 of Sakai as Duke's enterprise learning management system



available to all Duke courses, and the decommissioning of Blackboard in June 2012 after 10 years of use. Between March 2011 - June 2012, CIT offered 97 sessions of 18 different types of workshops to over 400 participants. In addition, CIT's staff worked one on one with faculty in 66 Office Hour help sessions and over 50 personalized office visits to help faculty and departments migrate and archive over 28,000 Blackboard sites prior to its shutdown on June 30, 2012.

**Blackboard to Sakai Transition (2011-2012)**



Along with Ed Gomes, Trinity College Arts & Sciences IT, CIT's Shawn Miller and Neal Caidin shared the story of the transition and its role in Duke's larger eLearning strategy

**"Duke's eLearning Roadmap and the Sakai Transition"** <http://bit.ly/dukesakai2012>

# Contributing to the Conversation about Teaching and Technology

Through presentations, publications, teaching and professional service, CIT stays actively engaged across Duke and contributes to the broader higher education community. Our staff bring their knowledge of best practices, trends and innovative ideas to their daily interactions with the Duke community.

## Events and Workshops

Over the past year over 635 faculty and staff attended one of CIT's workshops or events. Highlights for 2011–12 included:

**New publishing/new pedagogies: How online media and mobile devices are changing the way we think about publishing, teaching, and community engagement.** November 2011. Approximately 60 attendees from across campus came to hear Dave Johnston, Research Scientist at the Nicholas School of the Environment speak about the creation and use of the Cachalot, an open access digital textbook/iPad app developed for Marine Megafauna (Bio 127). Event co-sponsored by CIT and the Perkins Library e-book strategy committee.



The free Cachalot app includes articles, photographs, video, audio and artwork

**Teams for Learning @ Duke.** Presenters: Stephen Craig, Steve Nowicki, Alyssa Perz-Edwards, Craig Roberts. Over 70 Duke faculty and staff met in March 2012 for a one day interactive Team-Based Learning workshop. Attendees included faculty from departments across Trinity College of Arts & Sciences, the Pratt School of Engineering, the Nicholas School of the Environment, Sanford School of Public Policy, the Law School and the Medical School.



Full details about this workshop area available on the CIT web site. [cit.duke.edu/blog/2012/03/teams-for-learning-duke-workshop-report](http://cit.duke.edu/blog/2012/03/teams-for-learning-duke-workshop-report)

## Publications, Conference Presentations and Invited Talks

**iPads and the Duke Digital Initiative** Invited presentation for Apple University Executive Forum, Cupertino, CA, May 17, 2012. (Lynne O'Brien with Julian Lombardi, Assistant Vice President for Academic Technology)

**Bringing Mobile Learning to Your Institution.** 2 day workshop for Academic Impressions, Houston, TX, Feb. 20–22, 2012. (Lynne O'Brien)

**iPads in Education: Uses, Strengths, and Shortcomings.** American Council for Teaching Foreign Languages. Denver, CO. (Megan Kennedy)

**Enhance student learning and program development with rubrics.** Assessment Roundtable workshop, April 23, 2012. (Yvonne Belanger with Jessica Thornton, Provost's Office and Jennifer Ahern-Dodson, Thompson Writing Program).

# SHOWCASE 2012

CIT's 12th annual Faculty Instructional Technology Showcase on April 27<sup>th</sup> drew over 300 attendees to sessions on etextbooks, team based learning, the Sakai transition, interdisciplinary teaching, student perspectives on social media, and more. Selected session recordings are available on our website, including the featured plenary talk "Shaking it up: Transformations in higher education."



