Acknowledgments

Submitted by Kathy Takayama, Ph.D., Executive Director and Associate Provost

Special thanks go to Marc Raymond, Caitlyn Esposito, Sarah Carswell, and Zach Kornhauser.
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In September 2015, Provost John Coatsworth formally launched the Columbia Center for Teaching and Learning (CTL). Over the past year, the CTL focused on leveraging Columbia University’s legacy of exceptional teaching and existing partnerships with faculty, students, and colleagues across the institution to develop new programs and support excellence and innovation in teaching. We are now pleased to present our first annual report highlighting the Center’s accomplishments.

To support Columbia instructors in the creation of empowering learning experiences, the CTL develops programs and projects based on research-informed practices. At our Open House and Orientation events in September, we introduced our offerings—free services, including teaching consultations and educational technology training and support; programs and events; and the development of digital innovations in teaching and learning. We are thrilled to report that in our first year, we had 6,901 unique interactions with Columbia individuals through our programs and services. Through this work, our staff interacted with over 950 faculty and 830 graduate students.

During the 2015-2016 academic year, the CTL placed a major emphasis on the development of inclusive practices to support our diverse community of instructors and learners at Columbia. Our events focused on inclusive teaching and diversity were attended by over 250 participants. We are especially grateful to the students, faculty, and administrators who joined us in collaborative and introspective discussions for our campus-wide Inclusive Teaching Forum.

Over the last year, the CTL introduced new programming for faculty, including three intensive institutes focused on course design and pedagogical practices: the Course [Re]Design Institute; the Active Learning Institute: Flipped Classrooms and Beyond; and
These are just a few examples of the creative and exciting work of our collective team at the CTL. In this report, you will find a full description of our activities during our first year.

In the spring, the CTL hosted the Celebration of Teaching and Learning Symposium to showcase the innovative efforts of faculty and graduate students who are transforming their courses and pedagogies. The event featured the 2014-2015 Provost's Hybrid Learning Course Redesign and Delivery faculty awardees. Our highly skilled team of CTL learning designers, video production staff, and technical specialists provided support for the design and development of these courses. The Symposium also highlighted the creative and scholarly pedagogical innovations of Columbia's exceptional graduate student instructors, who shared their contributions in a series of intriguing lightning talks.

Excellence in teaching and learning need not be confined to our physical campus, and the CTL has supported Columbia's vision to instigate and cultivate global and integrative thinking in multiple ways: through the creative use of digital media and technology, by engaging our community in constructive dialogues on diversity and inclusivity, and by bridging partnerships across the globe. The CTL collaborated on over 30 educational projects developing digital innovations that extend the reach of the University and contribute knowledge to learners across the globe, from providing HIV prevention intervention for African American women on probation to supporting professional development training for urban educational leaders. Our highly successful Massive Open Online Courses (MOOCs) featured Columbia's renowned faculty. Videos from the course are available on the Columbia|Learn YouTube channel as open educational resources. Online viewers watched a combined 8,821 hours of educational videos from the Civil War and Reconstruction series, featuring Eric Foner, DeWitt Clinton Professor of History, over the past year.

These are just a few examples of the creative and exciting work of our collective team at the CTL. In this report, you will find a full description of our programs and activities during our first year. I am grateful to my colleagues who have been exemplary in their commitment, creativity, and professionalism in contributing to our mission, and to Provost Coatsworth and Vice Provost Soulaymane Kachani for their leadership and support for the Center. We also appreciate our important program collaborators across the institution, including the University Libraries, the Office of the Vice Provost for Faculty Diversity and Inclusion, Columbia University Medical Center, the Office of the Executive Vice President for Research, the Graduate School of Arts and Sciences, and the many faculty and graduate students who have been so generous with their time. We look forward to our continued growth and engagement with the Columbia teaching and learning community in the years to come.

Respectfully submitted,

Kathy Takayama, Ph.D.
Executive Director
Center for Teaching and Learning
Major Events Since Our Launch in September 2015

- **Launch**: SEP 2015
- **Learning with MOOCs Conference**: OCT 2015
- **Innovative Teaching Winter Institute for Faculty**: JAN 2016
- **University-Wide Inclusive Teaching Forum**: FEB 2016
- **Active Learning Institute: Flipped Classrooms and Beyond**: MAR 2016
- **Celebration of Teaching and Learning Symposium**: MAY 2016
- **Ivy Plus Teaching and Learning Centers Conference**: JUN 2016
- **Course Redesign Institute**:
The Center for Teaching and Learning (CTL) partners with faculty, students, and colleagues across the institution, to support excellence and innovation in teaching and learning. We are committed to advancing the culture of teaching and learning for professional development, curricular enhancement, and academic support through our programs, services, and resources.

**Our Mission**
The Center for Teaching and Learning (CTL) partners with faculty, students, and colleagues across the institution, to support excellence and innovation in teaching and learning. We are committed to advancing the culture of teaching and learning for professional development, curricular enhancement, and academic support through our programs, services, and resources.

**Our Approach**
Teaching is a critical practice, driven by inquiry, experimentation, reflection, and collaboration. We promote pedagogy that is inclusive, learner-centered, and research-based. The CTL supports the purposeful use of media and emerging technologies in the classroom and online to foster the success of Columbia’s instructors and students.

**Our Programs and Services**
The CTL provides a range of free services including teaching consultations and educational technology training and support; programs and events, including workshops, orientations, and institutes; and the development of digital innovations in teaching and learning.
Leadership

Kathy Takayama, Ph.D.
Executive Director
Center for Teaching and Learning

Directors

A. Maurice Matiz
Director,
Media and Instructional
Design Studio

Mark Phillipson, Ph.D.
Director, Graduate Student Teaching
Initiatives and Programs

CTL Staff

Lucy Appert, Ph.D.
Associate Director,
Instructional Design

Christine Bean, Ph.D.
Assistant Director for Faculty Teaching
Initiatives and Programs

Jonah Bossewitch, Ph.D.
Associate Director,
Software and Infrastructure

Jessica Brodsky
Learning Designer

Nick Buonincontri
Senior Technical Specialist

Sarah V. Carswell
Executive Assistant

Sarohini Chahal
Learning Designer

Aurora Collado
Learning Designer

Michael R. Deleon
Media and Production Lead

Jose Diaz
Senior Tech Specialist,
Media Production

Susan Dreher
Senior Software Engineer

Caitlyn Esposito
Communications
and Outreach Manager

Alexia Ferracuti, Ph.D.
Assistant Director

Andrew Flatgard
Learning Designer

Teresa Gonzalez
Administrative Coordinator

Jason Guzman
Learning Designer

Michelle V. Hall
Associate Director,
Educational Programs

Jon Hanford
Video Technical Specialist

Elizabeth Hernandez
Programs Coordinator

Kenny Hirschmann
Senior Learning Designer

Ashley Kingon
Learning Designer

Suzanna Klaf, Ph.D.
Associate Director

Zach Kornhauser
Associate Director
of Assessment and Evaluation

Andre Laboy
Learning Designer

Laura Lechner
Digital Media Specialist

Angie Lee
Learning Designer

Ellen Maleszewski
Learning Designer

Zarina Mustapha
Senior Front-end Developer

Nik Nyby
Programmer

Stephanie Ogden
Associate Director,
Media Production

Anders Pearson
Senior Programmer

Marc Raymond
Senior Experience Designer

Jessica Rowe
Senior Program Specialist

Paul Stengel
Senior Learning Designer

Learn more about our team at ctl.columbia.edu.
Total unique individuals at Columbia engaged in CTL programs and services from 2015-2016, segmented by university affiliation.
This graph shows the number of interactions with individuals at Columbia each month throughout the 2015-2016 academic year.
SUMMARY OF CTL SERVICES AND PROGRAMS

