Annual Report

Center for Teaching and Learning

Office of the Provost

2021-2022































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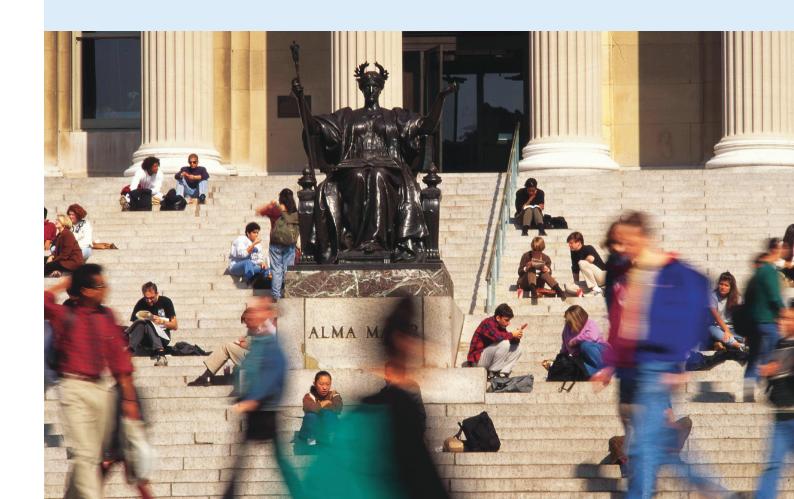
Our Mission

The Center for Teaching and Learning (CTL) partners with faculty, students, and colleagues across the University to support excellence and innovation in teaching and learning. The CTL is committed to advancing the culture of teaching and learning at Columbia through all of its programs, services, and resources.

The CTL understands teaching as a critical practice, driven by inquiry, experimentation, reflection, and collaboration. We promote pedagogy that is inclusive, learner-centered, and research-based. We support the purposeful use of new media and emerging technologies in the classroom and online to foster the success of Columbia's instructors and students.

Our Vision

Our vision is a Columbia teaching community that innovates in evidence-based instructional practices and technology use, promotes and participates in the research on learning, and commits to creating inclusive and equitable learning environments.



Letter from the Provost



Mary C. Boyce Provost

Dear Colleagues:

It is a pleasure to present the seventh annual report of the Columbia University Center for Teaching and Learning (CTL). Throughout my first full year as Provost, I was delighted to see how the CTL's remarkable team consistently helps strengthen the excellence of instruction across our schools, and I am glad to share its contributions with you through this report.

As you'll see in these pages, throughout the fall 2021 transition back to in-person teaching, CTL staff, as well as student pedagogical partners, offered invaluable guidance to help instructors approach the classroom in a new way. Teachers learned to leverage the best aspects of online and hybrid modalities in face-to-face settings, and it has helped propel ongoing educational innovation across the University.

In another vein, the CTL continued its work to put anti-racist pedagogy into action, equipping instructors with the tools to execute on President Bollinger's institutional call to anti-racism, made in 2020. Talented CTL staff developed online resources, ran workshops, and hosted a speaker series on anti-racist pedagogy. In fact, Frank Tuitt, the University of Connecticut's Vice President and Chief Diversity Officer, was our keynote speaker for the annual Celebration of Teaching and Learning Symposium in March 2022, as well as an insightful guest on the CTL's podcast, *Dead Ideas in Teaching and Learning*.

Perhaps the most inspiring examples of the CTL's work can be found in the stories of individual instructors throughout this publication—from senior faculty, including the Provost's Senior Faculty Teaching Scholars—to graduate students serving as teaching assistants for the first time. All of their accounts demonstrate how the CTL's core commitment to inclusive, reflective, research-based, and learner-centered education transforms classrooms across our University.

I hope you will enjoy the stories told here as much as I do. And to those educators who are not actively working with the CTL right now, I invite you to reach out. I'm sure that you will find that the CTL can help spark new ideas in your teaching, and that it is rewarding to connect with a community dedicated to pushing the frontiers of excellence in education.

Sincerely,

Mary Boyce Provost Professor of Mechanical Engineering

Letter from the Senior Vice Provost



Soulaymane Kachani Senior Vice Provost

Dear Colleagues:

Since the establishment of the Center for Teaching and Learning (CTL) in 2015, I have been very proud to see it grow into such an indispensable resource for faculty, graduate students, and colleagues across Columbia's campuses.

The CTL has served as a steady, guiding light for Columbia educators adapting to teaching in each modality that the pandemic has thrust upon us—online, hybrid, and then back to in-person in fall 2021. Throughout these difficult transitions, the CTL has introduced new pedagogies and tools to instructors, in order to fulfill the University's mission of advancing knowledge and learning at the highest level, no matter the circumstances. Importantly, CTL staff have also incorporated student perspectives into their work, collaborating with student pedagogical partners to promote engaged and inclusive learning.

Through the Office of the Provost Teaching and Learning Grants, we have funded another round of brilliant faculty projects, bringing the total projects funded since 2014 to 262. Through these grants, CTL staff have worked with faculty awardees to enhance their educational methods. Several recent and upcoming interventions focus on furthering anti-racism in and out of the classroom—a priority initiative for the University. Projects range from reducing bias in patient care and founding an anti-racist educator community of practice at our medical campus, to fostering diversity and inclusion for Business School faculty. This year's round of funding also incorporated two grants spearheaded by the Science of Learning Research (SOLER) Initiative. Through SOLER, we are pushing educational techniques further through the application of formal research methodologies to the scholarship of teaching and learning in new frontiers with our faculty, such as with virtual reality technology.

I invite you to read the accounts and testimonials written throughout this report that demonstrate the profound influence of the CTL on the Columbia community. For instance, GSAPP Professor Christopher Munsell wrote of the impact of implementing teaching strategies he learned at the CTL's Active Learning Institute, "I felt empowered by the number of students who told me they finally attained skills they thought they could never master." In another, a student of Psychology Professor Lila Davachi wrote of taking her re-designed course, "Ever since I was a kid, I knew I wanted to be a scientist and solve the universe's biggest mysteries...Coming to this class gave me the courage to be able to say, 'I don't want to be a scientist, I am one already.'"

I am indebted to our partner offices and colleagues across Columbia's campuses for their collaborations and hard work during this unpredictable and taxing year; for this I give many thanks. I'm grateful for our collective dedication to advancing and innovating teaching and learning at Columbia and beyond, and I look forward to an even brighter future ahead.

Sincerely,

Soulaymane Kachani Senior Vice Provost

Letter from the CTL Executive Director



Catherine RossExecutive Director of the Center for Teaching and Learning

Dear Colleagues:

Our collective journey over this past academic year involved many challenges and transitions, with changing COVID-19 parameters and moving back onto campus and into classrooms. Instructors were navigating multiple modes of teaching and discovering new student needs as the semester progressed. And yet through all of this, instructors committed to supporting their students' learning with flexibility and creativity, innovating in their teaching methods and attending to inclusion, anti-racism, and equity, despite the continually changing demands of the pandemic environment.

The CTL was honored to be a partner and a hub for instructors seeking support for their efforts to return to their classrooms as innovative instructors.

- The Dead Ideas in Teaching and Learning podcast, with over 25,000 downloads, continues
 to inspire Columbia instructors to experiment with new ideas like ungrading, anti-racist
 pedagogy, the interplay of instructor identity with inclusive teaching moves, the need for
 systemic change in how teaching is evaluated, and what our students have learned about
 learning over the last two years.
- The Provost's Teaching and Learning Grants have continued and in this past year have frequently incorporated all of the lessons we learned from teaching through the pandemic. This work was represented at an in-person Celebration of Teaching and Learning Symposium, with a record number of poster presentations in the Low Library Rotunda, and panel presentations by instructors and their students.
- The Provost's Senior Faculty Teaching Scholars continued to meet and to create a community around teaching across all of the disciplines represented, with a focus on the newly emergent needs for students and their learning as they returned to campus.

There is much more in this report than I can summarize in a letter, but the work over this past year does put me in mind of a bell hooks quote that calls us to action: "All of us in the academy and in the culture as a whole are called to renew our minds if we are to transform educational institutions—and society—so that the way we live, teach, and work can reflect our joy in cultural diversity, our passion for justice, and our love of freedom."

I can think of no better words to live by as we close out the 2021–2022 academic year and prepare for the new year ahead.

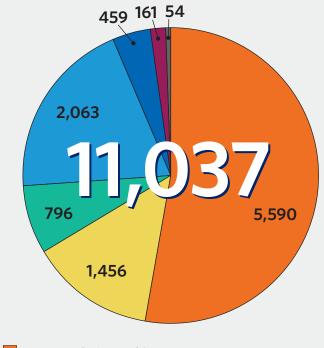
Sincerely,

Catherine Ross

Executive Director, Center for Teaching and Learning

Annual Highlights





- Morningside Arts and Sciences
- Morningside Professional Schools
- Fu Foundation School of Engineering and Applied Science
 - Columbia University Irving Medical Campus
- Affiliated Schools
- Centers and Institutes
- Other Units

Service to Columbia University

4,075 consultations and service interactions with Columbia-affiliated individuals

1,032 Columbia-affiliated individuals in on-demand CTL courses

80 Graduate student fellows and teaching consultants

37 teaching and learning projects funded by the Office of the Provost

Service to Columbia University and Beyond

2,896,110 minutes watched on ColumbiaLearn YouTube Channel

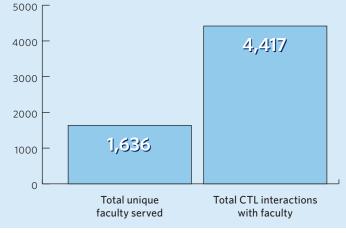
27 CTL-produced MOOCs *active on edX*

132,539 active learners on CTL-produced MOOCs on edX

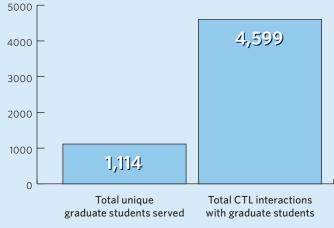
53 interactions with external visitors

42 CTL-developed software applications with 365,514 users and 1,952,397 page views





Service to Graduate Students



CTL-Wide Accomplishments

Celebration of Teaching and Learning Symposium

The Office of the Provost and the Center for Teaching and Learning welcomed the Columbia community to the Celebration of Teaching and Learning Symposium on March 29, 2022 to celebrate the ways that faculty and students have transformed their courses and pedagogies.

Frank Tuitt, the University of Connecticut's Vice President and Chief Diversity Officer and Professor of Higher Education and Student Affairs in the NEAG School of Education, delivered the keynote address: "Moving Beyond Diversity to Create Anti-Racist Teaching and Learning Environments," in Low Library.

Over 30 Columbia faculty, students, postdocs and staff presented posters and digital interactives in Low Library and online to share teaching and curricular innovations. The exhibition featured collaborative learning activities, examples of inclusive and anti-racist pedagogies, new models of student assessment and teaching with technology, and select projects by faculty recipients of the Provost's Teaching and Learning Grants.

The Symposium included the following online panel discussions:

- "The Science of Learning Research Initiative—Tales from Columbia's New Adventure in Scientific SoTL" with Beth Barron, Associate Professor of Medicine; Janet Metcalfe, Professor of Psychology; and Arya Rao, senior student at Columbia College.
- "Faculty Innovations in Teaching and Learning—
 An Interdisciplinary Panel Conversation" with Lila

 Davachi, Professor of Psychology; Ana DiGiovanni,
 PhD student in the Department of Psychology; Babi
 Kruchin, Lecturer in English as a Second Language,
 American Language Program; Natalie Voigt, Assistant
 Professor of Nursing; and Elizabeth Walters, Lecturer
 in the Discipline of English and Comparative Literature.

"I felt affirmed hearing about practices that I've intuitively been utilizing in the classroom. On some level, I am still plagued by the idea that I am supposed to lecture at students from a podium, when facilitating a learning community is no doubt the more effective and egalitarian approach."

 —Anonymous attendee of the Celebration of Teaching and Learning Symposium

210 participants attended the event.

To watch recordings of the event: https://ctl.columbia.edu/about/2022-symposium/



Provost **Mary Boyce** introduces keynote speaker **Frank Tuitt** at the Celebration of Teaching and Learning Symposium.

Anti-Racist Pedagogy Speaker Series

In partnership with The Office of the Vice Provost for Faculty Advancement, the CTL organized two anti-racist pedaogogy events: Dr. Frank Tuitt's keynote address "Moving Beyond Diversity to Create Anti-Racist Teaching and Learning Environments" at the Celebration of Teaching and Learning Symposium, and a workshop for Columbia faculty, staff, and students with Dr. Asao B. Inoue, Professor of Rhetoric & Composition at Arizona State University.

Dr. Inoue's workshop "Understanding and Doing Antiracist Classroom Assessment" considered what antiracist assessment can be in university courses and how faculty from across disciplines from Humanities to STEM courses can meaningfully engage in it. He argued that classroom assessment, from grading to feedback on literacy performances, is an ecology made up of seven interconnected elements that can help instructors promote antiracist assessment practices in courses.



Asao B. Inoue, from Arizona State University, presents a workshop for Columbia instructors on "Understanding and Doing Antiracist Classroom Assessment."

Provost's Senior Faculty Teaching Scholars

The Provost's Senior Faculty Teaching Scholars work in partnership with the CTL to support, change, and innovate the culture of teaching and learning within their own departments and schools as well as across campus. Deans nominate senior faculty who are both outstanding teachers and well-respected researchers in their disciplines.

The 2021-22 Senior Faculty Teaching Scholars were as follows:

- Maura Abbott, School of Nursing
- Silvia Cunto-Amesty, Vagelos College of Physicians and Surgeons
- Noam Elcott, Department of Art History and Archaeology, Arts & Sciences, Humanities
- Olatunde Johnson, School of Law
- Hod Lipson, Department of Mechanical Engineering, School of Engineering and Applied Science
- Stephanie McCurry, Department of History, Arts & Sciences, Social Sciences
- Daichi Shimbo, Vagelos College of Physicians and Surgeons
- Duy Linh Tu, Graduate School of Journalism

Below is a highlighted project by Senior Faculty Teaching Scholar **Silvia Cunto-Amesty**.

Silvia Cunto-Amesty, Associate Professor of Medicine and Population and Family Health and Medical Humanities and Ethics, hosted a pilot workshop with her team, Kayhan Irani and Jorge Gonzalez, and colleagues from Theater of the Oppressed. The workshop, entitled "Young Men of Color, Intersectional Identities and Mental Health: How the Pandemic Unveiled the Fragility of Our Social Structures," aimed to help students explore how implicit biases impact our beliefs, stereotypes, assumptions, and actions, and maintain health disparities when interacting with patients' intersectional identities. It was held on April 5, 2022 for the annual Interprofessional Education Day (IPE), Interprofessionalism in Action: Strengthening Ethical, Responsive, and Accountable Care. This yearly event is sponsored by the Department of Medical Humanities and Ethics. The pilot aimed to provide students with diverse viewpoints through embodiment work (a tangible or visible form of an idea, quality, or feeling). The approach was innovative in its use of theater exercises to embody identity and bias.

Dead Ideas in Teaching and Learning Podcast

This year, the CTL released seasons 3 and 4 of its podcast, *Dead Ideas in Teaching and Learning*, hosted by CTL Executive Director Catherine Ross. The mission of the podcast is to encourage instructors, students, and leaders in higher education to reflect on what they believe about teaching and learning. In each episode, guests are invited to share their discoveries of "dead ideas"—ideas that are not true but that are often widely believed and unconsciously embedded in the pedagogical choices we make.

The theme of the podcast series originates from the article "The Tyranny of Dead Ideas in Teaching and Learning" (*The Sociological Quarterly*, 2011) by Diane L. Pike, Professor of Sociology at Augsburg University. Episodes are released bi-weekly and are approximately 30 minutes in length.

Episodes focused on dead ideas in grading, teaching with technology, student motivation, assessment, inclusive and anti-racist pedagogies, and teaching and learning systems.

Guests have included Columbia faculty, students, and staff, as well as notable external authors and experts.



Season 3, Fall 2021:

- "Why Dead Ideas?" A Conversation with Host Catherine Ross and Ian Althouse, Senior Assistant Director, Columbia CTL
- "Why Educating for Wholeness, Social Justice, and Liberation Is the Future of Higher Education: A Conversation" with Laura I. Rendón, Professor Emerita at the University of Texas-San Antonio and author of Sentipensante (Sensing/Thinking) Pedagogy: Educating for Wholeness, Social Justice and Liberation (2009)
- "Dead Ideas in Faculty Evaluation" with Kevin Gannon, Professor of History and Director of the Center for Excellence in Teaching and Learning at Grand View University
- "Convergent Teaching" with Aaron Pallas and Anna Neumann, Professors of Education at Teachers College and authors of Convergent Teaching (2019)
- "Learning Innovation and the Future of Higher Education" with Joshua Kim, Director of Online Programs and Strategy at Dartmouth College, and Edward Maloney, Executive Director of The Center for New Designs in Learning and Scholarship at Georgetown University
- "The Power of Blended Classrooms" with **Denise Cruz**, Professor of English and Comparative Literature at Columbia

11,889 podcast downloads for Seasons 3 and 4

To learn more and listen to the podcast: https://ctl.columbia.edu/podcast/

Season 4, Spring 2022:

- "Speaking from the Heart: An Instructor and Her Student Reflect" with Karen Phillips, former Senior Lecturer in the Discipline of Chemistry at Columbia, and Yarin Reindorp, student at Columbia's School of General Studies
- "The Damaging Myth of the Natural Teacher: The Story Behind The Story" with **Beth McMurtrie**, senior writer for *The Chronicle of Higher Education*
- "Teaching Development at Its Best: A Graduate Student Reflects" with Columbia graduate student Aleksandra Jakubczak
- "Dead Ideas About Anti-Racist Pedagogy" with Frank Tuitt, Vice President and Chief Diversity Officer, Professor of Higher Education and Student Affairs at the University of Connecticut
- "The Impact of Student Perceptions of Instructor
 Authority on Resistance to Inclusive Teaching" with
 Chavella Pittman, Professor of Sociology at Dominican
 University, and Thomas Tobin, founding member of the
 Center for Teaching, Learning, and Mentoring at the
 University of Wisconsin at Madison. Co-hosted with
 Rebecca Petitti, Assistant Director, Columbia CTL.
- "Minding Bodies—How Physical Space, Sensation, and Movement Affect Learning" with Susan Hrach, author of the book Minding Bodies: How Physical Space, Sensation, and Movement Affect Learning (2021).
 Co-hosted with Caitlin DeClercq, Assistant Director, Columbia CTL
- "Two Years Later—Learning through a Pandemic with Two Columbia Undergraduate Students" with Emma Fromont, student at Columbia's School of General Studies, and Victor Jandres Rivera, student at Columbia College.

"I hope you will do more podcasts in the coming year. They certainly made my commute enjoyable and meaningful this semester!"

Naoko Sourial, Lecturer, Department of East
 Asian Languages & Cultures

Thank-a-Prof/Thank-a-TA Initiative

The Thank-a-Prof/Thank-a-TA initiative celebrates impactful teaching and learning at Columbia University and recognizes professors and TAs for their contributions. In the 2021-22 academic year, students across Columbia's departments and campuses submitted 963 thank-you notes, which were forwarded to professors and TAs.

Learn more: https://ctl.columbia.edu/thank-a-prof/

Sample thank-you notes:

"Thank you for your endless understanding, guidance, and empathy. It is incessantly clear that you not only care about us as students, but care about crafting a class that everyone can take significance from—which is, as I see it, why we take the Core. Thank you for your fair grading, thorough feedback, and constant availability both through email and through office hours. In your class, I feel like I have improved as a writer, as a reader, and (for what it's worth) as a cultured individual."

—Alejandra Diaz-Pizarro writing to professor Jeffrey Wayno. Course: Masterpieces of Western Literature and Philosophy; Fall 2021.

"You are such a compassionate and thoughtful person.
Thank you for making our Integration of Science & Practice such a safe space. It allows us to engage in really productive discussions; I have learned so much from you and my fellow classmates. I look forward to our two-hour class each week, and return home afterwards feeling more hopeful and invigorated to work in the field of public health."

—Student writing to professor Helen De Pinho. Course: Integration of Science & Practice; Fall 2021.

"Thank you so much for being such an incredible guide and advocate in Civil Procedure. Because of you, I aspire to be a TA for Civil Procedure so I can pass along the generosity and kindness you have shown us. Civil Procedure is a daunting, unwieldy subject and you have helped me distill it into distinct, tangible parts. You always make yourself available and are so accommodating. You never make me feel small for asking questions that are rudimentary. You are so generous in giving us feedback—the untold hours you spend helping us are recognized and appreciated. Your reliability, selflessness, and your inclusiveness have made me feel at home at Columbia Law School. This semester is grueling and I am so fortunate that I have you as my TA. It has made all the difference in making Civil Procedure and Columbia feel less intimidating. Thank you!"

—Luke Cronin writing to TA Alexandra A. Nickerson. Course: Civil Procedure; Fall 2021

Thank-a-Prof Thank-a-TA Thank you.

Support for Transition to In-Person Teaching and Learning

The Center for Teaching and Learning provided critical support for Columbia instructors transitioning from online to in-person instruction in Fall 2021. CTL staff developed online resources for instructors, which were added to a comprehensive collection of Teaching in All Modalities resources, and hosted a panel discussion with Columbia Health, detailed below. In addition, the CTL ran a variety of workshops for both faculty (see page 31) and graduate students (see page 47).