*Diagonally from lower left:* Amy Campbell, Assistant Director of CIT (left) with Joan Clifford, Romance Studies; Lynne O'Brien, Director of CIT (left) with Diane Bryson, Graduate School; Craig Roberts, Duke Institute for Brain Sciences

## May 2012 workshop series

Each year, these popular workshops support faculty in exploring ideas from the Showcase and new technologies as well as preparing for the upcoming fall semester. This spring's workshops included:

- Hands-on workshops to build courses in Sakai
- Flipping your class
- Team-based Learning: Basics
- Team-based Learning: Next steps
- Easy recording of course videos
- Adding interactivity to your class with iPads
- Social media for teaching
- Lightning Rounds on etextbooks, tools for self-directed learning, and new tools for teaching and research



# Center for Instructional Technology Staff, 2012

Complete profiles available at <http://cit.duke.edu/about/staff>

**Lynne O'Brien, Ph.D.**  
(Education) Director, Academic  
Technology and Instructional Services



**Amy Campbell, M.S.**  
(Ecology and Evolution)  
Assistant Director, CIT



**Seth Anderson, M.Ed.**  
(Educational Technology)  
Academic Technology Consultant



**Yvonne Belanger, M.S.**  
(Instructional Design, Development  
and Evaluation)  
Head, Assessment and Planning



**Dottie Black, M.Ed.**  
(Media Arts) PepsiCo K-12 Technology  
Mentor Coordinator



**Neal Caidin, B.S.**  
(Mathematics)  
Head, Applications



**Meghan Kennedy, M.S.**  
(Instructional Psychology and Technology)  
Languages Consultant



**Chris Lorch, B.S.**  
(Music Technology)  
Academic Technology Consultant



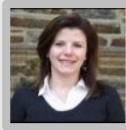
**Shawn Miller, M.A.**  
(Rhetoric and Writing Studies)  
Social Sciences Consultant



**Andrea Novicki, Ph.D.**  
(Biological Sciences)  
Sciences Consultant



**Patricia Pawlak, B.S.**  
(Geo-Environmental Sciences  
and Biology) Staff Assistant



**Randy Riddle, B.S.**  
(Public and Applied History)  
Humanities Consultant



**Haiyan Zhou, M.L.S., M. Ed.**  
Online Learning and Health Sciences  
Consultant



## Areas of expertise and current interests of CIT staff

- Collaboration and productivity tools
- Online teaching methods and e-learning
- Blogging and social networking
- Open-access educational resources and standards
- Open source tools for education
- Faculty development
- Educational course and program design
- Assessment and program evaluation
- E-textbooks and e-readers
- Educational use of mobile devices
- Digital video and imagery
- 3D display technology
- K-12 educational technology and teacher education
- Project- and problem-based learning

## Areas of focus for 2012 –13

**Encouraging teaching and curriculum innovation** — promoting innovative teaching methods such as team-based learning, flipping the classroom and other strategies for active learning; supporting distinctive University programs such as DukeEngage and DukeImmerse

**Expanding Duke’s elearning infrastructure** — Exploring and integrating academic tools to meet the full range of Duke’s teaching and learning needs including Sakai, WordPress, Voice Thread, Panopto and other emerging tools

**Understanding the impact of mobile devices in education** — testing uses of mobile devices for teaching and learning and designing learning materials and learning activities for use in distributed settings through the Duke Digital Initiative, iPad exploration and other initiatives

**Supporting the shift from paper/text to digital/multimedia information** — exploring the impact of new formats on education through the use and authoring of e-books, e-textbooks and app development projects using iPads and other technologies

**Promoting open access in education** — promoting the development and use of open educational resources, including Coursera free online courses; understanding open education models

**Assessing teaching innovation** — assessing CIT initiatives as they connect to university goals, such as Coursera and the Duke Digital Initiative; assessing the effectiveness of CIT-sponsored projects; and assessing the impact of programmatic changes such as team-based learning

*Let CIT keep you informed about the latest research, useful ideas and tools*

**Subscribe to our monthly e-newsletter** for event information, funding opportunities and highlights of faculty projects and CIT programs

**Visit the IT web site** to learn about the latest trends in instructional technology, see our full calendar of events, request a personal consultation, browse examples of innovative teaching at Duke, and to get ideas for enhancing your course

<http://cit.duke.edu/>