- Conferences Attended by CTL Staff: 13
- Presentations to External Institutions: 13
- External Visitors to the CTL: 80
6,901
Unique Interactions
with Individuals at Columbia University

2,725
Participants
in CTL Programs and Events

456
Participants
in University-Wide CTL Programs

286
Attendees
of CTL Diversity Programs
The CTL offers a wide range of free services to the teaching community at Columbia University. Our philosophy is to provide the most supportive environment possible for Columbia faculty and instructors to become reflective and effective teachers.

Teaching consultants, digital media specialists, and learning designers are available throughout the year for intensive face-to-face consultations to discuss course design; curriculum planning; assignment development; learning activities and teaching approaches; educational tools and resources; assessment and evaluation; and other topics related to effective teaching and communication in today's academic environment.

During the 2015-2016 academic year, CTL staff conducted 2,199 consultations with individuals at Columbia University.
Number of consultations, segmented by Columbia affiliation.

- Undergraduate Students: 9
- Faculty: 1,371
- Total: 2,199
Columbia instructors have access to a range of teaching technologies and tools that allow learners to conveniently access online course content, interact with and analyze multimedia content, and engage with their peers and instructors inside and outside of the classroom. The CTL provides instructors with online resources and in-person support for using these technologies, and serves as a catalyst for improving the teaching community’s skills and knowledge of technology-supported teaching and learning.

The CTL also hosts hands-on workshops that are designed to help faculty choose educational technologies and employ them effectively in their courses. Workshop topics include:

*CourseWorks Essentials*

*Course Management*

*Leveraging Media for Close Reading and Analysis – Mediathread*

*Using Wikis for Learning and Collaboration*

*Engaging Students with Audience Response Systems*

*Active Learning with EdBlogs*

*Teaching with Google Apps*

During the 2015-2016 academic year, CTL staff provided technology and training support to 1,707 individuals at Columbia University.
The CTL offers professional development programs and events to connect Columbia instructors to effective teaching approaches, resources, and educational tools and technologies. From workshops to multi-day institutes, CTL programs emphasize cohort-building, hands-on activities, and the exchange of ideas across disciplines.

During the 2015-2016 academic year, CTL staff conducted 91 programs and events attended by 2,725 participants.
91 Total Programs and Events

72 Workshops

2 Orientations

6 Community-Wide Events

6 Institutes
WORKSHOPS AND ORIENTATIONS

Collaborative Learning

The Collaborative Learning workshop series explored group learning activities and the digital technologies that support them. Participants who attended all workshop sessions and completed related track activities received individualized feedback and a letter certifying their completion of the track. Workshop topics included:

- Modes of collaborative learning
- Mobilizing collaborative learning with technology
- Assessing collaborative work

Slow Teaching: An Introduction to Contemplative Pedagogical Practices

The Slow Teaching workshop series provided an introduction to resources and practices in contemplative pedagogy. When incorporated into teaching, contemplative exercises can deepen student engagement, enhance active learning, and stimulate inquiry and insight. Participants were guided through contemplative pedagogical exercises, and came away with teaching methods to apply in the future. Workshop topics included:

- Mindful listening
- Reducing stress in the classroom
- Contemplative writing
- Promoting self-reflection
- Fostering inquiry
- Winding down (and around)

Pedagogies in Practice

The Pedagogies in Practice series featured leaders in educational development. Guest speakers shared insight about research-based instructional methods and discussed tactics for implementing them in the classroom. Workshop topics included:

- Active Learning
- Active Learning 101
- Active learning strategies for student engagement
- Active learning: Tools to stimulate discussion and student engagement in the classroom

Documenting Your Teaching

Documenting Your Teaching workshops focused on ways to gather real evidence of one’s teaching life, which is crucial during academic job searches or professional reviews. The workshops also helped instructors at all levels plan and develop courses more efficiently, and supported an inquiry-based approach to teaching. Workshop topics included:

- Teaching statement sprints
- Diversity statements
- Building a teaching portfolio

Presentation Skills for Educators

These interactive workshops presented by The Engaging Educator—a team of educators, facilitators and professionals—introduced participants to a series of activities that address the fear of public speaking, and help instructors build confidence, clarity, and create true engagement with a class or lecture audience. The sessions culminated in personalized feedback for each participant on presentation strengths and areas for improvement.

- Developing learning-centered syllabi (and courses)
- Effective course design using Bloom's Taxonomy
- Lecturing: An effective teaching method?
Student Assessment and Feedback

Feedback and grading: Designing effective, efficient strategies
Gauging student learning with classroom assessment techniques
Informal Early Feedback (IEF): Just-in-time student input to improve teaching and learning

Diversity and Inclusion

Fulfilling the promise of diversity: How to create and sustain an inclusive classroom climate
Inclusive excellence for the learning environment: Entryways and convergence
Leveraging diversity and promoting equity in your teaching
Pathways to dreams: Achieving your success
The classroom climate for LGBTQ students: How does it impact learning?
WORKSHOPS AND ORIENTATIONS

Disciplinary Applications

The Disciplinary Applications series explored the application of research-based pedagogical methods to courses in specific subject domains. Workshop topics included:

- Using Case Study Method to Enhance Teaching in the Sciences
- Demystifying the Primary Literature: Strategies to Implement in Your STEM Classroom
- Using Case Study Method to Enhance Teaching in the Social Sciences
- Teaching Strategies and Professional Development for Researchers

Teachers’ Lounge

Teachers’ Lounge gatherings are informal discussions of learning research and its connection to issues in the classroom. Though primarily attended by graduate students, all instructors at Columbia were welcome.

Fall 2015

Teachers’ Lounges were organized around discussions of identity, inclusion, and diversity in the classroom. Participants discussed topics such as inclusive curricular design, stereotype threat, social environments in the classroom, disabilities and learning, and the interplay of various identities (race, gender, sexuality, nationality, class) with instruction in various subject area domains.

Spring 2016

Teachers’ Lounges were organized around a new theme, “Master Class.” Participants observed lecture footage of university educators who are noted teachers and reflected on and critiqued their practices.