Resources

From Online to Face-to-Face: Keeping What Works

This resource provides strategies for moving online teaching practices that promote student engagement into the face-to-face classroom, including Columbia-supported tools to engage students.

Supporting Learning When Students Can't Make It

To Class Whether for travel, quarantine, or illness, students may need to be absent from in-person learning. This resource provides strategies on how to provide continuity during absences.

Tips for Recording Classes in All Learning Spaces

This resource highlights potential benefits and considerations for recording live class sessions and making them available to support student learning.

Tips for Teaching in a Masked Environment

Teaching while instructors and students are masked can require creative solutions. To help address these challenges, we've compiled a series of tips as well as resources from peer institutions.

Transition to In-Person Teaching

To assist with the transition to in-person teaching, this resource encourages instructors to reflect back on pandemic teaching experiences and identify what they plan to carry forward.

Reflections on the Return to In-Person Learning in

Fall 2021 In Fall 2021, we asked our student consultants to reflect on their experiences with the return to in-person learning, as part of the Students as Pedagogical Partners initiative. In this resource, they share what has been most helpful in supporting them during their return to Columbia classrooms.

Four Virtual Teaching Practices to Bring into the

In-Person Classroom This student-created resource highlights four pandemic teaching practices that undergraduate students find supportive of their learning: 1) recorded lectures, 2) virtual office hours, 3) technologyenhanced learning, and 4) flexible testing practices.

Forum

Return to the Morningside Classroom with Students' Well-Being in Mind: A Forum for Faculty and TAs

In partnership with colleagues from Columbia Health, CTL organized a panel discussion about how to support students' mental health during a particularly challenging year. Participants learned about the ways to support students through the transition to in-person learning, discovered ways to connect them to health and wellness services, and engaged in a Q&A.

PANELISTS INCLUDED:

- Melanie J. Bernitz, Senior Vice President, Columbia Health, and Associate Clinical Professor of Medicine
- Weiyen Chung, Clinical Psychologist, Counseling & Psychological Services, Columbia Health
- Richard J. Eichler, Executive Director, Counseling & Psychological Services
- Anne Goldfield, Associate Director for Outreach & Community Response, Counseling & Psychological Services
- Aisha Holder, Clinical Psychologist, Counseling & Psychological Services
- Catherine Ross, Executive Director, Center for Teaching and Learning.

350,238 total page views on CTL website.

What to expect from, and how to support, your returning students

Richard J. Eichler, Ph.D.

Executive Director, Counseling & Psychological Services

September 21, 2021



Richard J. Eichler, Executive Director, Counseling and Psychological Services, presents at the "Return to the Morningside Classroom with Students' Well-Being in Mind" forum.

Office of Teaching, Learning, and Innovation —

The Office of Teaching, Learning, and Innovation (OTLI) oversees the Center for Teaching and Learning and is responsible for administering the Provost's initiatives in teaching and learning, including the Office of the Provost Teaching and Learning Grants (learn more about the grants on page 18). The Office leads efforts in online education, provides support for schools to offer new courses and extend existing courses and programs to audiences around the world, reviews new and existing online and hybrid degree and non-degree programs, and proposes, reviews and disseminates policies on teaching and online education. Below are highlighted OTLI programs from the 2021-22 academic year.

Science of Learning Research Initiative (SOLER)

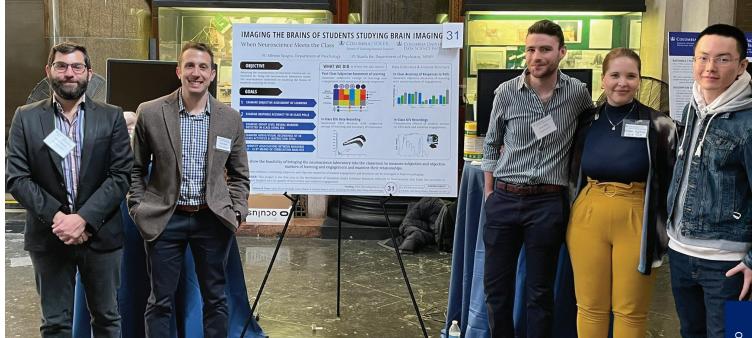
The SOLER Initiative—a research division of the Office of Teaching, Learning, and Innovation (OTLI)—is dedicated to facilitating the systematic generation of insights about teaching and learning in the context of Columbia courses and degree programs through the process of Discipline-Based Education Research (DBER).

In 2020, SOLER launched the Provost's SOLER Seed Grants (PSSG) program to fund and support faculty-led DBER projects. PSSG awardees receive up to \$5,000 in funding and extensive in-kind support. SOLER lowers the barriers for faculty to perform impactful DBER work within their departments by managing and collaboratively developing project elements such as study design, research instrument development, Institutional Review Board approval, data security and analysis, and dissemination of results. SOLER expanded the PSSG program in 2021, funding six projects led by faculty from across the university, including one project conducted in collaboration with the CTL and another with CUIT's Emerging Technologies Consortium.

SOLER achieved or participated in four major developments in the 2021-22 academic year:

- The establishment in September 2021 of the SOLER Student Research Assistants (SSRA) program, which connects masters and doctoral students from across the University to SOLER projects and mentorship from OTLI staff. As of June 2022, five students have joined the team.
- 2. A February 2022 journal club session attended by faculty, SSRAs, CTL staff, and other community members. The group discussed essays about fundamental issues in the science of learning and university administration.
- 3. The March 2022 Celebration of Teaching and Learning Symposium. Program Director Adam Brown hosted a virtual panel featuring Janet Metcalfe (SOLER faculty committee co-chair and Professor of Psychology), Beth Barron (2021 PSSG awardee and Associate Professor of Medicine), and Arya Rao (Columbia College '22 and TA for Brent Stockwell's VR biochemistry course). Additionally, members of the Stockwell and Spagna SOLER project research teams led interactive demos of their Virtual Reality (VR) and electroencephalogram (EEG) technologies, respectively, at the live poster session.
- 4. The April 2022 information session for the PSSG program's latest application cycle. Two previous PSSG faculty awardees Wing Fu (Physical Therapy) and Vanessa Guida Mesina (Undergraduate Writing Program) shared their insights and presented concrete examples of their PSSG-supported DBER projects. Notably, the 2022 cycle featured the integration of PSSGs into the broader Provost's Teaching and Learning Grants ("RFP") framework and included an option for faculty to apply for dual CTL-SOLER support through the Innovative Course Design + SOLER Grant, designated for projects with extensive support needs for pedagogical ideas and/ or media/software content development and a clear research focus.

To learn more about SOLER: https://soler.columbia.edu



Alfredo Spagna, Lecturer in Psychology, along with members of his research team and Adam Brown, SOLER Program Director, present on their research project at the 2022 Celebration of Teaching and Learning Symposium.

Provost's Conversation on Online Learning

For this year's Provost's Conversation on Online Learning (PCoOL), President of Wiley Education Services Todd Zipper was invited to discuss five trends in higher education to study and adapt during this pivotal time for universities, including education as a benefit, alternative educational institutions, and the rise of the mega-nonprofit. Zipper joined Senior Vice Provost Soulaymane Kachani for a presentation and discussion on November 15th.

President of Wiley Education Services **Todd Zipper** joins Columbia for the Provost's Conversation on Online Learning.

Provost's Conversations on Online Learning (PCoOL) feature public talks by leading experts and peers on the future of education, specifically around online education. Through such conversations, we hope to learn and share knowledge to enhance teaching and learning efforts at Columbia not only online but also on campus to ensure the richest and most dynamic educational experience for all of our students.

Past PCoOL guests have included the CEOs of edX, OpenClassrooms, 2U, and Coursera, and leaders in online education from the University of Pennsylvania and the University of Illinois Urbana-Champaign.

Learn more and watch the recordings: https://online.columbia.edu/pcool/

Provost's Teaching and Learning Grants ——

The Office of the Provost provided funding opportunities through grant programs for faculty interested in integrating new educational methods and technologies into their classrooms and learning environments. The CTL offered logistical, organizational, and instructional support for faculty awarded funding from the Office of the Provost. For more details on the CTL's involvement in the Provost's Teaching and Learning Grant projects, see page 65 in the Instructional Technologies section.

Innovative Course Design Grants

The Office of the Provost's Innovative Course Design Grants provided faculty with funds of up to \$20,000 and support from the CTL to develop innovative pedagogies and technology-rich learning strategies for Columbia courses.

SPRING 2021 AWARDEES

Below is the list of faculty who released courses in the 2021-22 academic year with support or advice from the CTL.

Jean-Marie Alves-Bradford, Associate Professor of Psychiatry, CUIMC

PROJECT: "Incorporating Technology in an Advocacy, Allyship, and Upstander Skills Curriculum for Medical Students"

Read more about this project on page 42.

Dolores Barbazán Capeáns, Lecturer in Spanish, Department of Latin American and Iberian Cultures

Leyre Alejaldre Biel, Lecturer in Spanish, Department of Latin American and Iberian Cultures

PROJECT: "Brainscape Lifelong Learning for Spanish Intermediate II: Developing Fluency in Spanish Language Acquisition through the Applications of Theories from the Science of Learning"

Beth Barron, Associate Professor of Medicine, CUIMC PROJECT: "Investigating Bias in Standardized Patient Assessments of Medical Students"

Nikhar Gaikwad, Assistant Professor of Political Science **PROJECT:** "A Case Study Pedagogical Approach to International Political Economy"

Sarah Hansen, Senior Lecturer in the Discipline of Chemistry **PROJECT:** "Mixing Modalities in the General Chemistry Laboratory"

Pascale Hubert-Leibler, Senior Lecturer in French
PROJECT: "Transferring the Contents of the Newly
Redesigned Intermediate French I Course (UN FREN
2101) Onto an EdBlogs Website"

Ben Orlove, Professor of International and Public Affairs **Cathy Vaughan**, Associate Director for Monitoring & Evaluation, Columbia World Projects; Senior Staff Associate, International Research Institute for Climate and Society (IRI), Columbia Climate School

PROJECT: "Using Project-based Learning to Improve Student Learning about Climate-related Risk"

Nancy Owen, Instructor in Nursing, CUIMC
Karol DiBello, Associate Professor of Nursing, CUIMC
PROJECT: "Telehealth Clinical Simulation for
Public Health Nursing"

Read more about this project on page 42.

Amanda Sarafian, Assistant Professor of Rehabilitation and Regenerative Medicine (Occupational Therapy), CUIMC PROJECT: "Utilizing Case-based Teaching and Simulation Technology to Engage Students and Develop Clinical Competency in a Pediatric Occupational Therapy Graduate Course"

Zhongqi Shi, Senior Lecturer in Chinese; Associate Director of the Chinese Language Program PROJECT: "Teaching Business Chinese Language and Culture with Podcasts"

Alfredo Spagna, Lecturer in Psychology

PROJECT: "Building a Bridge Between Theory and Practice: Blended Learning Meets Behavioral Neuroscience"

Nakul Verma, Senior Lecturer in Computer Science **Ansaf Salleb-Aouissi**, Senior Lecturer in the Discipline of Computer Science

PROJECT: "A Fast and Effective AI Approach for Student Feedback in Proof-Based Computer Science Courses"

SPRING 2022 AWARDEES

Below is the list of projects that will be developed and released in the 2022-2023 academic year with support or advice from the CTL.

Christian Braneon, Climate Scientist, Columbia Climate School **Natalie Unwin-Kuruneri**, Senior Director of Academic Initiatives, Columbia Climate School

Alix Schroder, Associate Director of Academic Initiatives, Columbia Climate School

PROJECT: "Bringing Environmental and Climate Justice Tools into the Classroom: Using Inquiry-Based Learning and Systems Thinking Interventions to Enhance Teaching"

Rachel Cummings, Assistant Professor of Industrial Engineering and Operations Research, Fu Foundation School of Engineering and Applied Science

PROJECT: "Introducing Case-based Teaching into Interdisciplinary Data Privacy Education"

Alan J. Detton, Associate Clinical Professor of Medicine, Vagelos College of Physicians and Surgeons

Todd A. Bates, Assistant Clinical Professor of Education Assessment (in Medicine), Vagelos College of Physicians and Surgeons

PROJECT: "Proposal for a Novel Elective Bridging 3D Printing and Medical Educator Skill Development"

Ari Goldman, Professor of Journalism, Graduate School of Journalism

Gregory N. Khalil, Adjunct Assistant Professor, Graduate School of Journalism

PROJECT: "Covering Religion"

Thomas Groll, Senior Lecturer of International and Public Affairs, School of International and Public Affairs

PROJECT: "Assignment Builder for EconPractice and Adaptive E-Learning Assignments"

Leah Hooper, Senior Director of Educational Initiative; Associate in Sociomedical Sciences, Mailman School of Public Health

Christine Mauro, Assistant Professor of Biostatistics, CUIMC **PROJECT:** "A Growth Mindset Intervention for a Graduate-level Biostatistics Course: Research-based Strategies to Mitigate Threats to Academic Belonging"

Agnieszka Legutko, Lecturer in Yiddish, Department of Germanic Languages

PROJECT: "Building an Online Archive: A Meaningful Engagement with the Past in a Literature Course"

Rochelle Mendonca, Assistant Professor, Rehabilitation & Regenerative Medicine (Occupational Therapy), Vagelos College of Physicians and Surgeons

PROJECT: "Developing and Implementing an Assistive Technology and Modifications Course to Build Skills and Competency in Technology-Based Interventions for Graduate Occupational Therapy Students"

Yousef Nouhi, Senior Lecturer in Arabic, Department of Middle Eastern, South Asian & African Studies

PROJECT: "Proposal for Innovative Course Design (Standard Arabic for Heritage Speakers)"

Zhongqi Shi, Senior Lecturer in Chinese, Department of East Asian Languages & Cultures

PROJECT: "Use of Video-Based Reflection and Interactive Feedback to Improve Speaking in Foreign Language Classes"

Martha Sliwinski, Associate Professor of Rehabilitation and Regenerative Medicine (Physical Therapy), Vagelos College of Physicians and Surgeons

PROJECT: "Developing Capacity and Digital Modules to Expand Self Compassion and Mindfulness Practice for Health Practitioner Students"

Drew Youngen, Lecturer of Applied Physics & Applied Mathematics, Fu Foundation School of Engineering and Applied Science

PROJECT: "3Demos: Bringing Interactivity to Visualizations in Calculus"

Innovative Course Module Design Grants

The Innovative Course Module Design Grants provided support to faculty who are interested in experimenting with a new pedagogical strategy or tool. Recipients received in-kind support from the CTL and up to \$2,000 for a one semester period.

SPRING 2021 AWARDEES

Below is the list of projects developed and released in the 2021-22 academic year with support or advice from the CTL.

R.J. Jenkins, Curriculum Design Specialist, Columbia University Center for Veteran Transition and Integration, School of General Studies

PROJECT: "#TappedPotential: Narrative History as a Tool for Building Persistence Among Student Veterans"

Babi (Barbara) Kruchin, Lecturer, American Language Program, School for Professional Studies

PROJECT: "Improving International Students' Writing Skills through Reviews and Teacher Feedback in an Academic Writing Course"

Catherine McManus, Assistant Professor of Surgery, Vagelos College of Physicians and Surgeons

Roman Nowygrod, *Professor of Surgery, Vagelos College of Physicians and Surgeons*

PROJECT: "Unveiling the Hidden Curriculum: An Innovative Approach to Teaching Professionalism in the Operating Room during the Medical Student Surgery Clerkship"

Kathleen Mullen, Assistant Professor of Nursing, CUIMC **PROJECT:** "Interactive Learning of Trauma-informed Postpartum Assessment"

Shaoyan Qi, Lecturer, Department of East Asian Languages and Cultures

Read more about this project on page 42.

PROJECT: "Exploring Task-based Language Testing in an Introductory Chinese Course"

Dara Steinberg, Assistant Professor of Medical Psychology, Pediatrics Department and Psychiatry Department, Vagelos College of Physicians and Surgeons

Nobuko Hijiya, Herbert and Florence Irving Professor, Pediatrics Department, Vagelos College of Physicians and Surgeons

Megan Askew, Postdoctoral Clinical Fellow, Pediatrics
Department, Vagelos College of Physicians and Surgeons
PROJECT: "Training the Future Front Line: A Module to
Teach Medical & Psychology Students Teamwork to
Promote Multidisciplinary Collaboration in the Care of
Pediatric Patients"

SPRING 2022 AWARDEES

Below is the list of projects that will be developed and released in the 2022-2023 academic year with support or advice from the CTL.

Heather Butts, Lecturer, Health Policy and Management, Mailman School of Public Health

PROJECT: "Public Health Law, Ethics, and Regulations Module for Students and Community Members"

Ashley Graham-Perel, Assistant Professor of Nursing, CUIMC **PROJECT:** "Colloquium for Nursing History and Anti-Racism Affirmation"

Natasha Mehta, Assistant Professor of Medicine, Vagelos College of Physicians and Surgeons

Walkiria Jimenez-Loo, Assistant Professor, Medicine, Vagelos College of Physicians and Surgeons

Melissa Patterson, Assistant Professor of Medicine, Division of Palliative Care, Vagelos College of Physicians and Surgeons

Laura Abbruzzese, Associate Professor, Rehabilitation and Regenerative Medicine, CUIMC

PROJECT: "An Educational Initiative to Reduce Falls and Increase Mobility Assessment: Enhancing Geriatric Education in the Medical Students Primary Care Clerkship"

Kristie Schlauraff, Lecturer, English &

Comparative Literature

PROJECT: "Writing as Curation: Enhancing Undergraduate Research with Museum Objects"

Ovita Williams, Lecturer, School of Social Work

Susan Witte, Professor, Social Work

Online Modules in Clinical Neurology"

PROJECT: "An Informed Perspective: Awareness and Allyship for Disability Justice"

Amy Yu, Assistant, Clinical Neurology, Postdoctoral Clinical Fellow in the Department of Neurology, Vagelos College of Physicians and Surgeons PROJECT: "Asynchronous Learning Through

Massive Open Online Courses (MOOCs) Grants

The Office of the Provost's Massive Open Online Courses (MOOCs) Grants provided faculty with funds of up to \$25,000 and support from the CTL to develop innovative online courses. MOOC instructors partner with the CTL on course design, media production, and course delivery.

SPRING 2021 AWARDEES

course: "Frontiers of Science: A Four-Course MOOC Series — Part 1"

David Helfand, Professor of Astronomy

Ivana Nikolic Hughes, Senior Lecturer in Chemistry; Director of Frontiers of Science

Faculty Spotlight



Natalie Voigt, Assistant Professor of Nursing

Natalie Voigt is an Assistant Professor of Nursing in the Masters Direct Entry Nursing program at CUIMC. The MDE program is a rigorous 15 month accelerated graduate nursing program that recruits students from various undergraduate and professional backgrounds. Dr. Voigt was awarded an Office of the Provost Innovative Course Module Design Grant for her course "The Science of Nursing Practice with Adults II," which is one of two medical surgical nursing courses offered in the program. Below, Dr. Voigt discusses the innovations she made with the support of the Center for Teaching and Learning in her funded project titled "Increasing Student Critical Thinking Through Case-based Learning Modules in Medical Surgical Nursing Education."

Please describe the previous iteration of the curriculum and its main challenges.

The central objective of our nursing curriculum is to cultivate critical thinking skills necessary for sound clinical reasoning and clinical decision making to be safe and competent nurses. However, it seemed as though in my experience, there were inconsistencies among the students' ability to demonstrate adequate critical thinking related to clinical decision making in the classroom and clinical areas. So, the purpose of this grant was to create case-based learning modules that would engage students in more active learning processes to enhance critical thinking skills.

What is the intervention that you implemented and how does it enhance the student learning experience?

The pedagogical underpinnings of my project centered on the Elements of Mastery model by Ambrose (figure 4.1 from Ambrose, S. A., et al. (2010). How learning works: 7 research-based principles for smart teaching. San Francisco, CA: Jossey-Bass, p. 96). The interventions implemented as part of this redesign included a creation of pre-recorded lecture content, which was made available to the students to review asynchronously, the creation of evolving case studies for in-person small



Figure 4.1. Elements of Mastery.

group discussions, and completion facilitated by the professor and the TAs. At the conclusion of the case, a debrief was created along with opportunities for individual self-reflection using a two-question

ungraded quiz. Evaluation of case-based learning was achieved through weekly ungraded quizzes, our course evaluations, and student testimony.

What were the results?

In my course evaluation ratings, I was focused on two particular items for improvement: "The materials were presented in a logical, organized manner" and "Important content was clearly and understandably communicated." When I plugged these values into a simple t-test, the difference between my first year of teaching, and my second year of teaching with CTL support through my Provost award showed a significant improvement.

Student insights

"Participating in a case study group is a great opportunity to apply lecture knowledge and helps reinforce your understanding and comfort level with the material."

"This is a safe space to make mistakes and ask as many questions as possible. It is helpful to delegate questions between group members for the sake of time management. Utilize your TAs, they are here to help you!"