RewirED Series

This series of one-hour seminars explored blended learning approaches, culminating in a showcase of projects developed by faculty. Seminar topics included:

- Activate the Classroom: Just-in-time teaching and other techniques to increase student engagement and retention
- Curate the Resources: Exploring ways to collect, manage, and interrogate digital source materials
- Drive the Discussion: Stimulating meaningful discussions in the classroom and online
- Produce the Media: Using video as an effective instructional tool
- Show the Blend: Showcasing the work of Columbia faculty who have experimented with blended learning techniques

Fall Orientations for Teaching Fellows and Teaching Assistants

Ahead of the Fall 2015 semester, CTL held two teaching orientation programs for 148 new Teaching Fellows and Teaching Assistants at Columbia. These orientations featured concurrent sessions on topics such as establishing classroom policies, grading tactics, running class discussions, managing activities in CourseWorks, and inclusive teaching practices. The orientations culminated with a session highlighting campus resources that can help instructors with challenging teaching situations.
INSTITUTES

Taking place over one to several days, institutes provide an opportunity for instructors to fully immerse themselves in new ideas and approaches for improving the learning experience.

**Junior Faculty Course Design Institute**
**September 1, 2015**

The Junior Faculty Course Design Institute was a one-day exploration of effective teaching and learning strategies in a collaborative and supportive environment, with an optional second day of workshops and one-on-one consultations.

**Innovative Teaching Winter Institute**
**January 14-15, 2016**

The Innovative Teaching Winter Institute for Columbia faculty was an immersive, two-day series of demonstrations, discussions, and activities centered on the effective use of instructional technologies and pedagogical approaches. Each participant designed and prepared a centerpiece assignment for use in an upcoming course. As they developed their respective assignments, participants engaged in facilitated conversations with colleagues to articulate learning goals, refine implementation plans, and hone assessment strategies.

**Active Learning: Flipped Classrooms and Beyond**
**March 14-15, 2016**

The Active Learning Institute (previously The Flipped Classroom Institute) was a two-day workshop for Columbia faculty that explored the essentials of flipping a course, from designing online and in-class materials to facilitating learning activities in the classroom.

**Course [Re]Design Institute**
**June 7-9, 2016**

The Course [Re]Design Institute was an intensive three-day experience in which Columbia instructors, with hands-on guidance from CTL staff, focused on designing or redesigning a specific course.

**Innovative Teaching Summer Institute**
**June 13-16, 2016**

The Innovative Teaching Summer Institute was an intensive, multi-day series of workshops, discussions, and posted reflections for graduate students centered on the effective use of instructional technologies and pedagogical approaches. Participants envisioned assignments with specific learning goals and were introduced to a variety of digital tools and directed to campus and online resources to help them meet their goals. By the end of the Institute, each participant has defined, revised, and presented an innovative assignment that exemplified his or her instructional priorities.

**Columbia University Medical Center (CUMC) Summer Institute**
**June 28, 2016**

The CUMC Summer Institute was a one-day workshop for junior faculty or senior faculty who had taken on a new teaching role. The Institute focused on exploring effective teaching and learning strategies in health sciences education.
COMMUNITY-WIDE EVENTS

Over the past year, the CTL hosted several major events to celebrate teaching accomplishments and discuss topics relevant to the Columbia teaching and learning community.

Learning with MOOCs
October 2-3, 2015
www.learningwithmoocs2015.org

The CTL chaired and hosted the Learning with MOOCs II Conference at Columbia University. The Conference gathered more than 200 educators, technologists, researchers, learning scientists, entrepreneurs, and funders of MOOCs from around the world to share innovations, discuss the impact of MOOCs on education, and look at the future of online learning. The agenda included five expert panels and produced more than 40 papers.

Inclusive Teaching Forum
February 26, 2016
bit.ly/inclusivectl

The Inclusive Teaching Forum brought together students, postdoctoral instructors, faculty, and staff to discuss aspects of diversity in the classroom and initiate the creation of a Guide to Inclusive Teaching and Learning at Columbia. Plenary speaker Michele DiPietro, co-author of How Learning Works: Seven Research-Based Principles for Smart Teaching, connected inclusive teaching methods and priorities to research-based principles of effective pedagogy.

Celebration of Teaching and Learning Symposium
March 25, 2016
bit.ly/celeb2016

The Celebration of Teaching and Learning Symposium was a one-day forum for Columbia faculty and instructors who are dedicated to enriching the student learning experience. The Symposium showcased the innovative efforts of faculty and graduate student instructors who are transforming their courses and pedagogies, including the Fall 2014 and Spring 2015 Hybrid Learning Course Redesign and Delivery grant awardees.
ENGAGEMENT WITH OUR NATIONAL NETWORKS

Ivy Plus

On May 12-13, 2016, the CTL hosted the annual conference of the Ivy Plus Teaching and Learning Centers at Columbia University’s Faculty House. Provost John Coatsworth kicked off the conference by welcoming the directors of the Ivy Plus member institutions.

Over the next two days, participants gathered to highlight recent accomplishments, identify challenges, exchange ideas, and build cross-institution connections. A major focus was placed on addressing issues of diversity and fostering inclusive learning environments. The conference provided an opportunity for participants to share their approaches to engaging faculty and instructors on these issues at their institutions.

Participants included representatives from Ivy Plus member institutions Brown University, California Institute of Technology (Caltech), University of Chicago, Columbia University, Cornell University, Dartmouth College, Harvard University, Harvard Kennedy School, University of Michigan, Massachusetts Institute of Technology, University of Pennsylvania, Princeton University, Stanford University, and Yale University.

CIRTL Network

In February 2016, Columbia University joined the Center for the Integration of Research, Teaching and Learning (CIRTL) Network, established in 2003 with support from the National Science Foundation to improve teaching skills and increase the diversity of future university faculty in science, technology, engineering, and mathematics (STEM) fields. As a CIRTL member, Columbia University will build local learning communities as well as a network with the 45 other member universities.

CIRTL stresses the use of successful, evidence-based strategies (e.g., inclusive teaching, collaborative learning, study groups, real-world scenarios, and ongoing assessment practices) proven to promote active learning and to help STEM students from all backgrounds succeed and complete their degrees. The network also emphasizes the importance of developing national connections through exchanges and virtual courses.
At the CTL, we incorporate innovative technologies to develop educational resources that enrich the classroom and other learning environments. Working with faculty and instructors, CTL specialists have developed a range of learning tools and experiences for learners at Columbia and across the globe.

During the 2015-2016 academic year, the CTL worked with faculty and instructors to initiate and develop more than 30 educational projects, including visualization and modeling tools; real-time data collection tools; data sharing programs; annotation and study tools; media archives; training environments; simulations; and multimedia study environments. Our staff currently maintains over 100 active projects.
CTL videos are available on the Columbia | Learn YouTube channel as open educational resources.
The following selected projects highlight the CTL's key partnerships; our expertise in learning-experience design, media production, and software development; and our emphasis on using research-informed practices to promote communication and collaboration.