To read the full spotlight: ctl.columbia.edu/spotlight/natalie-voigt/

course: "Columbia Public Health Activist Academy"

Terry McGovern, Harriet and Robert H. Heilbrunn Professor and Chair of the Heilbrunn Department of Population and Family Health, Mailman School of Public Health

Heather Krasna, Adjunct Assistant Professor of Health Policy and Management, Mailman School of Public Health; Assistant Dean

SPRING 2022 AWARDEES

course: "Frontiers of Science: A Four Course MOOC Series — Part 2"

David Helfand, *Professor of Astronomy* **Ivana Nikolic Hughes**, *Senior Lecturer in Chemistry;*

Director of Frontiers of Science

COURSE: "Inclusive Teaching: Supporting All Students in the College Classroom - MOOC Refresh"

Amanda Irvin, Senior Director of Faculty Programs and Services, Columbia Center for Teaching and Learning

Rebecca Petitti, Assistant Director of Faculty Programs and Services, Columbia Center for Teaching and Learning

Large-Scale Teaching and Learning Grants

The Large-Scale Teaching and Learning Grants supported efforts around teaching initiatives and exploration at the school, department, or program level. Awards provided up to \$20,000 per academic year plus in-kind CTL support.

SPRING 2021 AWARDEES

Below is the list of grants completed and released in the 2021–2022 academic year with support from the CTL.

Jonathan Amiel, Professor of Psychiatry at CUIMC; Senior Associate Dean for Innovation in Health Professions Education

PROJECT: "Founding a Health Sciences Campus Anti-Racist Educator Community of Practice to Enhance Equity and Justice in Healthcare"

Beth Barron, Associate Professor of Medicine, Vagelos College of Physicians and Surgeons, Department of Internal Medicine

PROJECT: "Reducing Bias in Standardized Patient Assessments of Medical Students"

Michael Joseph, Vice Dean for Education; Associate Professor of Epidemiology, Mailman School of Public Health PROJECT: "Mapping Public Health Curriculum for Anti-Racism and Equity"

Nikolas Kakkoufa, Lecturer in Modern Greek; Director of Undergraduate Studies for the Program in Hellenic Studies, Department of Classics

PROJECT: "Learning Greece from the Streets; An Urban E-Archaeology of the City"

Jenny Mak, Adjunct Professor, Fu Foundation School of Engineering and Applied Science; Senior Associate Dean of Undergraduate and Graduate Student Affairs

Elizabeth Strauss, Director of Professional Development and Leadership, Fu Foundation School of Engineering and Applied Science, Dean's Office, Academic Programs, Professional Development and Leadership

PROJECT: "Developing an Innovative Hybrid Curriculum for Professional Development and Leadership"

Nim Tottenham, Professor of Psychology Lila Davachi, Professor of Psychology

Caroline Marvin, Lecturer in the Discipline of Psychology **PROJECT:** "Cultivating Science Identity and Increasing Persistence in STEM: Expanding Access, Training, and Support for Undergraduate Researchers"

Read more about this project on page 23.

SPRING 2022 AWARDEES

Below is the list of grants that will be developed in the 2022-2023 academic year with support or advice from the CTL.

Brune Biebuyck, *Director, Columbia Global Centers* **PROJECT:** "Recording Studio in Reid Hall"

Monica Lypson, Rolf H. Scholdager Professor of Medicine, Vice Dean for Education, Vagelos College of Physicians and Surgeons

Jean-Marie Alves-Bradford, Director of the Office of Equity, Diversity & Inclusion, Associate Professor of Psychiatry, CUIMC

PROJECT: "Curriculum Design Workgroups Focusing on Inclusive Teaching Pedagogy Using Backward Design at Vagelos College of Physicians and Surgeons"

Faculty Spotlight



Lila Davachi, Professor of Psychology **Ana DiGiovanni**, PhD student in Psychology

In Spring 2021, Lila Davachi, along with Nim Tottenham, Professor of Psychology, and Caroline Marvin, Lecturer in the Discipline of Psychology, was awarded an Office of the Provost Large-Scale Grant to redesign and reimagine the thesis research curriculum in the department of Psychology. Dr. Davachi worked with PhD students Ana DiGiovanni and Anna Vannuci on the project, with support from the Center for Teaching and Learning. Below, Dr. Davachi and Ana DiGiovanni share their experience.

Please describe the previous iteration of the program

The prior Psychology research thesis curriculum was structured as a 2-year Honors program for students in their junior and senior years with GPAs of 3.65 or higher. It was quite a small program, resulting in few students (~10 per year) benefitting from Columbia's strong research mentorship. We noticed that students who applied to the honors track were often already involved in research and they knew how to navigate campus. This further disadvantaged those from underrepresented backgrounds, who did not have prior research experience or those who arrive on campus and just don't really know that this is something they can do. It dawned on us that we really needed to think about how to break down these barriers to entry to the program.

What is the intervention that you implemented and how does it enhance the student learning experience?

We implemented the STAR (Senior Thesis Advanced Research) program to create an inclusive undergraduate research mentorship program for students pursuing

Psychology or Neuroscience & Behavior majors. Components include a 3-semester curriculum, and there's no longer a GPA requirement. The main innovation is the addition of "The How-To's of Research" course that students take the first semester, which provides scaffolding for the program. This course is designed to reveal the hidden curriculum associated with involvement in research, while also increasing students' science identity.

How is the course structured?

The course is structured a bit differently than traditional psychology classes. First there's an asynchronous component in which students interact with short lectures before coming together in class. Class time is then dedicated to hands-on learning and practical exercises to equip students with tangible research skills. There is a strong focus on group-based in-class challenges in which students work with one another on assignments. Lastly, we devote some class time to workshopping research ideas and getting feedback from not only fellow classmates, but also instructors. We focus on this iterative nature of science, whereby you're constantly updating your knowledge and searching for new papers and integrating this into the existing body of work. The final research proposal due at the end of the semester is scaffolded throughout the entire course, making use of sequenced assignments for which students get feedback, so they are not surprised by their final grades.

Has it been successful?

The class has actually doubled this year. We have two parallel sessions that are going, so we have been successful in recruiting more students. And we have more freshmen and sophomore students enrolled.

Student testimonial

"Ever since I was a kid, I knew I wanted to be a scientist and solve the universe's biggest mysteries to me...However, the idea of doing research, especially as a young lady in a largely patriarchal country, sounded very odd and unlikely to my people at home. As a result, I have always been afraid of calling myself a scientist, and masked my interest by saying that I am thinking of doing research on the side. However, coming to this class gave me the courage to be able to say 'I don't want to be a scientist, I am one already."

To read the full spotlight:

https://ctl.columbia.edu/spotlight/lila-davachi/

Samantha Lu, Associate Director for International Student Services Office

David Austell, Associate Provost and Director for International Student Services Office

Grace Chang, Program Manager for International Student Services Office

PROJECT: "International Students' Onboarding and Immigration Compliance"

Kiran Pandit, Assistant Professor of Emergency Medicine, Vagelos College of Physicians and Surgeons

Tiffany Murano, Vice-Chair of Education, Department of Emergency Medicine, Vagelos College of Physicians and Surgeons

PROJECT: "A Re-Imagining of Teaching Assessment Systems for Faculty of the Department of Emergency Medicine"

Jonah Rockoff, Armand G. Erpf Professor of Business, School of Business

Ann Bartel, Merrill Lynch Professor of Workforce Transformation; Vice Dean for Diversity, Equity, and Inclusion

Michelle V. Hall, Managing Director, Samberg Institute for Teaching Excellence

PROJECT: "Fostering Diversity and Racial Equity, and Promoting Inclusive Excellence for Faculty at Columbia Business School"

Provost's Interdisciplinary Teaching Awards (ITA)

Provost's Interdisciplinary Teaching Awards (ITA) are designed to support faculty from different disciplines to work collaboratively on the design and launch of innovative interdisciplinary courses. Emerging from the deliberations of the Provost's Interdisciplinary Working Group, this program awards up to \$20,000 to teams of two or more faculty from different departments or schools to develop and offer undergraduate or graduate courses that integrate content and perspectives from different disciplines to enhance student learning.

SPRING 2021 AWARDEES

Below are the projects developed and released in the 2021–2022 academic year with support or advice from the CTL.

William Eimicke, Professor of Professional Practice, School of International and Public Affairs

PROJECT: "Blended Learning/Panopto Lecture Support"

Andrea Solomon, Vice Dean and Dean of Academic Affairs, Graduate School of Arts and Sciences

PROJECT: "Sustaining and Broadening the Teaching Observation Fellowship Program for Columbia Graduate Students"

Maura Abbott, Assistant Professor of Nursing, CUIMC Adena Bargad, Assistant Professor of Nursing, CUIMC

Elise Desperito, Assistant Professor of Medicine,

Vagelos College of Physicians and Surgeons

PROJECT: "The Breast Cancer Care Continuum: Prevention, Screening, Diagnosis and Management for Health Equity"

Jonathan Cain, Associate University Librarian for Research and Learning, Columbia University Libraries

Jeremiah Trinidad-Christensen, Head, Research Data Services, Columbia University Libraries

Moacir de Sa Periera, Research Data Librarian, Columbia University Libraries

PROJECT: "The Whys and Hows of Exceptional Scholarship and Research Data"

SPRING 2022 AWARDEES

Below is the list of projects that will be developed and released with support or advice from the CTL.

Jean-Marie Alves-Bradford, Associate Professor of Psychiatry, Vagelos College of Physicians and Surgeons PROJECT: "Developing an Upstander Curricular Thread throughout the Medical school Curriculum"

David Austell, Associate Provost and Director of the International Students and Scholars Office

Samantha Lu, Associate Director for International Student Services Office

Grace Chang, Program Manager for International Student Services Office

PROJECT: "Building Foundations for Global Leadership"

Jonathan Cain, Associate University Librarian for Research and Learning, University Libraries

PROJECT: "Expanding Access to Foundations for Research Computing"

Ellen M. Fahey, Assistant Professor of Nursing, CUIMC **Letty Moss-Salentijn**, Zagarelli Professor of Dental Medicine and Vice Dean of Curriculum Innovation and IPE, College of Dental Medicine

PROJECT: "The First Collaborative Patient Encounter 'Communication, Coordination, Collaboration, Becoming a Team'"

PROVOST'S TEACHING AND LEARNING GRANTS

Mark Mazower, Ira D. Wallach Professor of World Order Studies; Director, Columbia Institute for Ideas and Imagination

Marie d'Origny, Administrative Director, Columbia Institute for Ideas and Imagination

PROJECT: "Creating Teaching and Learning Content at Reid Hall, Paris"

Taylor Sewell, Assistant Professor of Pediatrics, Vagelos College of Physicians and Surgeons

Carri W Chan, Professor of Business and Faculty Director of the Healthcare and Pharmaceutical Management Program, Columbia Business School

Peter Tollman, Adjunct Assistant Professor of Business and Executive in Residence, Columbia Business School

PROJECT: "Healthcare Management, Design, and Strategy (HMDS)"

Innovative Course Design + **SOLER Grant**

The Innovative Course Design + SOLER Grant, launched in 2022, provides faculty the opportunity to use a formal research structure through support from the SOLER Initiative to investigate the impact of their Innovative Course Design innovations. Innovative Course Design + SOLER awardees receive in-kind support from the CTL and funds up to \$20,000, plus in-kind support from the SOLER Initiative and funds up to \$5,000.

SPRING 2022 AWARDEE

Nicholas Bock, Lecturer in the Discipline of Earth and **Environmental Sciences**

PROJECT: "Interactive Simulations to Support Inquirybased Statistics in Frontiers of Science"



Support for Faculty

4,417 interactions with Columbia faculty

1,913 services provided to Columbia faculty

1,018 faculty participants at CTL programs and events



Faculty at the Office of the Provost Faculty Orientation.

the sharing of ideas, approaches, and challenges; and create space for the ongoing process of self-education and self-reflection. CTL staff also created two new online resources for faculty, "Assessing Equitably with All Learners in Mind" and "Navigating Heated, to complement the workshops. Read more about the workshops on page 34 and resources on page 38.

The CTL supports the professional and pedagogical development of Columbia faculty. CTL programs and services are grounded in teaching and learning scholarship, allowing faculty to explore, experiment, and reflect on their teaching practice. Faculty are introduced to innovative pedagogies and instructional technologies for integration into their classroom. The CTL encourages a learner-centered approach to teaching Columbia students and promotes teaching practices that cultivate inclusive and equitable learning environments. This section highlights the range of programs and services offered to Columbia faculty.

Highlights for Faculty

Anti-Racist Pedagogy Initatives

In the 2021-22 academic year, the CTL offered several new opportunities to support Columbia faculty in incorporating anti-racist pedagogy into their teaching practices. The CTL developed three new faculty workshops: "Anti-Racist Pedagogy in Action: First Steps," "Navigating HOT Moments: Before, During, & After Class," and "Addressing Challenges to Equitable Assessment." The workshops aimed to guide instructors in the practical steps of anti-racist teaching; allow for

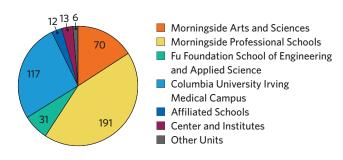
Offensive, and Tense (HOT) Moments in the Classroom,"

Programs and Initiatives 27

Customized Offerings for Columbia Schools

To respond to the diverse teaching needs of faculty across Columbia's campuses, the CTL developed numerous customized workshops in various formats. Over 440 faculty attended CTL customized offerings during the 2021-22 academic year.

For example, the "Navigating HOT Moments: Before, During, and After Class" workshop was adapted for SEAS faculty in an online format using case studies tailored best to an engineering course environment which included a Poll Everywhere activity. The "Navigating HOT Moments" workshop was also adapted for Law School faculty in a hybrid format using a case study relevant to a law course environment. Read more about Customized Offerings on page 35.



440 Faculty Attendees at CTL Custom Workshops

Programs and Initiatives

The CTL offers professional development programs and events to connect Columbia faculty and instructors to effective teaching approaches, resources, and instructional technologies.

STUDENTS AS PEDAGOGICAL PARTNERS

Students as Pedagogical Partners (SAPP) is a CTL initiative that partners with students to include the undergraduate student perspective in innovative teaching and learning at Columbia. For the 2021-22 academic year, the CTL hired eight undergraduate student consultants on teaching and learning. CTL staff and the SAPP student consultants partnered to develop the online resources:

- "What Makes a Class Inclusive?:
 Six Learners' Perspectives"
- "Reflections on the Return to In-Person Learning in Fall 2021"
- "Collaborative Learning: The Learner's Perspective"

- "Four Elements of Slide Design that Matter to Students' Learning"
- "Active Learning in the Technology-Enhanced Classroom"
- "Supporting Learning in Intro Lab Courses at Columbia: A Learner's Perspective"

The student consultants also contributed to two episodes of the CTL's podcast *Dead Ideas in Teaching and Learning*, and engaged in a live discussion with faculty that built on the podcast episode focusing on the transition to in-person learning:

- Season 4, Episode 1: Speaking from the Heart: An Instructor and Her Student Reflect with Dr. Karen Phillips and Yarin Reindorp
- Season 4, Episode 7: Two Years Later—Learning through a Pandemic with Two Columbia Undergraduate Students

A few of the consultants participated in the "Teachers' Lounge: Intercultural Pedagogy Now: Student Views," a conversation with international Columbia undergraduates and graduate students and postdocs. Student consultants shared their poster and perspectives during the 2022 Celebration of Teaching and Learning poster exhibition. Lastly, Columbia instructors were invited to submit their teaching and learning questions through SAPP's "Ask a Student" initiative. Through these mediums, the students were able to share their experiences of learning and provide meaningful insights for instructors.

Learn more at https://ctl.columbia.edu/faculty/sapp/



Undergraduate student consultants Sarah Considine, Jandres Rivera, Emma Fromont, and Ambrose Zhu with CTL Associate Director Suzanna Klaf and Assistant Director Jamie Kim at the Celebration of Teaching and Learning Symposium.



Meet the student consultants below and read about their experiences in the SAPP initiative.

"One of the key take-aways was learning how to have constructive and nuanced conversations with other students to find more comprehensive ways to promote practices like diversity, inclusion, equity, and active learning.

This program helped me realize the potential power of communication. I feel more confident speaking with professors and staff when I feel that I, as well other students, need support. This includes having conversations with professors about syllabi and inquiring about resources to help supplement my education. As a student with disabilities, it was valuable learning about ways I could advocate on my behalf and ensure that I am receiving the most support I can."



Victor Jandres Rivera Columbia College (Spring 2022)

"I learned about the theory behind teaching and learning, the structure of the classroom space and how that contributes to effective learning, and how to take concrete steps as a learner to understand expectations and teaching objectives of the professor.

After being a part of the SAPP, I have become more aware of class structure and how I can take initiative to do well in a course. SAPP has definitely helped me become more communicative as a student to understand professor expectations as well."



Michelle Yao Columbia College (Fall 2021)

"I learned to engage in internal conversation with myself and to write reflections that show my voice. Many of the topics we discuss here prompted me to reflect on my past four years of learning, including what worked and didn't work for me. I believe it is only through constant reflection that one could improve and further develop.

I realized how much I appreciate open communication with both the professors and my classmates. I realized the importance of collaboration and how it incentivizes me to engage more in class and develop friendships!"



Annabelle Tang
School of Engineering and
Applied Science
(Spring 2022)

"I learned a lot about the importance of incorporating students in their learning process and allowing them to contribute to it and take ownership of it. I also found it really valuable to hear others' experiences in each classroom setting as a basis for my understanding of what it means to be a learner at Columbia.

I think that I have become a more aware and active learner as a result of my participation in this program. I am more cognizant of how I learn and what I am learning, and feel myself actively thinking about how to improve learning environments while I am in them."



Sarah Considine
School of Engineering and
Applied Science
(Spring 2022)

"I learned a whole lot about both the student and the instructor's perspective. I learned that we have a voice in this school and that a lot of our student experience is common across different classes and years and that unless we talk about it, our instructors might not know what works and doesn't work for us.

I learned to consider the instructor's perspective more, learned through discussion and reflection which learning practices work better for me, what helps me succeed, and how important collaboration and community are to me here."



Yarin ReindorpGeneral Studies
(Fall 2021)

"First, I felt heard and that was an amazing experience. Seeing my experience valued was great. I learned how to put my feelings into words, and how to be more practical, and concrete. It was great to have to be very precise about potential solutions and share precise experiences. I also learned how to work in a team—when discussing reflections with my peers—and feel much more comfortable with public speaking after the poster exhibition and the teachers' lounge.

I am much more aware of what professors are trying to implement. It is great to have the opportunity to think about "the other side"—that of teaching."



Emma FromontGeneral Studies
(Spring 2022)

"Through my engagement in the SAPP initiative, I have expanded my ideas of inclusivity and active learning, among other things, as I got to hear the perspectives of students from varying backgrounds.(...) One of the main take-aways I have gotten from this initiative is the importance of communication both inside and outside of the classroom. (...) I now see learning as much more than just being in a classroom. (...) . Learning is so much more than just passively obtaining information and it is not something that's necessarily done alone or without support. Learning is meant to be valuable regardless of the setting in which it occurs and it should be the primary goal of participating in any class. Learning has become my priority in the courses I am taking and will be taking."



Keylin EscobarColumbia College
(Spring 2022)

"The SAPP initiative allowed me to perceive the broad diversity of student experiences at Columbia beyond the immediate academic environment that I find myself in. I find it insightful to be able to cross-reference the various experiences of my peers to figure out what this institution can learn both from external feedback as well as better sharing of best practices internally.

This program has made me better at reflecting on my own personal experiences through trying to frame my experiences as actionable items for others in creating resources."



Ambrose Zhu
General Studies
(Spring 2022)

"I think that one of the best components of the Active Learning Institute (ALI) was that it required you to reconstruct a learning objective you already use. I find that a lot of professional development courses are taught in a vacuum and to a wide audience. ALI was different because it required you to learn new teaching methods and apply them to your course through peerfeedback. This approach allowed me to walk away from the Institute with a new curriculum that was ready for the classroom. ALI also affords each participant the opportunity to interact with professors from all over the University. For me personally, I think it made the ALI experience all that more enriching. After ALI, I had the tools to adjust pedagogy as the course progressed. These tools increased the overall engagement, learning and success of my courses. Furthermore, I felt empowered by the number of students who told me they finally attained skills they thought they could never master."

 Christopher W. Munsell, Glascock Associate Professor of Professional Practice of Real Estate Development Finance, Graduate School of Architecture, Planning & Preservation (GSAPP)

INSTITUTES

The CTL offered the following institute for faculty this year. See additional institutes in the Support for Faculty at CUIMC section on page 41.

134 faculty participants in CTL institutes

Institutes

Institutes provide an immersive setting for faculty to develop new teaching approaches and skills with hands-on guidance from the CTL staff over a period of several days.

Active Learning Institute

In this four-day immersive online experience, held in June 2022, faculty explored the purposes and benefits of active learning and learned how to apply these research-based practices by developing their own active and learner-centered (face-to-face or online)



Columbia faculty and CTL staff gather for the Active Learning Institute in June 2022.



Provost Mary Boyce converses with faculty at the 2021 Office of the Provost Faculty Orientation.



Dennis Mitchell, Executive Vice President for University Life and Senior Vice Provost for Faculty Advancement meets with new faculty at Orientation.



Catherine Ross, CTL Executive Director, and Amanda Irvin, CTL Senior Director, meet with faculty at Orientation.

course units. Through a series of hands-on activities and discussions via Zoom and CourseWorks, faculty engaged with topics such as facilitating individual and collaborative learning activities, creating effective asynchronous course materials, and fostering an inclusive course climate. Faculty left with a detailed map of their redesigned course unit, one carefully-planned active learning experience, and a video-based asynchronous activity ready to be used in their next course.

OFFICE OF THE PROVOST FACULTY ORIENTATION

The Center for Teaching and Learning and Office of the Vice Provost for Faculty Advancement (OVPFA) partnered to develop the new online Office of the Provost Faculty Orientation to welcome and acclimate faculty to the 2021-22 academic year in August 2021. This virtual orientation program aimed to complement each school's orientation activities by introducing a range of University resources and offices devoted to supporting faculty's teaching and scholarship.

The orientation comprised a series of online self-paced CourseWorks modules and acquainted faculty with the CTL, the OVPFA, the Office of Faculty Affairs, the Office of Work/Life, the Office of Multicultural Affairs, the Office of Equal Opportunity and Affirmative Action, Columbia University Information Technology, the Office of Research Initiatives, and the University Libraries.

The CTL also co-hosted an in-person reception at Faculty House with the OVPFA to welcome faculty who joined Columbia in 2020 and 2021. Provost Mary Boyce welcomed faculty, and Dennis Mitchell, Executive Vice President for University Life and Senior Vice Provost for Faculty Advancement, and Catherine Ross, CTL Executive Director, shared information about the OVPFA and CTL, respectively.

WORKSHOPS AND EVENTS

Workshops and Events allow faculty to explore timely topics related to teaching, learning, and instructional technologies for 1-2 hours with the CTL. The CTL hosts many of the workshops during the weeks leading up to the beginning of the Fall and Spring semesters in order to help faculty prepare for the coming semester. Workshops were held in in-person, online, and hybrid formats during the 2021-22 academic year. The CTL offered the following workshops and events.

672 faculty participants in CTL workshops and events

Summer 2021

Faculty Book Discussion Group: Radical Hope

CTL held a discussion with faculty surrounding Kevin Gannon's *Radical Hope: A Teaching Manifesto*. Participants met at three 75-minute sessions to discuss radical hope as a pedagogical lens, while also collaborating to rethink and revise their own course materials through this framework. In between the bi-weekly synchronous sessions, participants had the option to discuss and make connections with the reading in a shared, asynchronous discussion space. The author, Kevin Gannon, joined the final session via Zoom to answer participants' questions and discuss his own radical hope perspective.

Hybrid/HyFlex Teaching with All Learners in Mind

Faculty connected with colleagues teaching hybrid courses, shared ideas and teaching approaches, discussed anticipated challenges and solutions in breakout rooms, engaged in group Q&A discussion, and planned for their course context. Participants experienced the hybrid/HyFlex modality as a learner would, joining in-person or via Zoom.

Fall 2021

Conversations with Columbia Students: Transition to In-Person Learning

In this session, undergraduate students Yarin Reindorp and Michelle Yao built on the episode "One Year Later: Learning in a Pandemic with Two Columbia Undergraduate Students" of the CTL's *Dead Ideas in Teaching and Learning* podcast series and discussed how they are transitioning back to in-person learning in Fall 2021.

Conversation with Jenny Davidson: Learning Beyond Grades

In the CTL's *Dead Ideas in Teaching and Learning* podcast episode "Dead Ideas in Grading," Jenny Davidson, Professor of English and Comparative Literature at Columbia, shared her pandemic teaching experience in which she chose to give all of her students an A in Spring 2020, and discussed why, even outside of a pandemic setting, she has long been resistant to the conventional practices of grading. After listening to this episode, participants explored these dead ideas further with Professor Davidson, and considered ways in which they could engage students in deep learning beyond grades.

Conversation with Jonathan Amiel and Aubrie Swan Sein: Authentic, Equitable Assessment

In the CTL's Dead Ideas in Teaching and Learning podcast episode "Assessment For and As Learning," Jonathan Amiel, Senior Associate Dean for Innovation at College of Physicians and Surgeons, and Aubrie Swan Sein, Director of the Center for Education Research and Evaluation and Associate Professor of Educational Assessment at CUIMC, discussed the changes they implemented in their curriculum and assessment strategies and the dead ideas they have encountered—especially around assessment. After listening to this episode, faculty joined Professors Amiel and Swan Sein to explore these dead ideas further and discuss ways in which they could adopt authentic and equitable assessment methods that support students' development and growth in their learning journey.

Conversation with Roxanne Russell: Transition to In-Person Teaching

In the CTL's Dead Ideas in Teaching and Learning podcast episode "Online Teaching and Learning," Roxanne Russell, Director of Online Education at Mailman School of Public Health, discussed misconceptions or "dead ideas" about online teaching and learning as well as the benefits of online education. After listening to this episode, faculty joined Dr. Russell to explore these dead ideas further and discuss how they could apply some of the takeaways of online education to in-person classrooms as they made the transition back to in-person instruction in Fall 2021.

Creating Inclusive STEM Courses: 5 Inclusive Teaching Principles

In this session, STEM faculty learned about 5 inclusive teaching principles they could apply to their Science and Engineering courses. Faculty reflected on the perspectives of our STEM student partners to identify how these inclusive teaching principles can contribute to building an inclusive classroom community.

Engaged Lecturing

Drawing on the science of learning, CTL worked with faculty to consider ways of breaking up a lecture to promote student engagement and learning. Faculty had the opportunity to plan for an upcoming class session and share strategies to engage learners during lectures.

Promoting Student Inquiry in Science and Engineering Lab Courses

CTL hosted a panel to hear from Science and Engineering faculty colleagues who have designed their laboratory courses to prioritize student inquiry and provide students more agency to make their own scientific and engineering decisions. Faculty Panelists included: Sarah Hansen (Chemistry), Aaron Kyle (Biomedical Engineering), and Terryanne Maenza-Gmelch (Environmental Science, Barnard).

Spring 2022

Assessment Tune-Up for Provost Grant Applicants

This session was aimed at faculty applying for the Office of the Provost Innovative Course Design and Innovative Module Design teaching and learning grants, but all applicants were welcome to attend. Participants explored strategies for evaluating and assessing the effectiveness of their projects and received feedback on their evaluation plans.

Establishing Shared Values of Academic Integrity with Undergraduates

This discussion, hosted in collaboration with Victoria Malaney-Brown, Director of Academic Integrity for Columbia College and Columbia Engineering, centered on best practices in academic integrity when teaching undergraduate students. Participants explored the 6 Fundamental Values of Academic Integrity and how they could use them to cultivate a shared sense of responsibility for upholding academic integrity in their course. Faculty participants also drafted a narrative unique to their course to share with students to spark this conversation.

Giving Feedback to Maximize Student Learning

This session explored the connection between feedback and student learning, and provided strategies on giving feedback that is actionable, timely, and efficient. Through reflection on current feedback practices and whole group discussion, participants considered an individual feedback plan that incorporates evidence-based strategies that are transparent, time-saving, and effective into teaching practice.

Intro to Gradescope: Grading and Feedback for Science & Engineering

Gradescope is an assessment platform integrated with CourseWorks that allows graders to build rubrics for faster and more equitable grading, respond to handwritten student work in an online environment, and provide feedback to students efficiently. This session for science and engineering faculty provided a demonstration of how to grade a handwritten assignment, provide feedback to students, and link CourseWorks courses and assignments with Gradescope.

Maximizing Learning: Addressing the Factors that Induce Cheating

In this session, hosted in collaboration with Victoria Malaney-Brown, Director of Academic Integrity for Columbia College and Columbia Engineering, participants first explored James Lang's theory of cheating, which highlights five contextual factors prevalent in classrooms that may induce academically dishonest behaviors. They then collaboratively developed strategies that lessen or eliminate the impact of these factors to reduce cheating in their own courses.

Planning Your Lectures Based on the Science of Learning

Participants discussed how to plan lectures to promote student learning and engagement. They further discussed findings from the science of learning—activating prior knowledge, practicing retrieval, and reflecting—and simple ways they could incorporate them so students can further engage with course material.

Provost Teaching and Learning Grants RFP Town Hall

Faculty attended this Town Hall to learn more about the Request for Proposals (RFP) and the application process for Office of the Provost Teaching and Learning Grants.

The Syllabus: A Way to Build Trust with Your Students

Building on the CTL's *Dead Ideas in Teaching and Learning* podcast episode "The Syllabus with William Germano and Kit Nicholls," this session further explored dead ideas about the syllabus in classrooms.

Tools to Engage Students:

Polls, Discussion, and Peer Collaboration

Faculty explored educational technology tools and platforms to engage students in and out of the classroom. They watched short demonstrations of three tools: Ed Discussion, a richly featured discussion platform; Poll Everywhere, a tool for posting questions and spontaneous surveys in class; and Perusall, a free collaborative annotation tool. They were then invited to ask questions and to reflect on how they might intentionally integrate these tools and platforms into their teaching context.

Ungrading: An Alternative Approach to Assessing Student Learning

Building on the CTL's Dead Ideas in Teaching and Learning podcast episode "Ungrading" with Jesse Stommel, this session further explored dead ideas about conventional grading practices.

Fall 2021 and Spring 2022

Teaching Inclusively From the Start

In this session, faculty reflected on their teaching practices and considered five principles of inclusive teaching. Faculty collaborated with colleagues, shared ideas, and left with strategies to implement in their courses.

Teaching Large Courses

In this session, faculty explored how to build community, promote academic integrity, and work with TAs in large courses. Participants and CTL staff discussed ways to implement evidence-based strategies to make large courses more manageable and rewarding for faculty and students alike.

Teaching with CourseWorks

Faculty learned how to create community, support student engagement, and assess student learning using CourseWorks, Columbia's learning management system. This workshop provided an overview of the CourseWorks interface and highlighted a toolset to set up a course with clear expectations for students, create opportunities for a variety of assignment engagements, and nurture an environment that encourages a culture of inclusive communication.

Engaging Students in Discussion

Participants explored a four-step planning process as well as strategies to ensure that students engage in and learn from discussions and leave with clear takeaways.

"The workshop was fantastic in several ways:

- 1. It made the process of making courses inclusive less daunting.
- 2. It provided tangible outcomes we could use to assess the inclusivity of our courses
- 3. It answered a lot of questions we had around 'how do we do this'
- 4. It provided us with fabulous resources that faculty have started reading already
- 5. It engaged faculty in a way I have rarely seen before. I don't even know where the two hours went. It was so seamless and applicable, that we just went with the flow."
- Rochelle Mendonca, Assistant Professor of Rehabilitation and Regenerative Medicine (Occupational Therapy), participant in the Workshop To Go "Ways to Make Your Course More Inclusive"

Assessment and Grading with Columbia Tools

This workshop provided faculty with an overview of the tools available to assess students and meet the demands of online, hybrid, and face-to-face assessment. Participants explored assignments, quizzes, and the gradebook in CourseWorks, as well as a newly available tool, Gradescope.

Anti-Racist Pedagogy in Action: First Steps

Participants were introduced to anti-racist pedagogy as a framework for teaching and learning, connected this framework to their own teaching contexts, participated in a communal reflective practice around anti-racist pedagogies, and collaborated in small groups with their colleagues.

Transition to In-Person Teaching

Faculty reflected back on their teaching practices from the last year and considered what to carry forward from online to in-person teaching. Participants shared experiences, worked through anticipated challenges, and considered strategies and instructional technologies to best support their teaching.

Teaching in the Morningside eClassroom

Faculty learned about and experienced a hybrid classroom environment on Morningside campus, equipped by Columbia University Information Technology (CUIT) to enhance face-to-face instruction as well as support remote students. CTL provided an overview of hybrid (HyFlex) classroom technology, shared pedagogical resources, and answered questions from faculty. These sessions were offered in collaboration with CUIT colleagues.

Navigating HOT Moments: Before, During, and After Class Faculty learned strategies for engaging with, facilitating,

and navigating HOT—heated, offensive, or tense—moments before, during, and after class.

Addressing Challenges to Equitable Assessment

This session helped participants identify several common challenges to equitable assessment, as well as possible strategies to address these challenges as they arise. It is essential for instructors to be able to both identify and address these challenges as they occur so that all students can have an equitable learning experience.

WORKSHOPS TO GO

The Workshops To Go program is an on-demand offering for departments or programs interested in hosting a pedagogical workshop for their faculty. All workshops present evidence-based practices and are grounded in the science of teaching and learning.

With each Workshop To Go offering, faculty receive resources, strategies, and practices that can help them address common challenges in their classrooms. Department chairs and program directors select from a list of session topics offered in 60- or 90-minute formats, and then work with CTL staff to focus the workshop on the needs of their faculty. In 2021-22, Workshops To Go were offered in in-person, hybrid, and online formats.

Below is a list of Workshop To Go sessions and the departments, schools, and/or offices that requested them:

- Engaging Students in Discussions: CTL staff led this workshop for faculty in the Department of Neurology.
- Ways to Be More Inclusive in Your Course:
 CTL staff led four workshops on this topic for faculty at the School of the Arts, and one each for faculty in the Department of French, the Department of Occupational Therapy, the Department of Biology at Barnard, and at Teachers College.

Learn more: https://ctl.columbia.edu/faculty/offerings/workshops-to-go/

CUSTOMIZED WORKSHOPS

In addition to Workshops To Go, department chairs and administrators requested customized workshops and information sessions to address the specific teaching needs of instructors in their schools, departments, and other academic units. During these workshops, participants worked through discipline-specific challenges and/or case studies and brainstormed strategies to implement in their own classrooms. Workshops were offered in in-person, hybrid, and online formats.

Schools & Offices

Barnard Department of Biology

 Community, Responsibility, and Vulnerability in Biology (September 10): This custom session was developed to better prepare Barnard Biology discussion section leaders for facilitating discussions of biology and its impact on society. Faculty first brainstormed ways to strengthen connections between the lecture and discussion sections. They learned about community agreements and developed ways to implement these in their discussion sections. They then learned about affirmative inquiry and multipartial facilitation of discussions, and applied this framework to two case studies.

Columbia Business School

Feedback for Learning with Columbia Tools (April 1): This workshop was part of the Columbia Business School Samberg Center's Faculty Development Day. Participants were introduced to a framework for effective feedback that is targeted, timely, and actionable. They learned about specific Columbia tools, such as Canvas Rubrics, Speedgrader, and Gradescope. Through reflection on current feedback practices and whole group discussion, participants considered how to incorporate Columbia tools and evidence-based strategies into their individual course contexts.

Law School

- CourseWorks Refresher for Columbia Law School staff (August 11 and January 21)
- CourseWorks for Legal Writing Instructors
 (September 29): Participants explored how to assess student learning and organize course content using CourseWorks. The workshop gave an overview of Modules, Files, Assignments, Groups, SpeedGrader, and peer review.
- Navigating HOT Moments: Before, During, and After Class (March 21): Part of the Columbia Law School Spring Adjunct Faculty Teaching Workshop, this session, facilitated in collaboration with the Law School's Olatunde Johnson, Esq. and Michael Gerrard, Esq., led the adjunct faculty members through an application of strategies for engaging with, facilitating, and navigating HOT moments before, during, and after class to a provided case study.

Department of Psychology

 Ed Discussion Demo (November 19): Instructors were introduced to Ed Discussion and participated in demos of specific Ed Discussion tools that were useful for teaching students coding.

School of Social Work

- Managing and Customizing Assignments in CourseWorks (August 25)
- New Faculty Orientation (September 1)
- General CourseWorks Workshop (September 1 and January 7)
- Designing an Inclusive and Transparent Syllabus
 (November 3): The session was a "guided tour" of the
 CTL's online resource: Designing an Inclusive Syllabus.
 Participants had an opportunity to both individually
 reflect on their own syllabus, as well as complete an
 activity in pairs where they workshopped each other's
 syllabi from the student perspective.

• Workshop on the Classroom Environment (January 24): This workshop was designed for Columbia School of Social Work (CSSW) instructional faculty (full-time, part-time, and course associates), field instructors, and student-facing staff members. Following a panel of CSSW faculty and alumni, participants were broken into small groups to discuss challenges and strategies around three self-selected topic areas: classroom strategies, school-wide policies, and social media challenges and concerns.

School of Engineering and Applied Science

- Navigating HOT Moments: Before, During, and After Class (February 17): This session was led for SEAS Professional Development and Leadership. Building upon reflections and discussions from the "Anti-Racist Pedagogy in Action: First Steps" worksheet, participants applied strategies for engaging with,

"[CTL Assistant Director] Dr. Petitti had extremely helpful suggestions on how I could improve clarity when giving instructions for class exercises. Even though I thought what I said was clear, she suggested writing very detailed instructions on the slides. [The Teaching Observation] held me accountable to wanting to improve aspects of my teaching even though it required me to get out of my comfort zone. It was also a boost of confidence, as it seems I am my own worst critic. I have since given virtual workshops and have made sure to include explicit written instructions for class exercises. I implemented other changes in the course based on CTL workshops, but not the teaching observation, that were tremendously successful. I used Poll Everywhere in every class to help me gauge student comprehension of pre-class materials and to spark conversation. It was a fun tool to use and it gave the students a chance to think before engaging in discussion."

—**Lauren Houghton**, Assistant Professor of Epidemiology, participant in a CTL Teaching Observation

facilitating, and navigating HOT moments before, during, and after class to a scenario they created via a Poll Everywhere activity.

School of Professional Studies

- Workshop on Diverse Student Backgrounds for Strategic Communication Faculty (February 22)
- Mediathread Demo for Narrative Medicine Faculty (October 19)

School of International and Public Affairs

CourseWorks Workshop for TAs (September 7)

School of the Arts

• Mediathread Demo for Film Faculty (December 7)

Services

The CTL offers a range of services that guide Columbia faculty to support them as they reflect on their teaching and implement effective practices.

CONSULTATIONS

Faculty requested 1,908 one-on-one consultations with CTL staff to receive support for their teaching and learning needs throughout the year. These consultations were offered in person, over Zoom, and over the phone, either scheduled or during CTL virtual office hours for faculty seeking immediate support. Common consultation topics included course and curriculum design, hybrid and online teaching strategies, inclusive teaching strategies, Provost's teaching and learning grants, and assessment and evaluation.

TEACHING OBSERVATIONS

Through a structured process, CTL consultants observed instructors in their in-person, online, and hybrid classrooms and provided individualized feedback to improve their teaching. In the academic year 2021-22, 6 teaching observations were conducted for faculty across three different schools at Columbia. CTL staff also worked with schools, programs, and departments seeking to refine their peer teaching observation practice.

ASSESSMENT AND EVALUATION

Faculty requested 11 consultations focused on assessment and evaluation. CTL staff worked with faculty to identify and develop assessment methods, consult

on assessment and evaluation strategies for grants that support teaching and learning, and provide professional development on a variety of assessment best practices.

LEARNING DESIGNER TECHNOLOGY SUPPORT

CTL Learning Designers help members of the Columbia teaching community effectively integrate instructional technologies into their teaching practice. Faculty and instructors can seek advice and support to experiment with a rich portfolio of online platforms and digital and media tools to turn classrooms and online environments into active spaces for learning. The CTL also supports custom software development and media production driven by the faculty's teaching and assessment goals. These efforts allow faculty to stay on the cutting edge of instructional technologies.

This year, the CTL supported a range of platforms and provided space, equipment, and education for the production of media and learning objects.

To learn more: https://ctl.columbia.edu/resources-and-technology/teaching-with-technology/

CourseWorks Support

Columbia's learning management system, CourseWorks, is at the center of many instructional technology activities. CourseWorks is supplemented and enhanced by other tools that support a range of instructional objectives, such as tools for online collaboration, presentations, lecture capture, audience response, media annotation, and electronic portfolios.

DIY Media Production Spaces

The CTL maintains two DIY Media Production Spaces with technology suited for producing instructional multimedia content including interactive videos, screencasts, and annotated media. Instructors who request to use the facilities receive a consultation with a CTL Learning Designer in order to learn how to use the equipment and software, discuss their learning goals for the course, and consider how student learning can be enhanced using instructional media. As a support to faculty creating their own media, CTL Learning Designers and the CTL Media Production Team have produced the "Teaching with Do-It-Yourself 'DIY' Video" guide. This guide offers examples, principles, and best practices to help instructors create engaging classroom experiences using video, and provides information about the CTL's DIY Media Production Spaces.

Edblogs

EdBlogs make it easy to share course content and create an online community using a blogging format. EdBlogs provides a blog for any course offered at Columbia University upon the course instructor's request.

Ed Discussion

Ed Discussion is a Columbia-supported communication, discussion, and Q&A platform that is integrated with CourseWorks (Canvas). Ed Discussion combines Question, Post, and instructor Announcement threads into a single interface, and offers tools to help instructors and students keep class discussions and communication organized and easy to access, even for large courses.



Gradescope

Gradescope is a tool designed to streamline and standardize the grading of paper-based, digital, and coding assignments. Gradescope allows for handwritten assignments to be graded digitally, and for multiple graders to collaboratively develop and implement their grading rubrics. It supports problem sets and projects as well as worksheets, quizzes, exams, and papers.

Locus Tempus

Locus Tempus, an open-source digital mapping tool, is designed to facilitate map-based learning activities across disciplines by engaging students as repository builders, researchers and curators. The application integrates with CourseWorks, allowing faculty to easily set up assignments from their courses.



Mediathread

Mediathread, an innovative platform developed at the CTL, supports discussions, compositions, and other assignments that are centered on multimedia source materials. Working in Mediathread, students are able to closely analyze videos, audio files, images, and PDFs, and share annotations and insights within a course-specific website.