Visit our website at ctl.columbia.edu to browse a portfolio of our active projects.

Footprints

Footprints is a crowd-sourced database of information related to the circulation of printed Jewish books. Developed through a collaboration of researchers from the Jewish Theological Seminary, Columbia University, University of Pittsburgh, and Stony Brook University, the site helps scholars and students trace the history and movements of Jewish books across space and time.

The CTL helped organize a Researchathon—a gathering of dozens of participants who were tasked with entering data into a prototype system—and a classroom pilot. These efforts helped inform the CTL developers’ design: a scalable application with a streamlined interface for data entry and sophisticated visualizations that help users gain a better understanding of research objects and the complex relationships among them. Access Footprints at: footprints.ccnmtl.columbia.edu.

Project Partners:
Michelle Chesner, Norman E. Alexander Librarian for Jewish Studies
Marjorie Lehman, Associate Professor of Talmud and Rabbinics, Jewish Theological Seminary

E-WORTH

E-WORTH ("Empowering African-American Women On the Road to Health") is an HIV-prevention intervention for African-American women on probation. Developed in partnership with the School of Social Work's Social Intervention Group (SIG), the goal of the intervention is to build positive peer norms and social support systems that allow participants to successfully negotiate critical barriers to health such as substance abuse and intimate partner violence.

Participants are introduced to fictionalized characters tackling important life-issues that lead to computer-supported learning activities tailored to accommodate a range of learning needs. The CTL and SIG faculty developed the exercises and the scripts for professional actors and a narrator that guides participants on their critical journey toward health.

Project Partners:
Nabila El-Bassel, Professor at the School of Social Work and Director of the Social Intervention Group
Louisa Gilbert, Associate Professor at the School of Social Work and Co-Director of the Social Intervention Group

Education Leadership Development Experience

The Education Leadership Development Experience (ELDEx) is an application that supports in-person intensive professional development workshops and training sessions for educational leaders. Developed in partnership with the Urban Education Leaders’ Collaborative (UELC) at Teachers College, ELDEx uses case studies and simulations to engage workshop participants in decision-making scenarios based on actual events.

UELC facilitators wanted to be able to differentiate learning experiences for each group in a workshop cohort and manage decision points to keep participants thinking on their feet. In response to their needs, the CTL created an open-source platform that enables facilitators to track group progress in real time and make “just-in-time” adjustments to the learning experience by modifying the narrative flow with decision-making “curve balls.” The platform also allows facilitators to easily add and edit their case studies. ELDEx has been used to deliver trainings to hundreds of participants around the country since it launched in Fall 2015.

Project Partner:
Brian Perkins, Director of the Urban Educational Leaders Program, Teachers College

Film Language Glossary

The Columbia Film Language Glossary (CFLG) is an online environment that illustrates the grammar and syntax of film by providing definitions of essential terms used in film scholarship and analysis. Originally developed in 2005 in partnership with Columbia University Libraries and School of the Arts faculty, the glossary incorporates selections drawn from the film canon. The glossary can enhance screenings, readings, lectures, and discussions for any course that involves the study of film.

This past year, the FLG project was the recipient of a Columbia Libraries Digital Internship Program grant that supported the work of an advanced graduate student to create new content and amplify existing entries. Some of the entries are enhanced with faculty voice-overs and annotations to highlight specific cinematic techniques.
Access the CFLG at:
filmglossary.ccnmtl.columbia.edu.

Project Partners:

Richard Peña, Professor of Professional Practice, Faculty of the Arts

Nancy Friedland, Librarian for Butler Media, Film Studies and Performing Arts

Mediatheke

Mediatheke is an open-source platform, created by the CTL, that supports multimedia analysis within a communal environment. Instructors using Mediatheke designate online collections of source materials for a given course and post assignments. Their students are able to collect video, audio, and image assets from across the web (or upload original media they create), annotate them, and embed them into compositions within a course-specific website.

During the 2015-2016 academic year, Columbia instructors used Mediatheke in 129 courses. Recently added features include a new assignment type to facilitate audio analysis in Music Humanities and similar courses. The CTL continues to provide training and technology support for Mediatheke, which has been used in over 250 courses since its launch in 2010. Mediatheke has been adopted at other institutions, including MIT, Dartmouth, Wellesley, Georgia Tech, and the University of Maine.
The CTL produces Massive Open Online Courses (MOOCs) on several platforms, including Coursera and edX. MOOCs provide the CTL with thousands of users and a large-scale analytics system for gathering and analyzing learner data. The analysis of this data directly benefits Columbia classrooms by informing more effective teaching approaches and the creation of educational resources. The CTL also regularly participates in the NYC MOOC-Makers Meetups—a core group of professionals from NYC-based cultural and educational institutions involved in producing massive open online courses (MOOCs).

**Active Courses**

**Civil War and Reconstruction**

*Project Partner: Eric Foner, DeWitt Clinton Professor of History*

The Civil War and Reconstruction three-part MOOC series started in September 2015 and ended in May 2016. This was the second time that the series, featuring Eric Foner, DeWitt Clinton Professor of History, was offered on the edX platform.

This MOOC series introduced thousands of new participants to the most pivotal era in American history. The Civil War transformed the nation by eliminating the threat of secession and destroying the institution of slavery, but led to the struggle after the war to breathe meaning into the promise of freedom for four million emancipated slaves. The three courses in the series covered the Antebellum (1850-1861), the Civil War (1861-1865), and Reconstruction (1865-1890).

**Big Data in Education**

*Project Partner: Ryan Baker, Associate Professor of Cognitive Studies, Teachers College*

The Big Data in Education MOOC with Ryan Baker, Associate Professor of Cognitive Studies at Teachers College, ran in Summer 2015 for eight weeks. Participants learned how, why, and when to use key methods for educational data mining and learning analytics on large-scale educational data.

**Courses in Development**

**Women Have Always Worked**


This two-part MOOC explores the history of women in America and how their work has changed in the home, the marketplace, and the nation.

*Release Date: Fall 2016*

*Course length: two 8-week courses*

**Major Trends in World Cinema: 1930-1960**

*Project Partner: Richard Peña, Professor of Practice, Department of Film*

This two-part MOOC explores three decades of international cinema history. The first part covers up to the end of World War II. The second part covers the period after the war to 1960.

**Freedom of Expression in the Time of Globalization**

*Project Partner: Agnes Callamard, Director of the Global Freedom of Expression Project*

Freedom of expression is at the heart of many global controversies and challenges. This MOOC will explore the scope, limits and abuses of this fundamental human right.

*Release Date: Fall 2016*

*Course length: 6 weeks*

**Global Muckraking**

*Project Partner: Anya Schiffin, Lecturer in the Discipline of International and Public Affairs*

This MOOC will explore the history and role of investigative journalism and examine how social media, innovation, and philanthropy are transforming the media today. MOOC participants will examine cases where journalists raise awareness about social problems, holding governments accountable.