Poll Everywhere

Learning Designers aided faculty with the use of Poll Everywhere, the Audience Response System (ARS) used at Columbia. Instructors used Poll Everywhere to communicate with learners, collect answers to questions, and provide real-time feedback. In Poll Everywhere, learners respond to questions using their own webenabled devices, such as a phone, tablet, or laptop.

Panopto

Panopto is Columbia's media platform featuring full storage and streaming functionality for audio and video content. Panopto supports recording and live streaming of classes and other events and can be integrated with CourseWorks/Canvas and other services through LTI integration. Panopto is particularly useful for flipped classroom, lecture capture/review, and online programs.

Quizzing with Confidence

Quizzing with Confidence provides an alternative to traditional multiple choice questions by allowing students to indicate their confidence in one of three choices. The application fully integrates with the Courseworks LMS to provide a seamless experience for students and for faculty reviewing submissions. *Read more on page 67.*

Resources and Online Courses

The CTL develops online resources and courses for instructors covering a range of teaching and learning topics. These resources and courses provide a concise introduction to pedagogical approaches, the basics of effective implementation, and practical strategies to help instructors address the teaching and learning issues that they face in their classrooms. In addition to the resources listed below, you can read about others developed this year in the section "Support for Transition to In-Person Teaching and Learning" on page 15.

Resources Updated or Created this Year

Active Learning in the Technology-Enhanced Classroom

In this resource, undergraduate student consultants, as part of the Students as Pedagogical Partners initiative, share what helps them stay actively engaged inside and outside of the classroom, and the tools and strategies that support their learning.

Anti-Racist Pedagogy in Action: First Steps

Classrooms serve as microcosms of the larger society, and the resources offered here, while focused on pedagogical practices, support broader commitments to anti-racist actions in higher education. This resource centers on citing the experts in this field, synthesizing their work to encourage further research and, most importantly, amplifying the voices of those who have been doing this work for decades.

Assessing Equitably with All Learners in Mind

The assessment of student learning is an important aspect of any course. This resource guides instructors through a process of reflection on their assessment approaches to help them recognize and remove barriers to student success and work toward more equitable learning experiences for all students.

Enhance your Course Discussion Boards for Learning: Three Strategies Using Ed Discussion

This resource offers three learner-centered strategies using Ed Discussion to enhance the ways students make use of the discussion board to learn in your course.

Collaborative Learning: The Learner's Perspective

This resource was created by three undergraduate student consultants, as part of the Students as Pedagogical Partners initiative. They share their experiences with collaborative learning and suggestions for promoting productive collaboration among students.

Designing an Inclusive Syllabus

This resource provides a starting point for instructors designing inclusive syllabi. It explores general strategies for inclusive syllabus design, dives deeper into specific syllabus elements, and encourages reflection on your current syllabus to re-imagine it with a focus on inclusivity.

Four Elements of Slide Design that Matter to Students' Learning

This resource was created by General Studies student Yarin Reindorp, during her time as an undergraduate student consultant in the Students as Pedagogical Partners initiative. It highlights elements of slide design that instructors are encouraged to consider when creating lecture slides.

Incorporating Rubrics Into Your Feedback and Grading Practices

This resource provides an overview of the benefits of rubrics. It includes strategies to help integrate them into teaching practice, and introduces a few Columbia tools to support rubric design and use.

Classroom Assessment Techniques (CATs): Low-Stakes Strategies to Assess Active Learning

Checking what and how students learned from an active learning method is a critical next step to ensure that students have met the learning objectives you set for them. This resource introduces classroom assessment techniques (CATs) as a way to assess what students have learned from active learning methods.

Designing Assignments for Learning

The rapid shift to remote teaching and learning meant that many instructors reimagined their assessment practices. This resource distills the elements of assignment design that are important to carry forward as we continue to seek better ways of assessing learning and build on our innovative assignment designs.

Getting Started with Active Learning

Active learning strategies involve students not just in doing things, but also thinking about what they are doing. Intentionally incorporating active learning strategies can benefit student learning, and, when done inclusively, can also narrow achievement gaps for traditionally underrepresented students. This resource introduces a holistic active learning framework as well as Columbia-supported instructional technologies that can be used to design both synchronous and asynchronous activities to engage students in active learning.

Getting Started with Project-Based Learning

Project-based learning (PBL) actively involves students in their learning and prepares them for the world beyond the classroom. It is a dynamic approach to teaching in which instructors play an important role in structuring the learning experience, guiding students as they work to find solutions to complex interdisciplinary problems in collaboration with diverse peers, developing skills and acquiring knowledge throughout the process. This resource offers an introductory overview of PBL, including the key features and questions for reflection as instructors develop their project-based teaching practices.

Navigating Heated, Offensive, and Tense (HOT) Moments: Before, During, and After Class

Regardless of course topic or content, challenging conversations, moments of rupture or disruption, and heated encounters may occur in the classroom. Though they are complicated and can be difficult to respond to, there are steps instructors can take to anticipate and navigate HOT—heated, offensive, or tense—moments before, during, and after they occur. This resource provides strategies that can be implemented in any course context.

Poll Everywhere: Audience Response Systems

Audience Response Systems (ARS), including Poll Everywhere, are used in classrooms of all sizes to engage participants by facilitating interactions among the students and the instructor. This resource details the what, why, and how of ARS at Columbia.

Resources for Assessing Student Learning

This resource outlines relevant CTL resources and programming (text-based resources, podcast, videos, workshops, self-paced online courses, etc.) for designing and implementing assessment in your course.

QuizCon: Multiple Choice Quizzing for Learning

This resource provides an overview of traditional multiple choice quizzing, highlights the benefits of confidence weighted multiple choice questions to student learning, and introduces QuizCon, which is a CourseWorks connected platform that facilitates quizzing using confidence weighted multiple choice questions.

Supporting Learning in Intro Lab Courses at Columbia: A Learner's Perspective

In this resource, undergraduate student consultant Keylin Escobar, as part of the Students as Pedagogical Partners initiative, highlights three aspects of her lab experiences that proved important to her learning in Columbia introductory lab courses: 1) support from lab instructors and TAs, 2) autonomy and lower stakes, and 3) peer collaboration.

Teaching with CourseWorks

This resource provides an overview of how to set up discussions, take attendance, create and grade assignments, and create online exams and quizzes using CourseWorks, Columbia's online learning management system.

Teaching in Times of Stress and Challenge

Emotions play a vital role in teaching and learning and it is especially important to be responsive to the vast range of emotions that may surface in the classroom during challenging times. This resource offers strategies for teaching during times of stress and highlights campus supports available to help instructors and their students navigate challenges.

What Makes a Class Inclusive?: Six Learners' Perspectives

In this resource, undergraduate student consultants, as part of the Students as Pedagogical Partners initiative, share their experiences with inclusive teaching and learning in Columbia classrooms as they transitioned back to in-person learning.

Teaching Guide

Guide for Inclusive Teaching at Columbia

In 2017, the CTL authored and released the *Guide for Inclusive Teaching at Columbia*, which has received widespread interest. The online version of the guide has been accessed over 47,252 times in 129 countries since its release. The guide offers five research-based inclusive teaching principles, as well as practical, accessible, and usable evidence-based strategies that instructors can use immediately.

Online Courses

Assessment and Grading in CourseWorks 2.0

This course provides instructors with an in-depth understanding of the assessment and grading features in CourseWorks. Participants learn about setting up assignments within CourseWorks using a range of tools. The course also helps participants navigate Courseworks' grading features to assess assignments, quizzes, and discussions. Since its original launch in late Spring 2018, the courses have recorded 423 enrollments by faculty and instructors.

Blended Learning Essentials

This self-paced course provides an overview of blended learning and guides instructors through the design process for a lesson or unit of study. The course features videos of Columbia faculty and former recipients of the Provost's Innovative Course Design grants, who share their blended teaching and learning experiences.

Course Design Essentials

This self-paced and self-enroll course brings the materials from the CTL's in-person "Course Design Essentials" offering into a CourseWorks course site to guide faculty through the design or redesign of a course. Participants learn about backward design and consider learner-centered and inclusive teaching practices as they draft course learning objectives, assessments, and plans for learning experiences on downloadable worksheets.

Hybrid & Online Teaching Institute

The Hybrid & Online Teaching Institute is an online offering that guides faculty through adapting their courses from face-to-face to online or hybrid formats. This offering provides instructors a foundation that can serve across all formats of teaching with the capacity to adapt quickly to whatever mode of teaching makes the most sense at any given time. The institute provides faculty with a comprehensive toolkit they can apply to their own course context whether this may be a seminar, small lecture, or large lecture class.

Inclusive Teaching: Supporting All Students in the College Classroom MOOC

In June 2019, the Columbia CTL launched the first ever MOOC (massive open online course) dedicated entirely to the topic of inclusive teaching in higher education. The course provides practical, accessible, and usable strategies that instructors can implement in their classrooms to create and maintain a supportive learning environment for all students. This course aims to provide instructors with tools that are immediately applicable to their teaching contexts. Since its launch, over 16,239 people have enrolled in the course.

Introduction to CourseWorks Online 2.0

Introduction to CourseWorks Online provides instructors with an overview of the features and functionality of Columbia's learning management system, allowing them to build and support engaging courses. In this self-paced course, participants learn how to navigate CourseWorks, manage syllabi and course materials, and utilize communication features. The course provides tips and examples that highlight the use of CourseWorks tools as applicable to various teaching and learning contexts. Since its initial launch in Fall 2017, the course has recorded 1,064 enrollments by faculty and instructors.

Support for Faculty at Columbia University Irving Medical Center

1,681 interactions with CUIMC faculty 913 services provided to CUIMC faculty 367 faculty participants at CTL programs and events

The CTL offered a range of faculty development programs and services to provide CUIMC instructors with effective teaching approaches, resources, and instructional technologies. The CTL facilitated institutes, customized workshops, and Provost grant support to address the specific teaching needs of schools, departments, and other academic units at CUIMC.

Institutes for CUIMC Faculty

Summer Institute for Teaching and Learning for CUIMC Faculty

This online institute, held in July 2021 and June 2022, was devoted to exploring effective teaching and learning strategies in health sciences education. The CUIMC Summer Institute is designed for junior faculty and senior faculty taking on a new teaching role to develop their skills as educators, learn about interactive teaching techniques, and collaborate with other faculty across the campus. Topics covered included: effective course design for face-to-face or online classrooms, designing student-centered activities, and creating inclusive learning environments.

The Summer Institute is facilitated by members of CUIMC's teaching community and is sponsored by the CTL, the CUIMC Office of Faculty Professional Development, Diversity & Inclusion, the Vagelos College of Physicians and Surgeons (VP&S) Center for Education Research and Evaluation, the VP&S Apgar Academy of Medical Educators, the VP&S Office of Education, the School of Nursing Office of Education, the College of Dental Medicine Office of Education, and the Mailman School of Public Health Office of Education.



CUIMC faculty and CTL staff gather for the Summer Institute for Teaching and Learning.

CUIMC Anti-Racist Educator Institute

The CUIMC Anti-Racist Educator Institute (AREI) and its associated Community of Practice (ARECP) ran in July 2021. The institute was designed for CUIMC faculty interested in implementing curricular and pedagogical reforms in diversity, equity, and inclusion (DEI). The institute is meant to augment existing initiatives. The goal of the ARECP is to convene a community of practice committed to facilitating anti-racist change in the education programs across all schools at CUIMC. ARECP participants engaged in training, implemented pilot trainings in their departments, and brought back their experience to the group to share best practices and plan continuous quality improvement.

The AREI was hosted in collaboration with the CUIMC Office of Faculty Professional Development, Diversity & Inclusion, the Mailman School of Public Health Teaching Academy, and the Office of Innovation in Health Professions Education at the Vagelos College of Physicians and Surgeons.

Support for Provost's Teaching and Learning Grant Projects for CUIMC Faculty

From Bystander to Upstander with Jean-Marie Alves-Bradford

In Spring 2021, faculty members Jean-Marie Alves-Bradford, Associate Clinical Professor, Department of Psychiatry, and Hetty Cunnigham, Associate Professor, Department of Pediatrics, sought CTL support to introduce a new curricular component to Columbia Medical School's Foundations of Clinical Medicine (FCM) Seminars to emphasize advocacy, allyship, and upstander skills. The goal of the course redesign, funded through a Provost's Innovative Course Module Design grant, was to help students recognize and respond to discrimination and bias that they may either experience or witness during their medical education and beyond.

The faculty members envisioned creating several "upstander" videos demonstrating bias response skills in medical settings, online interactive tutorials to demonstrate allyship and upstander skills, and interactive case-based scenarios for skills practice. COVID-19 protocols proved difficult for production, but the CTL team brainstormed a new set of ideas and pivoted their focus. Solutions included an outdoor discussion among students, an interaction in a hospital room with masks, and a simulation of an online Zoom classroom.

From Bystander to Upstander uses videos, interactive tutorials and case-based scenarios to help students and faculty recognize and respond to discrimination and bias that they may either experience or witness during their medical education and beyond. The final learning interactives and videos debuted in classrooms in October 2021 with great success. Dr. Alves-Bradford reported that students felt the videos were a much better illustration of the upstander skills than the previous written practice cases.

Telehealth Clinical Simulation for Public Health Nursing with Nancy Spear Owen

Nancy Spear Owen (RN), Instructor in Nursing, simulations lab professor and doctoral candidate in Nursing Education, earned a Provost Innovative Course Design Grant project to improve and redesign the practicum component of The Ambulatory Care Nursing course. She worked with the CTL to develop a Telehealth Clinical Simulation designed specifically to incorporate telehealth competencies into the School of Nursing (SON) curriculum. Through this collaboration, she produced a telehealth modeling video at the CTL DIY video station and developed methods for equitably and quantitatively assessing student patient safety awareness and therapeutic communication skills during simulations.

The project was particularly successful as it addressed a pertinent, recently emergent gap in the SON curriculum and students found the learning experience extremely useful. The COVID-19 pandemic intensified and accelerated the need for proficiency in nursing telehealth practice. Students valued watching a role model exemplar and pre-briefing prior to their simulation practice with standardized patients. The debrief and rubric for structured feedback engaged students to develop skills for self-assessment and self directed learning. As an instructor, Nancy was able to identify even better instruments for operationally assessing clinical competencies and developing reflective practice. The new telehealth modeling video, simulations assessment protocols, and pedagogical insights will continue to serve the SON for years to come.

Interactive Learning of Trauma Informed Postpartum Assessment with Katheleen Mullen

Kathleen Mullen, Assistant Professor of Nursing at CUIMC, developed an interactive learning module that teaches the principles and practice of Trauma Informed Care (TIC). It is essential that nurses learn TIC, but its

communal reflective practice around anti-racist pedagogies, and collaborated in breakout rooms video and instructional activities can be easily reused and with their colleagues. The first session focused on self-reflection around white supremacy, identity, and School of Nursing student population. biases. The second session focused on anti-racist/ inclusive teaching and repairing classroom ruptures. Friends of Occupational Therapy Award School of Nursing Essential Aspects of Teaching & The CTL's CUIMC team was awarded the "Friends of Learning: Grading, Rubrics, and Feedback (March 14): In this workshop, School of Nursing faculty were provided an overview and framing around assessment and feedback—assessment and grading of learning, and for learning, as well as what makes for effective feedback. CTL staff then went over practical applications of this framing, using rubrics as a tool for assessment and feedback. Lastly, faculty participated in a closing reflection, thinking about and sharing with colleagues how they might apply the session content to their own course contexts. PROGRAMS IN O ERAPY DO

implementation can be challenging for novice nurses. Through a Provost's Innovative Course Design Grant and extensive collaboration with the CTL, Dr. Mullen produced the Trauma Informed Postpartum Assessment modeling video in which students can observe and analyze the critical yet subtle practices of trauma informed care. The learning module includes predictive and analytical prompts that both reinforce the criteria of trauma informed care, and elicit self-reflection and group discussion on students' currently developing nursing practice. The project bolsters existing medical campus and nursing professional initiatives to promote more equitable care for all patients. Most excitingly, the adapted to enhanced patient centered care across the

Occupational Therapy Award" by Occupational Therapy (OT) faculty. The award is voted on by faculty for non-OT partners that had a significant impact on the department's work during the given academic year. The CTL team attended the May 19 OT Commencement Ceremony, and was presented the award by Rochelle Mendonca, PhD, OTR/L, Director of the Online Doctor of Occupational Therapy and Assistant Professor of Rehabilitation and Regenerative Medicine (Occupational Therapy).

Customized Workshops

The CTL facilitated the following customized workshops for CUIMC faculty:

 School of Nursing & Occupational Therapy Anti-Racist Pedagogy Workshops (November 8 and December 6): CTL held customized workshops for Occupational Therapy and School of Nursing faculty at their departmental faculty meetings. Participants were introduced to anti-racist pedagogy as a framework for teaching and learning, connected this framework to their own teaching contexts, participated in a



The CTL's CUIMC team was awarded the "Friends of Occupational Therapy Award" by OT faculty, which was presented at the May 19, 2022 Commencement Ceremony by Rochelle Mendonca, Assistant Professor of Rehabilitation and Regenerative Medicine (Occupational Therapy).

Support for Graduate Students

4,599 interactions with Columbia graduate students

1,240 services provided to Columbia graduate students

2,324 graduate student participants in CTL programs and events



The 2021-22 Senior Teaching Consultants.

Teaching Development Program (TDP) 45 Beginning to Teach (Foundational Track of TDP) . 47 Teaching Orientations 47 Essentials of Teaching & Learning 47 Advancing Your Teaching (Advanced Track of TDP) 48 Advanced Topics in Teaching Workshops 49 Learning Communities, Journal Clubs, and Lounges 50 Customized Programs 60 Lead Teaching Fellow Events 60

The CTL supports the pedagogical and professional development of Columbia graduate students across the University who have current or future teaching responsibilities. This support includes an array of offerings for graduate students to help them reflect on, measure, and improve their teaching while at Columbia. Graduate students participating in the CTL's programs and services develop a sense of pedagogical agency and discover the value of interdisciplinary exchange and peer-driven inquiry, helping to prepare them for the future in a variety of academic and professional settings.

To learn more about offerings for graduate students: https://ctl.columbia.edu/graduate-instructors/

Highlights for Graduate Students

Teaching Development Program Sprint

The Teaching Development Program Sprint (TDPS) debuted in June 2022. Conceived as a way of supporting graduate students enrolled in the CTL's Teaching Development Program (TDP), the Sprint gave doctoral students the opportunity and space to complete all required components of the Foundational Track of the TDP in less than a week. This included completion of the Essentials of Teaching and Learning series, three advanced pedagogy workshops, a microteaching practice session, and first day of class plans. The Sprint also provided time to discuss, write, and post reflections on what they learned.



Graduate students participating in the Teaching Development Program Sprint.

In addition to giving graduate students a means for acquiring a foundation in evidence-based pedagogical practices, the Sprint also provided them with a mechanism for building community in and across disciplines. During this year's inaugural run, nearly 40 doctoral students from across the university gathered together in person for four full days of critical, sustained discussion and observation of one another's pedagogical practices.

Learning Communities Responding to the Current Landscape

Each term, Senior Lead Teaching Fellows (SLTFs) research, design, and lead CTLgrads Learning Communities (LCs) that respond to the current teaching landscape and the pedagogical needs and interests of their peers. This year, SLTFs tackled questions of classroom management, interdisciplinarity, heterogenous student populations and their diverse classroom objectives, linguistic justice and critical thinking in writing assignments, and how we use objects in the classroom.

In addition to LCs offered by this year's SLTFs, the CTL also supported LCs in collaboration with other Columbia offices and outside organizations. The first was the Pedagogies of Race and Oppression LC, which provided graduate students with a venue to learn more about anti-racist and anti-oppressive pedagogical practices. This LC, now in its second year, continued the CTL's collaboration with the GSAS Office of Academic Diversity and Inclusion. The second LC was a national run of the Citational Practice as Critical Feminist Pedagogy LC. Graduate students Cat Lambert and Diana Newby first offered this LC last academic year as SLTFs and this year brought their work to future faculty across the nation via the Center for Integration of Research, Teaching

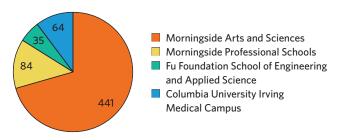
and Learning (CIRTL) Network. This LC also led to the development of an open educational resource, hosted by Columbia University Libraries, that serves as a repository of innovative and progressive strategies for teaching research and citation.

Programs & Services

TEACHING DEVELOPMENT PROGRAM

The Teaching Development Program (TDP) allows Columbia doctoral students to cultivate, document. and articulate their teaching development across the arc of their graduate school career. Graduate students can participate in the TDP program on either of two tracks: Foundational or Advanced. Over 156 students registered in the TDP in 2021-22, bringing total enrollment to 622

Completion of a TDP track earns a letter outlining track competencies and certifying completion from the CTL. Completion is also noted on Columbia transcripts for doctoral students in Arts and Sciences, Columbia Engineering, the Mailman School of Public Health, the School of Nursing, and the School of the Arts.



622 Teaching Development Program Participants across Columbia

Student Spotlight



Monica Thieu, PhD, Department of Psychology **Completed the Teaching Development Program (Advanced Track) in Spring 2022**

What motivated you to join the Teaching Development Program? Did your motivation shift or change when deciding to join (and complete) the Advanced Track?

I joined the TDP at first because I had already been attending a good number of CTL events. As I was getting closer to the dissertation stage of my PhD, I figured I may as well sign up and get the transcript notation! Ultimately, though, preparing a teaching portfolio for the TDP Advanced Track did actually force me to enumerate my teaching philosophy and take stock of my teaching artifacts and accomplishments in a way that I've never had to do explicitly before. It helped me see that I did actually have a coherent teaching philosophy, and that I could show evidence of it! Plus, I ended up submitting some of the teaching portfolio materials for postdoctoral fellowship applications, so it was immediately helpful for career prospects as well.

Through your work in the TDP, you have been exposed to so many of the CTL's offerings—the Innovative Course Design Seminar, LTF-led events, observations, participation in the TDParty, and more! Is there a particular offering (or two!) that stands out as being particularly enjoyable and/or instructive? If so, why?

While (of course!) I've been really thankful to have an engaged and supportive graduate student community for teaching and learning in my home department, I have really enjoyed getting to meet and hear from students in other departments through CTL offerings

like the Innovative Course Design Seminar, the TDParty co-working group, and events hosted by Lead Teaching Fellows (LTFs) from other departments. Working with grad students in other departments through CTL events has allowed me to abstract teaching tips beyond specific applications in the psychology classroom to figure out what makes those teaching strategies effective in general.

Looking back on your engagements with the CTL, in what ways has interacting with peers (in your department and across disciplines at the CTL) strengthened your own teaching practices?

As iron sharpens iron, one scholar of teaching and learning sharpens another. It's been incredibly empowering to know that I have a community of like-minded peers who also enjoy the art and science of effective teaching. Sometimes, I've gone to those peers for solidarity and encouragement when I'm about to teach new material, and other times I've asked those peers to vet my more adventurous ideas and keep me in check. I have worked most frequently with peers in my department, because we're already more familiar with each other and with discipline-specific concerns, but as noted above, I've learned a lot about discipline-general teaching concerns from peers across disciplines through CTL events.

Finally, what are 1-2 strategies that you use in your own teaching practice that new graduate student instructors might consider incorporating into their own practice?

Previous interviewees have given some pretty fantastic tips, so here's my two cents that I think others might not have mentioned here:

Carefully consider run time when planning lessons. When backward designing a lesson—from learning objectives, to targeted assessments, to lesson content it's important to allow lesson run time to realistically constrain the scope of learning objectives. Lecture, discussion, and activity components can only serve learning objectives if they're run clearly and slowly (enough). I have found that first-time lectures in particular tend to run longer than anticipated—for me, sometimes 30% longer than I initially expected. As a result, I over-budget for lecture time when lesson planning to make sure that I'm focused about what and how many learning objectives are actually accomplishable for a given unit of class. In this way, overbudgeting for lesson time helps keep me honest about how many learning objectives are sustainable to teach and assess, and forces me to prioritize which objectives I think are most important for students to reach.

BEGINNING TO TEACH

The CTL offers programs and services throughout the year to help graduate student instructors build confidence in their teaching and engage with a community of peers. They practice a variety of techniques to facilitate learning within their teaching context, develop conceptual frameworks for their teaching, and discover a diverse array of resources to support students in their classroom. Participation in these offerings with subsequent reflection helps to satisfy the Foundational Track for graduate students enrolled in the Teaching Development Program.

Teaching Orientations

Teaching Orientations introduce graduate students to a range of teaching resources, procedures, and policies at the University, as well as practical, evidence-based pedagogical strategies that they can implement on the first day of class. In Fall 2021 and Spring 2022, CTL offered orientation in the form of a series of five online, asynchronous modules.

The five asynchronous modules addressed the following topics:

Establishing instructional goals and an inclusive learning climate

- Clarifying TA roles and teaching support in a range of modalities
- Creating a policy sheet and a first day of class plan
- Considering common TA challenges and campus resources that help to navigate them
- Documenting next steps for teaching and professional development

228 graduate students accessed CTL's graduate student orientation in 2021-22. In addition to the on-demand modules, CTL ran 60-minute live debrief sessions that allowed participants opportunities to discuss module highlights, get individual feedback on policy sheets and plans for the first day of class, and engage in Q&A.

Essentials of Teaching and Learning Workshops

The Essentials sequence of workshops familiarizes graduate students with frameworks and tools they can use to facilitate student learning. Completion of the Essentials sequence is a requirement for completion of CTL's Teaching Development Program for graduate students. In Fall 2021, all Essentials sessions ran both online and in person; in Spring 2022, participants met online only. A series of asynchronous modules helps participants prepare for all live sessions.

Home

Module 1 - Values, Goals, and Frameworks to Guide Your Teaching

Module 2 - Preparing to Teach: Understanding Your Teaching Context and Roles

Module 3 - Preparing to Teach: Creating a First Day Plan and Policy Sheet

Module 4 - Campus Resources & Support for Teaching Challenges

Module 5 - Next Steps for Your Teaching and Professional Development

Introduction to Module 4: Campus Resources & Support for Teaching Challenges

Overview of Module 4

Video introduction



Key points from this video introduction by lan Althouse &, Senior Assistant Director of Graduate Student Programs and Services at the CTL:

The GSPS team refreshed CTL's on-demand Teaching Orientation for Graduate Student modules, recording new videos and adjusting guidance for Fall 2021 conditions.

Offices introduced in this module can offer support directly to you and/or to your students.

2021-22 Essentials sequence (ran each semester)

Creating Inclusive Learning Environments: Participants learned about the key terms, frameworks, and principles of inclusive teaching, focusing on strategies and tools for including all students in the learning process.

Designing Learning Objectives: Participants learned about backward design, an end-in-mind approach to instruction to facilitate students' learning.

Active Learning: Participants practiced developing class activities aligned with learning objectives that incentivize all students to participate.

Assessment and Feedback: Participants learned approaches for assessing student learning and providing feedback that encourages students to focus more on their improvement and less on bottom-line scores.

ADVANCING YOUR TEACHING

Graduate students wishing to advance their teaching practice and engage more deeply with a community of peers can participate in a range of advanced programs, seminars, and institutes at the CTL. These offerings help participants engage with the scholarship of teaching and learning within a community of peers invested in teaching, apply conceptual frameworks and emerging technologies to innovate their teaching, and cultivate transferable professional skills. Participation in these offerings with subsequent reflection helps to satisfy Advanced Track requirements for graduate students enrolled in the Teaching Development Program.

Seminars

Seminars provide the opportunity for cohorts of graduate students to engage in a sustained series of conversations, modules, and workshops focused on selected topics in teaching and learning over the course of the semester.

147 graduate student participants in CTL seminar programs

This year, the following seminar programs were offered to graduate students:

Transforming Your Research Into Teaching

The Transforming Your Research into Teaching seminar is a seven-week online intensive that helps participants



Students in the Leveraging Learning Spaces seminar gather in CTL spaces to interrogate effects of physical environments on learning.

create an advanced course based on their disciplinary research. The seminar emphasizes creativity in teaching—exploring how experience, style, and preferences can shape a unique learning experience for students. In this national seminar through the Center for the Integration of Research, Teaching, and Learning (CIRTL) Network—a consortium of 40+ US and Canadian universities focused on STEM future faculty development—participants engaged in two learning communities—one disciplinary, and another interdisciplinary. Each learning community consisted of an array of colleagues from other participating institutions. (Summer 2021)

Innovative Course Design Seminar

The Innovative Course Design Seminar allowed participants to explore evidence-based, inclusive, and online instructional design practices, and then to apply these concepts by creating a learner-centered syllabus that meets the challenges of teaching today. Participants applied the principles of backward design and inclusive teaching to develop context-specific learning objectives, aligned and scaffolded assessments, and a range of engaging activities across formats and contexts within a single course, whether in-person, online, hybrid, or HyFlex. (Fall 2021)

Leveraging Learning Spaces Seminar

Participants engaged in activities designed to both reflect on and experience the physical context of learning, including individual exercises, group discussions, and focused observations. Through these activities, participants articulated dimensions of pedagogical practice that are both emplaced (i.e., that recognize, leverage, and intervene in the physical setting of learning) and embodied (i.e., responsive and sensitive to the physical and sensorial contexts of cognition). (Spring 2022)

Assessing Teaching and Learning Seminar

The Assessing Teaching & Learning Seminar (ATLS) helps participants create a plan to assess teaching and student learning in the classroom. Over the course of four online modules, participants gained an understanding of Teaching as Research (TaR) by defining an original research question and developing their own TaR project proposal, drawing on the support of an online community of peers and the instructor. Participants learned about relevant data collection and assessment tools, both quantitative and qualitative, and completed a methods and data analysis section. The seminar culminated with the presentation of fully developed TaR proposals. (Spring 2022)

Events and Courses

Ivy Plus Teaching Transformations Conference

Since 2017, the CTL has partnered with colleagues within the lvy+ community to produce a one-day conference for graduate students who are especially committed to improving pedagogy. In 2022 the lvy+ Teaching Transformations Summit ran online. Around 40 graduate students and over 20 administrators from Columbia, Brown, CalTech, Cornell, Dartmouth, Harvard, MIT, Michigan, Penn, Rice, Stanford, Vanderbilt, Yale gathered to share teaching approaches and engage in a series of frank and generative discussions. This summit was a unique chance for Columbia graduate students to form national connections with peers and professionals actively working to improve the academy through teaching development.

Supporting Hybrid and Online Learning and Teaching (SHOLT)

Supporting Hybrid & Online Learning & Teaching (SHOLT) is an on-demand, self-paced course designed to help Columbia graduate student instructors in support roles develop effective teaching practices in online and hybrid courses. Four online modules cover topics including teaching as a team online, creating online communities with students, engaging students in active and collaborative learning online, and assessing student learning online.

Advanced Topics in Teaching Workshops

In 2021-22, the CTL provided several advanced workshops to graduate students looking to acquire new pedagogical frameworks and to innovate their teaching.

"One of the most valuable aspects of the Leveraging Learning Spaces Seminar is that it gave us the opportunity to engage with embodied cognition and learning spaces on two different scales. On the one hand, we got to reflect on these themes in terms of the big picture of higher--and not only higher--education. On the other, we worked together to plan concrete and actionable interventions that we can implement in our daily teaching--and that can improve our students' learning experience. The Seminar helped me to bring into focus the extent to which learning is an embodied and emplaced process. In fact, it also gave me the opportunity to concretely experience--as a learner--the benefits of an intentionally embodied and emplaced pedagogy. And, last but absolutely not least, it has empowered me to enhance my own teaching strategies accordingly."

— Claudia Antonini, Ph.D. Candidate, Department of Italian

Designing and Using Effective Rubrics

This workshop adopted an inclusive teaching lens for assessment design and feedback delivery through rubrics. Participants explored three types of rubrics and tried their hand at developing an inclusive rubric for assessing student participation—an area often assessed, but at risk of being inconsistent or following opaque criteria. (Summer 2022)

Hacking the Classroom

This workshop made visible a range of "hacks" that instructors can make—ranging from furniture rearrangement to activity facilitation to critically reflective practices—that foster a positive classroom climate, engage students, and support active learning. Participants identified techniques to effectively leverage space in office hours, small group discussions, and lectures. (Summer 2022)

How Can Technology Impact Learning?

During this session, participants engaged in some of the literature examining technology's impact on learning and considered how technology can bolster as well as impede the development of accessible learning experiences. Participants left with considerations for choosing digital tools and engaging them intentionally and accessibly. (Summer 2022)

HyFlex Practice Session

This session gave particular attention to teaching students distributed geographically—some physically in the classroom and others tuning in synchronously online—a tricky skill to develop especially if one has

never experienced HyFlex as a student. Participants were given the option to attend in-person or online; during the session, they experienced discussion between modalities, and identified practices to try whenever they have an opportunity to teach in a HyFlex (hybrid flexible) mode. (Fall 2021)

Identifying and Engaging with Students' Prior Knowledge

In this workshop, participants discussed when to design learning experiences that extend, amplify, or resonate with the experiences, values, or knowledge students bring into the classroom — and when to seek to challenge these ideas in service of course learning objectives. (Summer 2022)

Illuminating the Learning Process

This workshop defined some key terms and strategies in metacognition (the abilities students use to monitor their own learning and progress) that instructors may want to develop with students. Participants discussed several scaffolded learning processes, to help students develop important metacognitive abilities while learning discipline-specific skills. (Spring 2022 and Summer 2022)

Learning by Observing: Effective Teaching Observations

This workshop provided participants with a model for conducting observations of teaching that focus on instructional intention and student engagement techniques, as well as insights about the observer's own teaching development through observational practices. (Fall 2021 and Spring 2022)

Making It Hard to Cheat

This workshop incorporated research suggesting that there are predictable conditions that can induce cheating, offering strategies to reduce cheating and even improve students' overall performance in our courses by fostering their own intrinsic motivations to learn deeply in our classes. (Fall 2021, Spring 2022, Summer 2022)

Online Tools, In-Person Context

This HyFlex (hybrid flexible) session gave participants an option as to how they would like to engage in and experience tools for effective activities and strategies that worked for online and remote learning that could be adapted for the in-person classroom. (Fall 2021)

Setting Expectations with Students

This workshop helped participants develop structures to set the terms of a successful teaching or mentoring relationship. Participants considered how to handle difficult situations and how to surface expectations that can help instructors and students come into alignment. (Summer 2022)

Learning Communities, Journal Clubs, and Lounges

CTL Learning Communities, Lounges, and Journal Clubs are offerings for graduate students that build community around teaching development. They are designed to organically address graduate student interests as they cultivate instructional practices in today's teaching and learning environments.

CTLgrads Learning Communities

Drawing on support from the CTL, Senior Fellows from the CTL's fellowship programs work in interdisciplinary pairs or groups to design and co-facilitate two sequential discussions on teaching and learning topics. This year, Senior Fellows hosted the following learning communities for their peers:

Fall 2021

Citational Practice as Critical Feminist Pedagogy (CIRTL Network Learning Community)

- · Cat Lambert, Classics
- Diana Newby, English & Comparative Literature

Interdisciplinary Classrooms & Diverse Student Learning Goals

- Jonathan Lambert, Earth & Environmental Sciences
- · Andrew Richmond, Philosophy

Pedagogies of Race and Oppression

- Tamara Hache, Latin American & Iberian Cultures
- Daniel Santiago Sáenz, Latin American & Iberian Cultures

Why Assign Essays? Teaching Academic Writing as a Space for Critical Thinking & Linguistic Experimentation

- Isabella Livorni, Italian
- Sonja Wermager, Music

Spring 2022

Pedagogies of Race and Oppression

- Tamara Hache, Latin American & Iberian Cultures
- Daniel Santiago Sáenz, Latin American & Iberian Cultures

Teaching with Embodied Knowledge: Objects, Movement, and Philosophy of Education

- Emily FitzGerald, Religion
- Y. L. Lucy Wang, Art History & Archaeology

TILTing Authority: Hierarchy and Boundaries in the Classroom

- Skye Savage, Germanic Languages
- Abby Schroering, Theatre



Senior Lead Teaching Fellows run a CTLgrads Learning Community on embodied knowledge in 212 Butler Library.

CTLgrads Journal Club

CTLgrads Journal Club for graduate students and postdocs met every other week through the academic year. The sessions introduced participants to the research on teaching various disciplines (also known as Discipline-Based Education Research, or DBER) and engaged peerreviewed articles through group discussions. Participants focused on how they can use education research in their own fields and beyond to inform their own teaching practices. Journal Clubs were held in a HyFlex (hybrid flexible) format.

This year Journal Club sessions focused on the recently published volume Teaching Gradually: Practical Pedagogy for Graduate Students, by Graduate Students (Stylus, 2021) which compiles articles on pedagogy written by a range of graduate students, including several at Columbia University. Journal Club sessions often included authors of these articles in dialogue with participants.

Teachers' Lounge

In the CTL's Lounges, graduate students and CTL staff converse informally about teaching approaches, drawing from research and one another's classroom experiences. Teachers' Lounges in 2021-22 compiled best practices and lessons for returning to an in-person teaching environment in the fall, and focused on intercultural pedagogy in the spring.

Fall 2021: (Re)Locating Teaching

(Re)learning to Be Present

This session provided an open conversation about anxieties that may be triggered by classroom setups and activities. Participants considered ways that an

appreciation of in-person teaching may be refreshed, specifically how physical senses may be engaged in the service of learning objectives in a way that is not possible online; this discussion drew on concepts in the field of embodied cognition.

Evolving Teaching Spaces

In this session, participants looked closely at recently designed libraries, museums, public spaces, and offices, considering what might be brought back to the comparatively unchanged spaces of university classrooms.

Choreographing Teaching Artifacts

This session considered ways in which learners encountering objects can pursue multiple points of entry and engagement, be spurred to metacognitive reflection, and be led to consider material conditions and effects. In particular, it highlighted collaborative sense-making and sharing around objects, and we looked at several examples of object analysis in Mediathread, CTL's multimedia analysis platform. For more information about Mediathread, see page 66)

Spring 2022: Intercultural Pedagogy

Intercultural Pedagogy and the Pandemic

This session reflected on assumptions about teaching that we may have formed due to participants' cultural backgrounds, reviewed key elements of intercultural pedagogy, and considered challenges and opportunities for this kind of interaction due to disruptions of COVID-19. Participants also connected actual moments of cultural difference experienced in the classroom to a model of "intercultural competence."

2,147 Graduate student participants in CTL workshops

Intercultural Pedagogy Now: Instructor Perspectives

This session featured informal conversation with international TAs and instructors, discussing pedagogical experiences and discoveries in US classrooms. A panel of five doctoral students described specific challenges that they have experienced while working with students at Columbia, and shared insights about ways to navigate such experiences—deepening capacities for inclusive teaching along the way. The panel of doctoral students represented the departments of Civil Engineering, East Asian Languages & Cultures, Latin American & Iberian Cultures, Marketing, and Theatre.

Intercultural Pedagogy Now: Student Perspectives

This session included an informal conversation with international Columbia undergraduates, discussing their experiences and discoveries as learners in US classrooms. It revisited topics and suggestions

generated in 2016 by students on the International Student Advisory Board (ISAB), and invited undergraduates to consider what has changed for them as learners—and what hasn't—since then.

APPROACHING THE JOB MARKET

Approaching the Job Market Workshops

In Fall 2021, the CTL debuted detailed, self-paced modules to help graduate students represent their teaching experiences and priorities in applications, interviews, and campus visits. These asynchronous resources are now available to Columbia graduate students any time they are seeking guidance and models. These modules include:

- Introduction to the Teaching Statement (107 registrants in 2021-22)
- Introduction to the Diversity Statement (125 registrants in 2021-22)
- Introduction to the Teaching Portfolio (53 registrants in 2021-22)



At the final Teachers' Lounge of the semester, participants experience and reflect on object-based pedagogy within digital learning environments.

In addition, CTL ran live sessions to support graduate students preparing to represent their teaching on the job market. In 2021-22, these workshops included the following:

Teaching Statement Analysis Session: Participants who previously completed CTL's on-demand Introduction to the Teaching Statement module met with CTL staff and colleagues from other departments to collectively analyze excerpts from real teaching statements, and applied takeaways to their own teaching statement drafts. (Fall 2021)

Diversity Statement Analysis Session: Participants who previously completed CTL's on-demand Introduction to the Diversity Statement module met with CTL staff and colleagues from other departments to collectively analyze excerpts from real diversity statements, and applied takeaways to their own diversity statement drafts. (Fall 2021)

Building Your TDP Teaching E-Portfolio: In this session, participants learned about the functionality of the new Columbia Digital Sandbox platform supported by Columbia University Libraries, engaged with example e-portfolio templates, discussed best practices for showcasing their teaching development through visual

"I sought out CTL's support while on the job market because of their experience helping me reformulate my strategy. At first I got an interview at an R1 university for a TT job but I didn't get the job. [CTL Senior Assistant Director] Ian Althouse helped me conceptualize my approach and strategy after that. He was insightful and, together, we looked for Visiting Assistant Professorships which would serve as a springboard for TT jobs. After his and [CTL Assistant Director] Caitlin DeClercq's support I was able to land two job offers—one of which was a visiting position that will turn into a TT job; something that international students on visas can only dream of. The most valuable part of the experience I believe was thinking about my approach in framing who I am, what I bring to these institutions and the particular combinations of my teaching and research experience. While most seventh-year PhDs know how to market themselves, it is a bit difficult to know which part of ourselves to bring at which moment in a campus interview. CTL helped me think about when and how to project my teaching."

—**Karim Malak**, Ph.D. Candidate, Department of Middle Eastern, South Asian, and African Studies

THEO MILONOPOULOS

 ${\sf Postdoctoral\ Fellow-Perry\ World\ House-University\ of\ Pennsylvania}$

Home About CV Publications Teaching





Statement of Pedagogical Practices

This document summarizes my approach to teaching and the pedagogical practices I employ



<u>Diversity, Equity, &</u> <u>Inclusion</u>

My commitment to diversity, equity, and inclusion pervades all aspects of my teaching, from



Evidence of Teaching
Effectiveness

This section provides a summary of anonymized student course evaluations for



Theo Milonopulous (Political Science), below, gives a tour of his completed teaching portfolio to CTL Director Mark Phillipson and Assistant Director Caitlin DeClercq during a TDP exit interview.

Student Spotlight



Milica Iličić, PhD Candidate, Department of Slavic Languages
Completed the Teaching Development Program
(Advanced Track) in Spring 2022

What motivated you to join the Teaching Development Program? Did your motivations shift or change when deciding to join (and complete) the Advanced Track?