*Release date: Fall 2016*

*Course length: 6 weeks*
Innovating Instruction

*Project Partner:* Ellen Meier, Associate Professor of Practice, Teachers College.

This MOOC prepares middle school educators to integrate technology through the design of authentic projects to support deep and meaningful classroom engagement. This course will be part of the White House ConnectED initiative.

Release date: Fall 2016

Course length: 4 weeks.

The Science of Learning: What Every Teacher Should Know

*Project Partners:*

Pearl Kane, Klingenstein Family Professor for the Advancement of Independent School Education, Teachers College

Kevin Mattingly, Adjunct Associate Professor, Teachers College

This MOOC is an introductory teaching course for K-12 teachers about the science of learning and how to use current research to improve classroom outcomes. The course will be part of the White House ConnectED initiative.

Release Date: Fall 2016

Course length: 4 weeks

MOOC videos are available on the Columbia Learn YouTube channel as open educational resources.

youtube.com/ccnmtl

**Hours Watched**

*from The Civil War and Reconstruction Series on Columbia Learn in 2015-2016*

8,821
KEY INITIATIVES

The Triangle Initiative

c.tl.columbia.edu/innovations/global/

The Triangle Initiative is a strategic effort to create digital tools and capacities that serve the intersecting interests of education, research, and the larger international community. Over the past year, CTL staff supported the development of ten Triangle Initiative projects. These projects include a computer-supported curriculum that helps patients in South Africa stay on their antiretroviral medication; training modules for nurses that provide for children with HIV in sub-Saharan Africa, Brazil, and other locations; and educational modules providing guidance on genetic testing for parents of New York City children with cancer.

Case Consortium

casestudies.ccnmtl.columbia.edu

In July 2015, the CTL assumed ownership and administration of The Case Consortium @ Columbia project, an online collection of more than 80 interdisciplinary case studies that are used in more than 100 colleges and universities worldwide. The Consortium was founded by the Graduate School of Journalism, the Joseph L. Mailman School of Public Health, and the School of International and Public Affairs (SIPA).

Over this past year, the CTL expanded its services and support of case-based learning at Columbia. With a grant from the Office of the National Coordinator for Health Information, the CTL developed a case-based curriculum that will train at least 1,000 incumbent healthcare workers to use health information technologies from July 1, 2016 through June 30, 2017. The CTL also hosted three workshops on teaching with case studies at Columbia University.
CREATING DIGITAL SPACES: OUR PEOPLE AND PROCESS

Our Passion

Our staff maintains a playful sense of fascination around technology at the intersection of education, library science and research. We specialize in designing intuitive, user-friendly experiences, and have extensive experience delivering complex applications for teaching and learning. The CTL provides a uniquely supportive environment that allows faculty partners the opportunity to self-reflect, which often results in profound and positive changes to their teaching practices and learning environments.

Our Approach

Much like the design of a physical classroom, the architecture and design of digital learning environments expresses the values of their creators and significantly shapes learning experiences. For example, a digital environment can foster an atmosphere where students are figuratively sitting in the rows of a lecture hall, asking permission before they speak. Or, it can reflect the familiar circle of a seminar room where the conversation flows organically.

CTL learning designers, along with our staff of programmers, web developers, media producers, and web designers, work closely with faculty and other stakeholders to design powerful and effective learning experiences. Projects always begin with an educational hypothesis, one that imagines the ways that digital media and networked environments can promote learning objectives. Our approach is grounded in the curriculum with a focus on translating and preserving traditional scholarly practices such as critical analysis, close reading, and citing primary sources.

Our staff also helps faculty explore the frontiers of study and scholarship by creating opportunities for students to develop new digital literacies, meaningfully collaborate, analyze and construct large multimedia archives, and authentically engage in public discourse. We take pride in our adoption of cutting-edge production and engineering, and follow the principles of design research as well as industry best practices.

Our Projects

CTL learning experiences support good pedagogy by guiding the flows of knowledge, information, and power. Our projects not only reflect our staff’s combined expertise in educational technology and instructional design, but the unique capabilities of our talented media production and software development teams.

The CTL media production team produces media for all of the CTL’s online and face-to-face programs and projects, from producing digital health interventions to capturing interviews with world-renowned artists and intellectuals to developing hybrid and online courses such as MOOCs. The videos produced by the CTL promote in-depth inquiry and analysis, broaden understanding, and help promote diverse thinking and viewpoints within and beyond the academic community. Our team prides itself in maintaining a rigorous practice of experimentation and research to stay abreast of a fast-moving field.

The CTL developers’ work begins with supporting commodity platforms such as the LMS, wikis and blogs. Our custom software projects pick up where these systems leave off; we have a great deal of experience improving users’ experiences with rich media, annotations, collaboration, simulations, and translating software developed on a lab bench to the web. Customizing software, often by extending existing open-source frameworks, allows for even more control, allowing faculty to design student experiences tailored to their specific needs as well as utilize tools to administer and assess student performance.

Follow our reflections on the technical aspects of the CTL’s work at compiled.ctl.columbia.edu and on github.com/ccnmtl.

Watch our public video productions on our YouTube channel, Columbia | Learn.
Chris, I'm so glad because today, a concept you have when you get stuck in a rut. The part of a school Self-Determination says there are.

ENID points to illustrate.

ENID which need to be worked on. One needs are Autonomy feel as though they are in control of the course of their life. Relatedness (talking about people, and feel belonging & love). Competence (the ability to effectively solve problems). Chris, let's take a local situation, keep the idea that these are in place.

ENID (to Chris)
So how are you feeling?

CHRIS
I feel like she is incompetent... and it makes me feel like a kid. I'm irritated.

ENID (to Chris)
Now, Can you talk about what your work? [Pulling on a rope for meaningfulness,
The Lead Teaching Fellows program is a professional development opportunity for a select group of graduate students committed to promoting and advancing pedagogy. During the 2015-2016 academic year, five Senior Lead Teaching Fellows were added to the program, and the Lead Teaching Fellow roster expanded to 33. This cohort attended a series of gatherings, and produced over 60 teaching-related workshops and discussions in their home departments.

Working with the support of the CTL and the Graduate School of Arts and Sciences, Lead Teaching Fellows (or LTFs) produce teaching-related events in home departments, advance their own pedagogical development, and facilitate communication between the CTL, other LTFs, faculty, and graduate student instructors across the university.

**Anthropology**
Victoria Gross (Senior LTF)
Soo Young Kim
Fatima Mojadeddi

**Art History and Archaeology**
Natasha Marie Llorens

**Astronomy**
Stephanie Douglas

**Biological Sciences**
Suzie Tozier (Senior LTF)
Nijo Kato
Kausik Regunath

**Chemistry**
Nevette Bailey

**Classical Studies**
Sam McVane

**Classics**
Kate Meng Brassel

**Earth and Environmental Sciences**
Franziska Landes

**East Asian Languages and Cultures**
Joshua Batts

**Economics**
Leo Wang

**English and Comparative Literature**
Andrea Crow
Emma O’Loughlin Berat

**French**
Anna Provitola (Senior LTF)

**Germanic Languages**
Tabea Weitz

**History**
Melissa Morris

**Italian**
Savannah Cooper-Ramsay

**Latin American and Iberian Cultures**
Cristina Perez Jimenez (Senior LTF)
Wendy Muniz

**Middle Eastern, South Asian, and African Studies**
Sahar Ullah
Max Schmookler

**Music**
Ben Hansberry
Paula Harper

**Philosophy**
Robby Finley
Christine Susienka

**Physics**
Minghao Cheng

**Political Science**
Hadas Aron

**Psychology**
Daniel Barulli
Noam Zerubavel

**Religion**
Cara Rock-Singer

**Slavic Languages**
Holly Myers (Senior LTF)
Robyn Jensen
Inna Kapilevich

**Sociology**
Luciana Leao

**Sustainable Development**
Jason Wong
Peer Teaching Consultants (PTCs) are doctoral students who work closely with the CTL during the academic year to better design, implement, and assess elements of teaching. PTCs work with a partner to plan and conduct two peer teaching observations during the academic year. With each observation, PTC pairs collaboratively draft an observation plan and report. In addition, each PTC observes a faculty member teaching in a different discipline within the course of the academic year.

Molly Rose Avila  
Slavic Languages

Justin Canfil  
Political Science

Nassime Chida  
Italian

Whitney Cowell  
Environmental Health

Nicholas Croggon  
Art History & Archaeology

Andre Deckrow  
East Asian Languages and Cultures

Allison DeWitt  
Italian (2015-16 CTL Graduate Fellow)

Alex Fabrizio  
English and Comparative Literature

Nicole Gervasio  
English and Comparative Literature

Orit Hilewicz  
Music

Manpreet Kaur  
Religion

Ana Méndez Oliver  
Latin American and Iberian Cultures

Vivek Pal  
Mathematics

Halimat Somotan  
History

Ana Varela Varela  
International and Public Affairs
The Hybrid Learning Course Redesign and Delivery grant program, from the Office of the Provost, provides support for faculty who are developing innovative and technology-rich pedagogy and learning strategies in the classroom. Columbia faculty received support from CTL staff for the redesign, delivery, and evaluation of their courses during the 2015-2016 academic year.

FALL 2015

Alhelí Alvarado-Díaz
Lecturer, History
Alvarado-Díaz’s redesign employs new technologies to develop and interpret canonical texts as a part of Contemporary Civilization I & II in Columbia University’s Core Curriculum.

Jonathan Barasch
Professor of Medicine and Pathology and Cell Biology
Barasch and medical student Adam Schweber redesigned the course Molecular Mechanism to incorporate pre-class activities—interactive simulations and videos with quizzes—to allow for more patient visits and group work during class.

Adam Cannon
Senior Lecturer, Machine Learning
Cannon put together a team of instructors to blend an entirely new interdisciplinary computing course, Computing in Context. Students watch lecture videos before class, and participate in collaborative assignments online.

Matthew Connelly
Professor of History
Connelly incorporated new methods for analyzing the historical record in the age of big data into his course International and Global History Since World War II. Students contributed web exhibits and interactive tools to History-Lab.org.

Donald Davis
Ragnar Nurke Professor of Economics
Davis built a 2.0 version of the course The Economics of New York City with video elements and geo-spatial mapping, allowing students to experience spatial elements in the historical evolution of New York City.

Amy Fairchild
Professor of Sociomedical Sciences
Fairchild incorporated a collaboratively authored website into the Masters of Public Health Core Curriculum. The site includes videos, an index of publications, faculty and student blogs, and live chat sessions created throughout each semester.

Rachel Gordon
Assistant Professor of Medicine and Epidemiology
Gordon used team-based learning and flipped classroom techniques to rework her course on infectious diseases. Students form groups to work through clinical scenarios in which they must respond to difficult questions as a cohesive unit.

Martin Haugh
Associate Professor of Professional Practice in the Department of Industrial Engineering and Operations Research
Haugh redesigned his Foundations of Financial Engineering course using the flipped classroom model. He produced a series of professional videos to replace his lectures.

Darcy Kelley
Harold Weintraub Professor of Biological Sciences
Kelley redesigned her Frontiers of Science (FoS) course—a Core Curriculum course for all Columbia College students. Students watch lecture videos before class and use Smart Sparrow, an adaptive e-learning tool, to evaluate their learning.

Shantanu Lal
Associate Professor of Dental Medicine
Lal used Google Glass and Apple iPads to enhance his pediatric dentistry course. Google Glass enables master clinicians and instructors to film cases and view what their students are seeing in real-time using the iPad.

Letty Moss-Salentijn
Edward V. Zegarelli Professor of Dental Medicine
Moss-Salentijn began an ambitious redesign of the entire didactic course component for third-year dental students. Instructors use WACOM tablets with Camtasia to produce content in order to flip 4 of 13 didactic course modules.

Bernard Salanie
Professor of Economics
Salanie flipped his Mathematical Methods for Economists course by incorporating modular units, such as filmed lectures and “chalkboard” instructional videos, and using Piazza to enhance classroom participation.

Jay Sethuraman
Professor of Industrial Engineering and Operations Research
Sethuraman redesigned his Introduction to Mathematical Programming course using the flipped classroom model. He incorporated videos that provide pre-class overviews for all of the mathematical concepts and theories covered in the course.

Brent Stockwell
Professor of Biological Sciences and Chemistry
Stockwell took his already-flipped course Biochemistry: Structure and Metabolism and applied web-based, analytical tools to evaluate the effectiveness of team-based science learning.
Paola Velenti  
*Lecturer, Discipline of International and Public Affairs*  
Velenti flipped her Microeconomics for International and Public Affairs course, a part of the Core Curriculum at the School of International and Public Affairs, by integrating pre-class lecture videos and podcasts.

Amy Weman  
*Adjunct Assistant Professor of Social Work*  
Weman flipped her Program Evaluation in the Social Services course and worked on enhancing a project that incentivizes a local social service program to partner with her course and receive a free evaluation from her students.

**SPRING 2016**

Susan Boynton  
*Professor of Music*  
Boynton and her colleague Professor Brad Garton used Mediathread to allow her Masterpieces of Western Music students to visualize, analyze, and markup digital sound files. This is Boynton’s second Hybrid Learning Award.

Annette Insdorf  
*Professor of Film*  
Insdorf and Professor Rob Brink (Barnard College) used the Mediathread tool to allow Analysis of Film Language students to annotate clips from cinematic masterpieces.