I first joined the Teaching Development Program because some of CTL's offerings directly appealed to my needs and interests: there was a workshop series on slow and mindful teaching, and the syllabus design seminar helped me design the course I taught as a Teaching Scholar in 2021. In these workshops, I realized that I enjoyed thinking about my teaching practice on a deeper level, and that understanding the underlying principles of learning greatly improves my students' experiences. Shifting to the Advanced Track was a natural continuation of this journey: I wanted to delve more into observation and feedback opportunities, and from that point on it simply didn't make sense to not get a formal certificate.

Through your work in the TDP, you have been exposed to so many of the CTL's offerings—the Course Design Seminar, LTF-led events, learning communities, the MOOC, observations, and more! Is there a particular offering (or two!) that stands out as being particularly enjoyable and/or instructive? If so, why?

The Course Design Seminar was definitely the most rewarding: in addition to being a crash course on all the building blocks of evidence-based teaching, it made me think more deeply about my own work and understand why it is meaningful, and how to communicate its importance to others.

You recently put together a digital teaching portfolio as a capstone assignment for the TDP. What was that experience like?

The time I was creating the portfolio overlapped with my first and final round of academic job applications, and summarizing my teaching development helped me understand that I am an educator first, scholar second. It made me realize that I would not be happy with a research-heavy academic career, inspired me to seek out professional opportunities elsewhere, and helped me realize that the scope of my professional training and ability is much broader and much more transferable than I thought. Improving access to education and helping people learn is my core value, and I will continue to seek out opportunities to act on it regardless of where I land after graduation.

Looking back on your engagements with the CTL, in what ways has interacting with peers strengthened your own teaching practices?

I benefited the most from exposure to the implementation of the same teaching principles in disciplines different from my own. My colleagues from other departments helped me think outside of the box, and identify issues and solutions I couldn't have noticed on my own.

Finally, what are 1-2 strategies that you use in your own teaching practice that new graduate student instructors might consider incorporating into their own practice?

Rigorous, minute-by-minute lesson planning is a habit I developed in my hands-on training as a solo instructor in the Russian program and deepened through CTL. I start out with defining objectives for the individual class, mindful of how it fits into the overall course goals. I then make sure that each activity serves that goal, that sufficient time is allotted for it, and that no time is wasted on activities that do not contribute enough. Gradually, I also developed a keen intuition for balancing this pre-set structure with the organic flow of the lesson, which often changes as students interact with the material and the activities. Overall, this structured approach is great for cultivating intentionality and implementing the principles of objective-oriented teaching. It feels daunting and time consuming at first, especially since defining good learning objectives can be challenging, but it becomes easier with practice and it is 100% worth the effort!

and verbal media, and took the first steps toward setting up their own teaching e-portfolio to guide future work. (Fall 2021 and Spring 2022)

Careers in Education Development: Participants who were curious about the field of educational development as a career trajectory met with the CTL's Assistant Directors (ADs) and Learning Designers (LDs) to learn about their recent paths to careers in educational development and early experiences in this growing field. (Spring 2022)

SERVICES

The CTL offers a number of services to help graduate students at Columbia become reflective and effective instructors.

Consultations

Graduate students requested 362 one-on-one consultations with CTL staff to receive support for their teaching and learning needs. Common consultation topics included syllabus design, integrating instructional technologies into class activities, lesson planning, and creating and refining a teaching statement and teaching portfolio.

Microteaching

The CTL offered microteaching practice sessions for small groups of graduate students and postdocs to rehearse teaching practices and get direct feedback and support. These sessions were led by doctoral students who completed CTL training to become Microteaching Facilitators.

83 graduate student participants in CTL Microteaching sessions

Mid-Course Reviews

The CTL offered Mid-Course Reviews (MCR) for graduate student instructors seeking quick, anonymous student feedback on their teaching. The confidential service paired instructors with trained peer consultants who solicited feedback directly from students on their course. Participants gained a clear picture of how their teaching practices are impacting students' learning in their course.

"Having participated in multiple Mid-Course Reviews over several semesters, I have found that they provide junctures for self-reflection and positive change on both the instructor's and the students' parts. An MCR posits a moment of interruption around the point of the semester when things start to feel like they have settled into a familiar routine, which doubles as an invitation to reconsider what kind of an intellectual community the class wants to cultivate, under the instructor's guidance. The most helpful part of the MCR is being able to ask students directly what they think is going well—or not so well—in the class, through the CTL facilitator. I think the conversation that the students have with the CTL facilitator also gives them a new awareness of how fellow classmates have been responding to the course materials and class dynamics, which allows them to feel less isolated in their individual learning experiences. This is affirmed during the in-class, post-MCR debrief that I go through with my students. An MCR can also be surprising, because it can pinpoint where/how my expectations and the students' expectations are out of sync, or how sometimes my concerns are unfounded."

— **Ami Yoon**, Ph.D. Candidate, Department of English & Comparative Literature

167 graduate student participants in CTL Mid-Course Reviews

Teaching Observations

Graduate students requested teaching observations to receive individualized feedback on their teaching. Through a structured process, peer consultants observed instructors in the classroom and provided suggestions to improve their teaching. The CTL also worked with schools, programs, and departments seeking to refine their peer-to-peer teaching observation practices.

35 graduate student participants in CTL Teaching Observations

FELLOWSHIPS

CTL Fellowships provide Columbia doctoral students with an opportunity to apply for a paid, sustained professional development experience. "The Teaching Consultant I was paired with spent ample time discussing their classroom observations and provided an incredibly helpful diagram tracking student participation, which allowed us to consider together the ways that student voices were being balanced in the classroom space. This experience helped me reflect on my teaching by placing me in conversation with a peer to talk through effective pedagogical strategies that could apply not only in the language classroom, but in any teaching environment. The main takeaway from my Teaching Observation experience was a set of useful and new-to-me strategies for noticing and redistributing class participation across students. In particular, the Teaching Consultant gave me concrete tips about how to bring students into a discussion in a low-stakes manner, providing them with multiple avenues to engage and demonstrate their abilities."

— Laura DiNardo, Ph.D. Candidate, Department of Italian

80 graduate student fellows and teaching consultants

This year, the CTL offered the Lead Teaching Fellowship, the Teaching Observation Fellowship, the Teaching Assessment Fellowship, and the Academic Administration Fellowship. In addition, it trained and supported a cohort of Teaching Consultants and offered support for doctoral students attending teaching conferences.

Lead Teaching Fellows

Lead Teaching Fellows design and facilitate teachingrelated events and workshops for peers in their home departments, with support from the CTL. The fellowship provides an interdisciplinary professional development experience for students across campus who are committed to exploring and advancing pedagogical practices.

This year, Senior Lead Teaching Fellows mentored a roster of 49 Lead Teaching Fellows as they designed and produced 98 teaching-related workshops and online resources across the University. See page 60 for a list of workshops facilitated by Lead Teaching Fellows for their schools and departments. Fellows also participated in a series of interdisciplinary gatherings to plan and reflect on their departmental events.



The seven 2021-22 Senior Lead Teaching Fellows meet with CTL staff to plan for September kickoff activities for the 49 LTFs they are mentoring.

2021-2022 Senior Lead Teaching Fellows

Emily FitzGerald, Religion	Jonathan Lambert, Earth & Environmental Science
Isabella Livorni, Italian	Andrew Richmond, Philosophy
Skye Savage, Germanic Languages	Y. L. Lucy Wang, Art History & Archaeology
Sonja Wermager, Music	

2021-2022 Lead Teaching Fellows

Nile Davies, Anthropology	Elliott Sturtevant, Architecture	
Whitney Kite, Art History & Archaeology	Anne van Vlimmeren, Biological Sciences	
Luke Lea, Classical Studies	Valeria Spacciante, Classics	
Lien Van Geel, Classics	Minxi Jiang, Earth & Environmental Engineering	
Janine Birnbaum, Earth & Environmental Sciences	Sarah Giles, Earth & Environmental Sciences	
Nolan Bensen, East Asian Languages and Cultures	Rachel Cohen, Ecology, Evolution & Environmental Biology	
Aya Labanieh, English & Comparative Literature	Lilith Todd, English & Comparative Literature	
Stephanie Choriatis, Film	Jake Huebner, Film	
Jeanne Devautour Choi, French	Laetitia Ndiaye, French	
Xiran Lu, Germanic Languages	Noa Tsaushu, Germanic Languages	
Nikita Shepard, History	Jacob Bergquist, Industrial Engineering & Operations Research	
Laura DiNardo, Italian	Tamara Hache, Latin American & Iberian Cultures	
Maayan Malter, Marketing	Sibel Sozuer Zorlu, Marketing	
Niyati Shenoy, Middle Eastern, South Asian & African Studies	Lauren Bernard, Music	
Gabrielle Ferrari, Music	Bovey Rao, Neuroscience	
Ellie Kim, Nursing	Dallin Dressman, Pharmacology	
Olivia Branscum, Philosophy	Devin Morse, Philosophy	
Valerie Hsieh, Physics	Rebecca Marwege, Political Science	
Arnaud Maurel, Political Science	Bryn McCarthy, Political Science	
Ana DiGiovanni, Psychology	John Thorp, Psychology	
Tomi Haxhi, Slavic Languages	Elaine Wilson, Slavic Languages	
Chelsea Allen, Social Work	Andrew Wilson, Sustainable Development	
Ali Yalgin, Theatre	Celine Aenlle-Rocha, Writing	
Anna Schwartzman, Writing		

"I love the interdisciplinary nature of the CTL. Getting to observe and hear about how people from other departments think about instruction has been immensely valuable for me in terms of thinking outside the box about my own discipline. Getting to collaborate with my peers to dissect my own teaching, as well as pedagogical theories and readings, played a huge role in my own reflections. Reflecting on teaching can be exceptionally difficult, but CTL fellowships/programs do an excellent job of creating structures of accountability and a culture of openness to ask questions and admit past mistakes. I learned a ton of theory, both new ideas as well as being able to put a name to practices/concepts that I only informally understood. I also feel that I now have a more holistic perspective on what undergraduate instruction looks like, since I've seen it done by instructors from so many different disciplines."

 Ben Silver, Ph.D. Candidate, Department of Psychology;
 CTL 2021-22 Teaching Observation Fellow and formerly 2020-21 Lead Teaching Fellow

Teaching Observation Fellows

Teaching Observation Fellows (TOFs) work closely with the CTL, peer mentors, and each other across the academic year to assess and reflect on targeted elements of classroom teaching. The fellowship helps them to develop critical perspectives on the design, implementation, and assessment of teaching by observing each other in various settings and offering structured feedback.

This year, one Senior Teaching Observation Fellow mentored eight Teaching Observation Fellows. The Fellows participated in formal observations of one another's teaching, microteaching practice sessions, and observations of faculty. Upon completing the fellowship, Teaching Observation Fellows are qualified to join a cohort of trained Teaching Consultants in the CTL in future years. The TOF program was supported this year by an Office of the Provost Teaching and Learning grant, awarded to Andrea Solomon, Vice Dean and Dean of Academic Affairs, Graduate School of Arts and Sciences, for "Sustaining and Broadening the Teaching Observation Fellowship Program for Columbia Graduate Students."

2021-22 Senior Teaching Observation Fellow

Lauren Horst, English & Comparative Literature

2021-22 Teaching Observation Fellows

Lloyd Anderson, Earth & Environmental Sciences	Qian Cao, Philosophy
Chas East, Italian	Megan Goldring, Psychology
Cosima Mattner, Germanic Languages	Alex Pekov, Slavic Languages
Ben Silver, Psychology	Francesca Zhao, East Asian Languages & Cultures



Kickoff for the Teaching Observation Fellows in September 2021.

Teaching Assessment Fellows

Teaching Assessment Fellows (TAFs) are Columbia University doctoral students who work closely with the Center for Teaching and Learning during the academic year to support and assess teaching initiatives. TAFs engage directly with strategies and methodologies for evaluating the efficacy of teaching as they help to analyze the impact of teaching projects proposed by Columbia faculty and funded by the Office of the Provost.

2021-22 Teaching Assessment Fellows and project assignments:

- Emma lanni, Classics: Women Have Always Worked MOOC (Faculty: Alice Kessler-Harris, History)
- Ksenia Rybkina, Cellular, Molecular, and Biomedical Studies: Building a Bridge between Theory and Practice: Blended Learning Meets Behavioral Neuroscience (Faculty: Alfredo Spagna, Psychology)

- Abby Schroering (Senior TAF), Theatre: A Fast and Effective AI Approach for Student Feedback in Proof-Based Computer Science Courses (Faculty: Nakul Verma, Computer Science)
- Aleksandra Jakubczak, History: Using Project-Based Learning to Improve Student Learning about Climaterelated Risk (Faculty: Ben Orlove, SIPA)
- Kelsey Reeder, Social Work: Unveiling the Hidden Curriculum An Innovative Approach to Teaching Professionalism in the Operating Room during the Medical Student Surgery Clerkship (Faculty: Catherine McManus, Surgery, VP&S)

Teaching Consultants

Teaching Consultants (TCs) are trained by CTL to provide classroom teaching observations, facilitate microteaching sessions, and run mid-course reviews for graduate students who request these services. In 2021-22, Senior TCs mentored the Teaching Consultant cohort, provided consultations to graduate students, and worked with CTL on special projects.

2021-22 Senior Teaching Consultants

Zachary Domach, Religion	Annie Potter, Theatre
Thomas Preston, Germanic Languages	Abby Schroering, Theatre
Mary Catherine Stoumbos, Music	

2021-22 Teaching Consultants

Fellows in Academic Administration

In 2021-22, in partnership with GSAS, the CTL hosted three Fellows in Academic Administration (FAA) to serve as Teaching Development Program (TDP) Consultants. In this capacity, the FAAs tracked and assessed TDP participant activities, collaborated with CTL staff to conduct semesterlong assessment projects to quantify program impacts and understand participant experiences, and suggested strategies for communication, outreach, and administration.

2021-22 Teaching Development Program Consultants (FAAs) and Assessment Projects:

 Tianyuan Huang, East Asian Languages & Cultures: "Quantifying TDP Progress through TDP Pedagogy Reflections" (Fall 2021)

- Javiera Irribarren-Ortiz, Latin American & Iberian Cultures: "Assessing TDP Participant Goals and Reflections in the Essentials Series of Workshops" (Fall 2021)
- Nile Davies, Anthropology: "Developing a Timeline to Support TDP Participant Planning, Progress, and Completion" (Spring 2022)

Teaching Conference Support

Doctoral students who wished to attend conferences or training centered on teaching practices in higher education were sponsored by the GSAS Office of the Dean and funded by the Office of the Provost. Students received funds for attending or for presenting at a conference or training that helped them develop as instructors or explore discipline-based educational research (DBER).

Supported students and conferences:

- Abby Schroering (Theatre), Mary Catherine Stoumbos (English & Comparative Literature),
 Anne Potter (English & Comparative Literature),
 and Zachary Domach (Religion): POD Network
 Annual Conference. November 8-17, 2021.
- Xuexin Cai (East Asian Languages & Cultures):
 Video Production for Academics Online Course.
 January, 2022.
- Javiera Irribarren-Ortiz (Latin American & Iberian Cultures): Society for the Study of Southern Literature. February 17-20, 2022.
- Skye Savage (Germanic Languages), Xiran Lu (Germanic Languages), Cosima Mattner (Germanic Languages): Northeast Modern Language Association's 53rd Annual Convention. March 10-13, 2022.
- Norashiqin Toh (Political Science): 79th Annual Midwest Political Science Association Conference. April 7-10, 2022.
- Janine Birnbaum (Earth & Environmental Sciences):
 Earth Educators Rendezvous. July 11-15, 2022.

CUSTOMIZED PROGRAMS

In 2021-22, the Graduate Student Programs and Services team facilitated the following customized programming.

- Core Curriculum (4 sessions):
 - Inclusive Teaching, August 30, 2021
 - Art Humanities Syllabus Session, August 31, 2021
 - Literature Humanities & Contemporary Civilization Close Reading Workshop (online), March 25, 2022
 - Core Preceptor Orientation Co-facilitation, May 31, 2022
- Department of Germanic Languages: Teaching & Diversity Statements, December 2, 2021
- School of Social Work: Teaching Development for Doctoral Post-seminar Participants, December 7, 2021
- Department of Music: Active Learning Overview for the G6000 Pedagogy Course, February 25, 2022
- Graduate School of Arts and Sciences, Office of Academic Diversity and Inclusion: Syllabus & Course Design Workshop (online), May 31, 2022
- Fu Foundation School of Engineering and Applied Science: Mentoring Workshop, June 21, 2022

Peer Observation Programs

The CTL runs Peer Observation Programs (POPs) in the Graduate School of Arts and Sciences' Teaching Scholars program and the Core Curriculum. POP participants pair up, observe one another's classes, and debrief with each other, drawing on guidance and instruments provided by the CTL. POP meetings in the CTL allow the full cohort of participants to prepare for and reflect on the peer observation process. CTL ran the following POP sessions in the 2021-22 academic year:

- Teaching Scholars POP Kickoff, August 27, 2021
- Core POP Kickoff, October 18, 2022
- Teaching Scholars POP Mid-semester Meeting, November 23, 2021
- Core POP Mid-year Meeting, January 21, 2022
- Teaching Scholars POP Mid-year Meeting, January 27, 2022
- Teaching Scholars POP Mid-semester Meeting, March 10, 2022

LEAD TEACHING FELLOW EVENTS AND INTERACTIVE RESOURCES

98 of workshops and online resources created by Lead Teaching Fellows

874 graduate student participants in Lead Teaching Fellow workshops

LTF events are led by Lead Teaching Fellows to serve graduate student instructors in their respective departments. Below is a list of events and interactive online resources designed and facilitated by Lead Teaching Fellows in the 2021-22 academic year.

Anthropology

- Anthropology TA Orientation: Introduction to the Center for Teaching and Learning (Nile Davies, Fall 2021)
- How to Craft a Teaching Portfolio: A Workshop (Nile Davies, Spring 2022)

Architecture, Planning & Preservation

- Resource: GSAPP Teaching and Learning Survey (Elliott Sturtevant, Fall 2021)
- How to Teach with Primary Sources in Architectural and Urban History (Elliott Sturtevant, Spring 2022)

Art History and Archeology

- Art History and Archaeology TA Orientation (Whitney Kite, Fall 2021)
- Teaching Close Looking (Whitney Kite, Spring 2022)

Biological Sciences

- TAing in the Biological Sciences (Anne van Vlimmeren, Fall 2021)
- Mentoring with Intent (Anne van Vlimmeren, Spring, 2022)

Classical Studies

- (Over-)Correcting in the Classroom:
 Maintaining Morale without Sacrificing Standards
 (Luke Lea, Fall 2021)
- A Roundtable on Multidisciplinarity in Classics Teaching (Luke Lea, Spring 2022)

Classics

- Language Learning and Anxiety: Developing Strategies for a Stress-free Classroom (Valeria Spacciante, Fall 2021)
- Bringing a Language Syllabus to Life (Lien Van Geel, Fall 2021)
- From "On Screen" to "Face-to-Face:" Online Tools for a More Inclusive In-Person Classroom (Valeria Spacciante, Spring 2022)
- New Semester, New Me: Setting Up/Resetting Teaching and Writing Habits for the New Semester (Lien Van Geel, Spring 2022)

Earth & Environmental Engineering

- Pitching Pedagogy for The Job Market (Minxi Jiang, Fall 2021)
- Crafting a Teaching Statement with Peer Reviews (Minxi Jiang, Spring 2022)

"Getting to critically observe someone else teach was really valuable. This was partially because my partner was in an entirely different field so I could focus on things other than the content such as class dynamics. It provided me time to reflect on my teaching. The semester went so crazy fast so having a little structure and a teammate (and larger group) provided key accountability. [The Peer Observation Program] made me feel really good about my teaching! I got some good suggestions on how to improve, but also got positive feedback which was very nice to keep up the energy throughout the semester. I got some really good feedback and related discussions on how to better include all voices in my classroom from my partner that helped me develop some new activity strategies for my class!"