Robert O’Meally  
*Zora Neale Hurston Professor of English and Comparative Literature*  
O’Meally conducted an extensive survey to allocate media assets and collections that focus on the Harlem Renaissance, to be reviewed by his students and showcased in an online environment.

Bryan Winn  
*Assistant Professor of Ophthalmology*  
Winn worked with cartoonist Benjamin Schwartz (The New Yorker) to develop an interactive, humor-rich instructional tool called TEEch’Em. Winn evaluated the tool by incorporating it into his one-week course, Ophthalmology Clinical Clerkship.
Publications


Forthcoming

Saumaa, Hiie and Cennamo, M. Blended learning, creativity, and the power of two: A teacher and technologist collaborate. Hybrid Pedagogy, forthcoming.

Editorial Work
Appert, L. What’s new in educational technology? Presented at Cengage, Inc.’s Engage Speakers Series.

Conference and External Presentations
Appert, L. Learning together: Two models of an inter-institutional collaboration for faculty development. Presented at Online Learning Consortium International Conference.

Hirschmann, K. Learning together: Two models of an inter-institutional collaboration for faculty development. Presented at Online Learning Consortium International Conference.


Matiz, M. Columbia’s MOOCs. Presented at the Open edX Meetup.


Takayama, K. Preparing the future professoriate: The scholarship of mentorship as reflective praxis. Presented at the International Society for the Scholarship of Teaching and Learning Conference.

Takayama, K. Reflective teaching meets reflective learning: Forming partnerships with undergraduate students. Presented at the 2015 POD Conference.

Takayama, K. The importance of diversity in the classroom and institutional impact. Presented at Creating Connections Consortium (C3) Summit.

Takayama, K. The scholarship of teaching and learning: A microbiologist’s journey. Presented at the Scholarship of Teaching and Learning (SoTL) Academy.


Executive Director’s Presentations to Columbia University
Leadership
Presentation to the Columbia University Board of Trustees
Presentation to the Council of Deans
Presentation to the Deans of Education
Office of the Vice Provost for Faculty Diversity and Inclusion

Presentation at the Office of the Vice Provost for Faculty Diversity and Inclusion's Bridge to PhD Program Workshop

Presentation at the Office of the Vice Provost for Faculty Diversity and Inclusion's Junior Faculty Career Development Institute

Presentation to the Office of the Provost's Leadership Fellows

Office of the Executive Vice President for Research

Presentation at the NSF CAREER Award: Strategies for Successful Proposal Development Workshop

Effective PowerPoint Presentations. Presentation at the Office of the Executive Vice President for Research's Staff Meeting.

Committees and Legislatures

Presentation to the Columbia University Senate

Presentation to the Columbia University Senate IT Committee Meeting

Presentation to the Columbia University Senate Education Committee

Presentation to the Middle States Commission on Higher Education Accreditation Committee

Presentation to the Senate Committee on Student Affairs

Presentation to the Senate Libraries, Education and Information Technology Joint Committee Meeting

Schools

Presentation at the Faculty of Arts and Sciences' Chairs Meeting

Presentation at the School of Journalism's Faculty Meeting

Presentation at the School of Journalism's Faculty Retreat

Presentation to the Fu Foundation School of Engineering and Applied Science's Annual Meeting of the Faculty

Columbia University Medical Center (CUMC)

Presentation at the School of Nursing's Anna Maxwell Teaching Academy

Presentation to the CUMC Education Resource Council

Presentation to the CUMC Educator Clinic

Invited lecture at the CUMC Irving Institute for Clinical and Translational Research Colloquium on Patient-Oriented Research

Columbia University Libraries

Presentation to the Columbia University Libraries

Presentation to the Libraries Research Services Discussion Group

Departments

Presentation to the Computer Science Department

Presentation to the Distributed Computing and Communications Laboratory

Presentation to the Department of Music

Administrative Offices

How Students Learn. Presentation to the Office of Postdoctoral Affairs
CTL staff served on a large number of committees within Columbia University and nationally.

**Internal Committee Participation**

Chandler/Math Steering Committee

Columbia Faculty Mentoring Initiative Committee

Columbia Information Technology Leadership Committee

Educational Policy and Planning Committee (EPPC) of Arts and Sciences Working Group on the HHMI Initiative to Improve Science Education for Undergraduate Students

EPPC Sub-Committee on Innovative Practices in Teaching

Senate Education Committee

XPMethods - Columbia’s Group for Experimental Methods in the Humanities

**External Committee Participation**

International Society for the Scholarship of Teaching & Learning (ISSOTL) Board of Directors

Ivy Plus Conference Planning Committee

POD Network: Professional and Organizational Development Network in Higher Education
We are grateful to our partners for helping the CTL deliver programming to faculty and instructors with diverse interests, needs, and backgrounds, and to our project partners who collaborate with us on digital innovations across a range disciplines, schools, and departments.

### Program Partnerships

Columbia University Medical Center  
Graduate School of Arts and Sciences  
Office of the Executive Vice President for Research  
Office of the Vice Provost for Faculty Diversity and Inclusion  
Office of University Life

### Project Partnerships

College of Dental Medicine  
College of Physicians and Surgeons  
Columbia University Libraries  
Department of History  
Jewish Theological Seminary  
Mailman School of Public Health  
School of Arts and Sciences  
School of International and Public Affairs  
School of Journalism  
School of Social Work  
Teachers College

### External Partnerships and Associations

Center for the Integration of Research, Teaching and Learning (CIRTL) Network Coursera  
edX  
International Society for the Scholarship of Teaching and Learning (ISSoTL)  
Ivy Plus Teaching and Learning Centers  
National Science Foundation  
New-York Historical Society  
POD Network: Professional and Organizational Development Network in Higher Education

### Liaison Networks

Our department liaisons help keep the CTL informed about faculty and graduate students’ needs for programming and support. Liaisons also share announcements of CTL programs and activities to colleagues in their departments.

### Anthropology

Graduate Student Liaisons: Fatima Mojaddedi, Soo-Young Kim

### Art History & Archaeology

Graduate Student Liaison: Natasha Marie Llorens

### Astronomy and Astrophysics

Faculty Liaison: Frits Paerels  
Graduate Student Liaison: Stephanie Douglas

### Barnard College Department of Dance

Faculty Liaison: Katie Glasner

### Barnard College Education Program

Faculty Liaison: Maria Rivera Maulucci

### Biological Sciences

Faculty Liaison: Debby Mowshowitz  
Graduate Student Liaison: Kausik Regunath, Niyo Kato

### Biomedical Engineering

Faculty Liaison: Ed Guo  
Graduate Student Liaison: Rachel Sattler

### Chemistry

Faculty Liaison: Laura Kaufman  
Graduate Student Liaison: Nevette Bailey

### Civil Engineering and Engineering Mechanics

Faculty Liaison: Raimondo Betti  
Graduate Student Liaison: Miguel Arriaga

### Classics

Faculty Liaison: Joseph Howley  
Graduate Student Liaison: Kate Brassel

### Classical Studies Program

Graduate Student Liaison: Samuel McVane

### College of Dental Medicine

Faculty Liaison: Leroy Moss-Salentijn

### Columbia University Libraries

Faculty Liaison: Barbara Rockenbach

### Computer Science

Faculty Liaison: Adam Cannon  
Graduate Student Liaison: Marshall Ball
<table>
<thead>
<tr>
<th>Field</th>
<th>Graduate/Postdoctoral Liaisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth and Environmental Sciences</td>
<td>Graduate Student Liaison: Franziska Landes</td>
</tr>
<tr>
<td>East Asian Languages and Cultures</td>
<td>Graduate Student Liaison: Joshua Batts</td>
</tr>
<tr>
<td>Ecology, Evolution, and Environmental Biology</td>
<td>Faculty Liaison: Maria Diuk-Wasser</td>
</tr>
<tr>
<td>Economics</td>
<td>Faculty Liaison: Susan Elmes Graduate Student Liaison: (Leo) Lijun Wang</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>Faculty Liaison: Charles Zukowski Graduate Student Liaison: David Gidony</td>
</tr>
<tr>
<td>English and Comparative Literature</td>
<td>Graduate Student Liaisons: Emma O’Loughlin Bérat, Andrea Crow</td>
</tr>
<tr>
<td>French and Romance Philology</td>
<td>Graduate Student Liaison: Anna Provitala</td>
</tr>
<tr>
<td>Frontiers of Science</td>
<td>Faculty Co-Liaisons: Ivana Nikolic Hughes, Monica Rouco Molina</td>
</tr>
<tr>
<td>Germanic Languages</td>
<td>Graduate Student Liaison: Tabea Weitz</td>
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<tr>
<td>History</td>
<td>Graduate Student Liaison: Melissa Morris</td>
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<tr>
<td>Industrial Engineering and Operations Research</td>
<td>Faculty Liaison: Jay Sethuraman</td>
</tr>
<tr>
<td>Institute for the Study of Human Rights</td>
<td>Faculty Liaison: Kristina Renee Eberbach</td>
</tr>
<tr>
<td>Italian</td>
<td>Graduate Student Liaison: Savannah Cooper-Ramsay</td>
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<tr>
<td>Language Resource Center</td>
<td>Faculty Liaison: Stephane Charitos</td>
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<tr>
<td>Latin American and Iberian Cultures</td>
<td>Graduate Student Liaison: Wendy Muniz</td>
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<tr>
<td>Mechanical Engineering</td>
<td>Faculty Liaison: Sunil Agrawal Graduate Student Liaison: Jenny Ardelean, Braden Czapla</td>
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<tr>
<td>Middle Eastern, South Asian, and African Studies</td>
<td>Graduate Student Liaison: Max Shmoookler, Sahar Ullah</td>
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<tr>
<td>Motor Neuron Center</td>
<td>Postdoctoral Liaison: Carlos B. Rueda Diez</td>
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<tr>
<td>Music</td>
<td>Faculty Liaison: Susan Boynton Graduate Student Liaison: Ben Hansberry, Paula Harper</td>
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<tr>
<td>Oral History Master of Arts</td>
<td>Faculty Liaison: Amy Starcheski</td>
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<tr>
<td>Philosophy</td>
<td>Graduate Student Liaisons: Christine Susienka, Robby Finley</td>
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<tr>
<td>Physics</td>
<td>Faculty Liaison: Jeremy Dodd Graduate Student Liaison: Minghao Cheng</td>
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<td>Political Science</td>
<td>Faculty Liaison: Jeff Lax Graduate Student Liaison: Hadas Aron</td>
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<tr>
<td>Psychology</td>
<td>Graduate Student Liaisons: Daniel Barulli, Noam Zerubavel</td>
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<td>Mailman School of Public Health</td>
<td>Faculty Liaison: Leah Hooper</td>
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<tr>
<td>Religion</td>
<td>Graduate Student Liaison: Cara Rock-Singer</td>
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<tr>
<td>School of Journalism</td>
<td>Faculty Liaison: Duy Tu</td>
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<tr>
<td>School of Nursing</td>
<td>Faculty Liaison: Judy Honig</td>
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<td>School of Social Work</td>
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<td>Slavic Languages</td>
<td>Graduate Student Liaisons: Robyn Jensen, Inna Kapilevich</td>
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<td>Sociology</td>
<td>Graduate Student Liaison: Luciana Leao</td>
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<td>Statistics</td>
<td>Faculty Liaison: Daniel Rabinowitz</td>
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<tr>
<td>Sustainable Development</td>
<td>Graduate Student Liaison: Jason Wong</td>
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<tr>
<td>Theatre</td>
<td>Faculty Liaison: Bill Worhen Graduate Student Liaison: Warren Kluber</td>
</tr>
</tbody>
</table>
## Distribution of Services to Columbia University

<table>
<thead>
<tr>
<th>School Name</th>
<th>Unique Individuals Served</th>
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</thead>
<tbody>
<tr>
<td>Barnard</td>
<td>94</td>
</tr>
<tr>
<td>Business School</td>
<td>18</td>
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<tr>
<td>College of Dental Medicine</td>
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<tr>
<td>College of Physicians and Surgeons</td>
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<td>Columbia College</td>
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<td>Faculty School of Arts and Sciences</td>
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<td>Graduate School of Arts and Sciences</td>
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<td>Jewish Theological Seminary</td>
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<tr>
<td>Law School</td>
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<td>School of Architecture Planning and Preservation</td>
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<tr>
<td>School of Arts</td>
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<td>School of Engineering and Applied Sciences</td>
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<td>Union Theological Seminary</td>
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<tr>
<td>Other</td>
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<td><strong>Grand Total</strong></td>
<td><strong>2,492</strong></td>
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<tr>
<td>Department Name</td>
<td>Unique Interactions</td>
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<td>-----------------------------------------------------</td>
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<tr>
<td>Anesthesiology</td>
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<td>Anthropology</td>
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<td>Applied Physics and Applied Mathematics</td>
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<td>Architecture Planning and Preservation</td>
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<td>Art History and Archaeology</td>
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<td>Ecology Evolution and Environmental Biology</td>
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<td>Department Name</td>
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<tr>
<td>------------------------------------------------------</td>
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<tr>
<td>Education</td>
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<tr>
<td>Epidemiology</td>
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<td>Film</td>
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<td>French and Roman Philology</td>
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<td>General Studies</td>
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<td>Genetics and Development</td>
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<td>Germanic Languages</td>
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<td>Health Policy and Management</td>
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<td>History</td>
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<td>Human Development</td>
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<td>Human Rights</td>
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<td>Industrial Engineering and Operations Research</td>
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Acknowledgments

Submitted by Kathy Takayama, Ph.D., Executive Director

Special thanks go to
Marc Raymond, Caitlyn Esposito, Sarah Carswell, and Zach Kornhauser.