 Nathan Lenssen, Ph.D. Candidate, Department of Earth and Environmental Sciences, participant in the Teaching Scholars Peer Observation Program

Earth & Environmental Science

- Accessible and Inclusive Teaching through Universal Design for Learning (UDL) in the Classroom, Lab, and Field (Janine Birnbaum, Fall 2021)
- Incorporating 3D Visualizations into Earth Science Teaching (Sarah Giles, Fall 2021)
- Beyond the TA: Planning and Marketing Your Teaching Experiences for the Job Market (Janine Birnbaum, Spring 2022)
- Utilizing Your Teaching Experience in Science Communication (Sarah Giles, Spring 2022)

East Asian Languages & Cultures

- The Experience of TAing in EALAC (Nolan Bensen, Fall 2021)
- Teaching East Asian Studies: An Open Conversation (Nolan Bensen, Spring 2022)

Ecology, Evolution & Environmental Biology

- SciComm in the Classroom: The Intersection of Science Communication and Science Education in Ecology/Evolution (Rachel Cohen, Fall 2021)
- Hosting Office Hours: Tools, Structure, Discussion (Rachel Cohen, Spring 2022)

English & Comparative Literature

- Creating Community in the Classroom (Aya Labanieh, Fall 2021)
- Teaching Writing to Read, Teaching Reading to Write (Lilith Todd, Fall 2021)
- How Have You Changed as an Instructor? Reflecting on Pedagogical Growth and Learning from Feedback (Aya Labanieh, Spring 2022)
- Is There a Medical Humanities Pedagogy? (Lilith Todd, Spring 2022)

Film

- Resource: Lights, Camera, TEACH: A Film Education Podcast (Stephanie Choriatis, Fall 2021)
- Being a Film TA: Responsibilities, Workload & Support (Jake Huebner, Fall 2021)
- Teaching and ADHD (Stephanie Choriatis, Spring 2022)
- Being a Film TA: Managing Expectations (Jake Huebner, Spring 2022)

French

- Unleashing Creativity in the Language Classroom (Jeanne Devautour Choi, Fall 2021)
- Inclusive Teaching through Culture-Based Activities (Laetitia Ndiaye, Fall 2021)
- Resource: French Department Graduate Instructors Survey (Jeanne Devautour Choi and Laetitia Ndiaye, Spring 2022)
- French Department Graduate Instructors Roundtable (Jeanne Devautour Choi and Laetitia Ndiaye, Spring 2022)

Germanic Languages

- Integrating Technology and Online Teaching Practices into In-Person Language Classrooms (Xiran Lu, Fall 2021)
- Breathing through Both Nostrils a Comparative Introduction to Yiddish (Noa Tsaushu, Fall 2021)
- Language Learning Beyond Textbooks (Xiran Lu, Spring 2022)
- How to Mutually Introduce Yiddish and German?
 A Comparative Mode of Teaching
 (Noa Tsaushu, Spring 2022)

History

 History Department TA Orientation (Nikita Shepard, Fall 2021)

Industrial Engineering & Operations Research

- The Art of the TAship (Jacob Bergquist, Fall 2021)
- TA 201: How to Grade (Jacob Bergquist, Spring 2022)

Italian

- Growth Mindset in the Language Classroom: Metacognitive Strategies for Both Students and Instructors (Laura DiNardo, Fall 2021)
- Staying Nimble: Using Technology to Move Between the In-Person and Online Classroom (Laura DiNardo, Spring 2022)

Latin American & Iberian Cultures

- Planning and Beyond: How to Use Authentic Materials in the Classroom (Tamara Hache, Fall 2021)
- What Do We Talk About When We Talk About Student Engagement? (Tamara Hache, Spring 2022)

Marketing

- Teaching with a Disability (Maayan Malter, Fall 2021)
- Teaching Assistantship: Expectations, Challenges and Best Practices (Sibel Sozuer Zorlu, Fall 2021)
- Microteaching in Business and the Behavioral Sciences (Maayan Malter, Spring 2022)
- Guest Speakers in the MBA Classroom (Sibel Sozuer Zorlu, Spring 2022)
- Middle Eastern, South Asian, & African Studies
- Resource: MESAAS-A Department Teaching Artifact? (Niyati Shenoy, Fall 2021)
- Diversity and Pedagogy at MESAAS (Niyati Shenoy, Spring 2022)

Music

- Classroom Communities: Making the Most of Collaborative Work in the Classroom (Lauren Bernard, Fall 2021)
- Writing About Music for Instructors: Assignments and Assessments (Gabrielle Ferrari, Fall 2021)

- Metacognition in the Classroom: Practices and Strategies (Lauren Bernard, Spring 2022)
- Reframing Boundaries for Instructors (Gabrielle Ferrari, Spring 2022)

Neuroscience

- Lab Mentorship and Beyond (Bovey Rao, Fall 2021)
- Teaching For and With Imposter Syndrome (Bovey Rao, Spring 2022)

Nursing

- Resource: Anti-Racist Pedagogy in Healthcare (Ellie Kim. Fall 2021)
- The Pathway to Anti-Racist Pedagogy During the Pandemic (Ellie Kim, Spring 2022)

Pharmacology

- Effective Teaching Principles for Scientific Research Presentations (Dallin Dressman, Fall 2021)
- Giving and Receiving Feedback in a Mentoring Relationship (Dallin Dressman, Spring 2022)

Philosophy

- Beyond the Prose Essay in Philosophy Assessment (Olivia Branscum, Fall 2021)
- Teaching Philosophy Writing: Communicating Our Implicit Knowledge (Devin Morse, Fall 2021)
- Aiming for Fairness and Objectivity: The Ups and Downs of Grading Multimodal Student Work (Olivia Branscum, Spring 2022)
- Developing Your Pedagogy as a Teaching Assistant (Devin Morse, Spring 2022)

Physics

- Deconstructing the Simple Pendulum: What Is the Role of the TA in a Peer-Led Team Learning Setting? (Valerie Hsieh, Fall 2021)
- Science is Political: How to Engage with "Difficult Knowledge" in STEM Courses (Valerie Hsieh, Spring 2022)

Political Science

- Anti-Ableist Teaching Methods and Universal Design for Learning (Rebecca Marwege, Fall 2021)
- Teaching and Public Speaking (Arnaud Maurel, Fall 2021)

- Teaching Controversial Topics (Bryn McCarthy, Fall 2021)
- Grading and Creating Assignments in Political Science (Rebecca Marwege, Spring 2022)
- Teaching and the Job Market (Arnaud Maurel, Spring 2022)
- Reducing Gender- and Race-Based Disparities in Discussion Sections (Bryn McCarthy, Spring 2022)

Psychology

- Reflections On a Year and a Half of Online Teaching and Learning: Part 1 (Ana DiGiovanni, Fall 2021)
- Reflections on a Year and a Half of Online Teaching and Learning, Part 2 (John Thorp, Fall 2021)
- Infusing Class Syllabi with Clarity and Inclusivity (Ana DiGiovanni, Spring 2022)
- Ungrading and Re-Centering Process in the Classroom (John Thorp, Spring 2022)

Religion

- Troubleshooting Your Teaching: Advice from Those Who've Been There (Sarah Hedgecock, Fall 2021)
- Working with an Inherited Syllabus (Sam Stella, Fall 2021)
- Giving an Effective Lecture (Sarah Hedgecock, Spring 2022)
- "What Do You Believe?" and Other Student Questions (Sam Stella, Spring 2022)

Slavic Languages

- How to Apply to Teaching-Related Funding Opportunities (Tomi Haxhi, Fall 2021)
- Smart Moves: Embodied Learning, Scaffolding, and Feedback (Elaine Wilson, Fall 2021)
- Resource: Alternative Pathways—Teaching-Related Jobs Beyond Academia (Tomi Haxhi, Spring 2022)
- Word Play: Creativity and Collaboration in the Language Classroom (Elaine Wilson, Spring 2022)

Social Work

- Resource: Approaches to Anti-Oppressive Pedagogy for Social Work Education (Chelsea Allen, Fall 2021)
- The Everyday Racial Projects of White Social Work Students (Chelsea Allen, Spring 2022)



An informal spring gathering of some CTL Fellows.

Sustainable Development

- Crafting an Effective Transdisciplinary Teaching Statement (Andrew Wilson, Fall 2021)
- Universal Design in Quantitative Social Science Education (Andrew Wilson, Spring 2022)

Theatre

- Playful Strategies for Teaching Research in Theatre and Performing Arts (Ali Yalgin, Fall 2021)
- Embodied Learning and Disabilities: Thinking Beyond Assumptions (Ali Yalgin, Spring 2022)

Writing

- Resource: How to Bring Linguistic Justice into the Writing Classroom (Celine Aenlle-Rocha, Fall 2021)
- Fostering Interdependence in the Writing Workshop (Anna Schwartzman, Fall 2021)
- How to Evaluate Student Writing Through the Lens of Linguistic Justice (Celine Aenlle-Rocha, Spring 2022)
- Alternative Workshop Models (Anna Schwartzman, Spring 2022)

Support for Instructional Technologies -

The CTL Instructional Technologies group works collaboratively with Columbia instructors and CTL colleagues to support teaching and learning through the purposeful use of media and technology, engaging in a range of projects requiring software development, interface and experience design, media production, and project management.

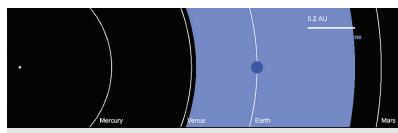
The group is composed of two teams: the Media Production team and the Software Development and Design team. Leveraging their extensive experience, both teams build digital experiences that augment the curriculum, exploring how technology and media can improve and enhance the student's learning experience. All CTL projects adhere to best practices, using well-documented processes to create efficient, effective, and accessible content, tools, and resources. Where possible, projects are shared to the benefit of audiences beyond the University.

The group advocates for and oversees a range of educational technology platforms. Members of the group represent the CTL at the University's IT Leadership Council and the Academic Technologies Leadership Group. The group ensures that the CTL's practices are compliant with University policies around accessibility, identity protection and data stewardship, issues that have become critical and complicated.

SUPPORT FOR PROVOST'S FUNDED TEACHING AND LEARNING GRANTS

The Instructional Technologies group is an essential resource for the Provost's Funded Teaching and Learning Grant projects, including the Innovative Course Design funded projects and the Massive Open Online Courses (MOOCs) funded projects. The group provides project management, media production, design, software development and technology expertise to faculty partners. See page 18 for the full list of 2021-22 Provost's Funded Teaching and Learning Grant projects.

Below are highlighted projects that required considerable work from the Instructional Technologies group in the 2021-22 academic year:



A Circumstellar Habitable Zone is defined as a region around a star where water could exist on the surface of an Earth-like planet. This visualization shows our Earth currently within an area favorable to life. As our Sun evolves, the size and location of the habitable area will change.

Astronomy Simulations

David Helfand, Professor, Department of Astronomy

The Astronomy Simulations team continued its mission to port Flash-based simulations to a more sustainable technology. The simulations were originally created under the direction of Professor Kevin Lee at the University of Nebraska-Lincoln and are used by Professor Helfand in his Columbia courses.

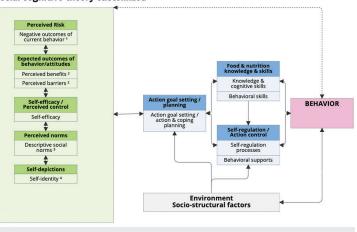
This year, the Circumstellar Habitable Zone simulation was added to the existing set. This simulation introduces students to the "basic conditions thought necessary for life to exist." Students can then explore where in our universe those conditions are most likely to be met by changing star mass and planet distance. An interactive timeline visualizes a planet's fate over time as its star stops fusing hydrogen, becomes a white dwarf and goes supernova.

https://columbiactl.github.io/astro-simulations/

Columbia University Libraries Exceptional Scholarship

The Exceptional Scholarship project, a collaboration between the Libraries and the CTL through the Provost's Grants program, was in development in 2022. The course instructs and informs researchers how to critically assess their current handling of research data by introducing them to the principles of structured research data management. The project's goal is to develop a compelling seven module course composed of text, video, and animations. The course will be delivered via the Courseworks LMS in both synchronous and asynchronous formats.

Social cognitive theory customized



In Design Online, students interact with established nutrition pedagogy models, adding and removing determining and facilitating behaviors. The new models are tailored to best represent their thinking.

DESIGN Online

Isobel Contento, Professor, Program in Nutrition, Teachers College

Pam Koch, Associate Professor, Program in Nutrition, Teachers College

The DESIGN Online web application is based on the DESIGN Procedure, created by Professors Isobel R. Contento and Pam Koch. DESIGN Online provides a systematic process to help practitioners create nutrition education that is effective in transforming behaviors. The DESIGN Online team completed work to enhance the web application with a new lesson plan type, which structures activities that include advocacy and making changes to the food, economic, and information environments to achieve a specific behavior change goal. The app is used in entry-level nutrition classes and graduate-level capstone projects. The team is also seeing interest from around the world. Notably, a cohort of nutrition educators in Korea used DESIGN to complete their coursework in the 2020-21 school year.

https://designonline.ctl.columbia.edu/

Learning Greek from the Streets

Nikolas Kakkoufa, Lecturer in Modern Greek, Department of Classics

Slated for launch in 2023, this project began development in 2022. The project will realize the vision set forth by Professor Nikolas Kakkoufa of using the Athens graffiti and street art landscape to connect students to Modern Greek language, cultivate alternative reading skills, and promote emotional and critical literacies. The project has three primary deliverables: a multimedia repository to

support classroom activities; an interactive 360° video to immerse students in the Athens built-environment and graffiti culture; and enhancements to the Locus Tempus application to support time-based activities.

Logic Learner

Ansaf Salleb-Aouissi, Senior Lecturer, Department of Computer Science

Nakul Verma, Lecturer in the Discipline of Computer Science

In collaboration with Computer Science faculty Nakul Verma and Ansaf Salleb-Aouissi, the CTL team built Logic Learner upon an existing prototype, adding an intuitive user experience, improving performance and scalability, and providing learning design and assessment solutions. Logic Learner is a practice tool for writing proofs in propositional logic. This project is unique as the machine-learning logic will continue to be maintained and improved by CS students. The team rolled out a pilot to students in February 2022, with a full-featured application launched in April, and an assessment process to follow in summer of 2022.

https://logiclearner.ctl.columbia.edu

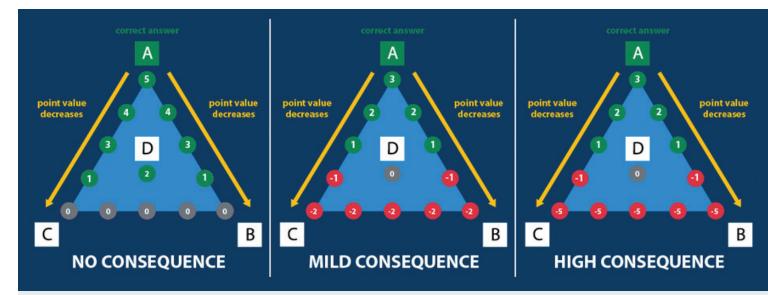


Mediathread PDF Selection

Mediathread, a collaborative media analysis and annotation platform and tool developed at the CTL, allows students to focus closely on multimedia objects from a range of digital collections and work with them in a course-specific analysis space. Mediathread was updated to support PDF analysis in addition to video, audio files, and images—a feature that had been much requested by instructors. The finished implementation includes the ability to highlight portions of PDF



CTL staff meet to develop Logic Learner.



In Quizzing with Confidence, instructors choose between three scoring schemes to determine a question's total points and whether students receive negative points for choosing a less confident or incorrect answer. For example, an incorrect answer earns 0 points in the "No Consequence" scheme, but students are penalized 5 in the "High Consequence" scheme.

documents, and use these selections in Mediathread assignments and discussions. The feature was completed in February 2022, and was officially rolled out to faculty and students in March of 2022. The Mediathread platform was used in 52 courses this year, with students creating 6,556 media annotations.

https://mediathread.ctl.columbia.edu

Quizzing with Confidence

Sarah Hansen, Senior Lecturer, Department of Chemistry **Alfredo Spagna**, Lecturer, Department of Psychology

Quizzing with Confidence provides an alternative to traditional multiple choice questions by allowing students to indicate their confidence in one of three choices. The application fully integrates with the Courseworks LMS to provide a seamless experience for students and for faculty reviewing submissions.

The CTL team working on the Online Quizzing with Confidence completed a soft launch of the application, with student-facing pilots in Fall 2021. Sarah Hansen integrated Quizzing with Confidence into her General Chemistry course for 25 students and Alfredo Spagna debuted the app in his Fundamentals of Human Neuropsychology course with 75 students.

https://quizcon.ctl.columbia.edu

Additional Projects

CTL Portfolio

In April 2022, the Instructional Technologies group worked on a new CTL Portfolio site that will serve as a public catalog of CTL projects, including Provost-funded, strategic, and legacy projects. Individual portfolio pages summarize a project's purpose, describing details about the project, such as faculty partner and department, teaching and learning goals, and image gallery. The site includes full-text search and social media card integration.

https://portfolio.ctl.columbia.edu/

Teaching Development Program (TDP) Portal

In collaboration with the CTL Graduate Student Programs and Services team and graduate students, a portal supporting and promoting the Teaching Development Program was constructed. The website organizes a range of materials to make the program's benefits and requirements easier to navigate. The site launched at the custom domain in January 2022. The team will use site analytics and surveys to assess the return on the project.

https://tdp.ctl.columbia.edu/

Panel: Teaching and Learning Across the Disciplines with Geospatial Maps

Columbia faculty and CTL staff held a panel discussion for the Columbia community on how geospatial maps are used at Columbia to activate students' critical thinking skills across diverse topics and disciplines. Faculty and research specialists who use mapping in their courses discussed the learning process and the geospatial activities and technologies underpinning them. Panelists shared insights related to their use of Columbia University Geographic Information System (GIS) resources as well as Locus Tempus, a CTL-developed mapping application for spatial and temporal thinking.

PANELISTS INCLUDED

- Professor Chris Harwood, Senior Lecturer in the Department of Slavic Languages
- Madiha Choksi, Digital Learning and Emerging Technologies Specialist
- Eric Glass, GIS/Metadata Librarian and Adjunct Assistant Professor of Social Work
- Susan Dreher, CTL Associate Director,
 Software Development and Project Management
- Paul Joseph Stengel, CTL Senior Learning Designer.

MASSIVE OPEN ONLINE COURSES (MOOCS)

The CTL provides comprehensive production and media support for the design, creation, and delivery of MOOCs using two partner organizations: edX and Coursera.

MOOCs Debuted in 2021-22:

Menstruation in a Global Context

Marni Sommer, Associate Professor, Mailman School of Public Health

Maggie L. Schmitt, Associate Director, GATE Program, Mailman School of Public Health

Caitlin Gruer, Program Manager, GATE Program, Mailman School of Public Health

The Menstruation in a Global Context MOOC launched in November 2021. The objective of this course is to provide learners with a foundation on the global menstruation movement that aims to ensure that the menstrual needs of everyone, everywhere are met. The MOOC features 24 guest experts from around the world, complementing the Columbia faculty.

https://bit.ly/mgc-mooc

Supporting Veteran Success

R.J. Jenkins, Curriculum Design Specialist, The Center for Veteran Transition and Integration

The Supporting Veteran Success in Higher Education launched on March 9, 2022. This Columbia Veteran Transition and Integration (CTVI) course, aimed at

university administrators, provides participants with the tools necessary to better understand, empathize with, and proctor the success of veterans in pursuit of their academic, personal, and professional goals. The course consists of six sections with scenarios, polls, animated presentations, and discussions. To broaden the reach of the course, conversations will be hosted on LinkedIn.

https://www.edx.org/course/supporting-veteransuccess-in-higher-education

MOOCs Updated in 2021-22:

University Studies for Student Veterans

A new edition of the University Studies for Student Veterans opened in November 2021, in ongoing collaboration with the Center for Veteran Transition and Integration (CVTI) at Columbia. It is the first update to this course since its initial release in September 2017. The new edition was streamlined, making it easier for veterans to tackle the various modules effectively and with less direct support and overhead on the part of the CVTI team.

https://www.edx.org/course/university-studies-forstudent-veterans

Inclusive Teaching - University of Tennessee Health Services Center Version

CTL created a private instance of our Inclusive Teaching MOOC staff for use by the University of Tennessee Health Science Center (UTHSC) staff. To prepare the course instance, CTL completed a thorough review to remove references and links to Columbia-specific details.

MOOCs in Production in 2021-22:

Frontiers of Science - Part 4: Climate & Us

CTL began production on Professor David Helfand's Climate & Us course, the last of four parts in the Frontiers of Science series under development.

MEDIA PRODUCTIONS

The media team produces impactful videos for online courses, resources for instructors, and promotional materials that leverage digital pedagogy and expand the CTL's visibility. The media team has established their expertise as producers and practitioners in the field of classroom and online teaching and learning. Their work focuses on leveraging video and exploring new technologies to produce course content that maximizes learning and follows best practices for digital accessibility.

Media Projects in 2021-22

Dead Ideas in Teaching and Learning Podcast Series

The media team worked closely with CTL Executive Director and host Catherine Ross to produce seasons 3 and 4 of the *Dead Ideas In Teaching and Learning* podcast series. *Read more about the podcast on page 12.*

The media team managed video production for the following CTL events:

- Return to the Morningside Classroom with Student Well-Being in Mind Forum
- Celebration of Teaching and Learning Symposium webinars and keynote presentation

The media team managed video production for the following Office of the Provost Teaching and Learning Grant projects:

- Amanda Sarafian (Occupational Therapy): "Utilizing Case-based Teaching and Simulation Technology to Engage Students and Develop Clinical Competency in a Pediatric Occupational Therapy Graduate Course"
- Alfredo Spagna (Psychology): "Building a Bridge Between Theory and Practice: Blended Learning Meets Behavioral Neuroscience"
- Nataliya Pilipenko (Psychiatry): "Clinical Interviewing in Primary Care Settings"
- Kathleen Mullen (Nursing): "Interactive Learning of Trauma Informed Postpartum Assessment"
- Jean-Marie Alves-Bradford (Psychiatry):
 "Incorporating Technology in an Advocacy, Allyship and Upstander Skills Curriculum for Medical Students"
- Victoria Malaney-Brown, Director of Academic Integrity: "Academic Integrity Pre-Arrival Tutorial"

Technology Platforms and Support

The Instructional Technologies group led several projects, infrastructure updates and migrations dedicated to security and risk management, accessibility, and ease of use in both software and hardware.

The group rolled out the Mosyle mobile device management (MDM) solution to staff, bringing the CTL into full compliance with Columbia University Information Technology (CUIT) IT Risk Management (ITRM) requirements.

In continuing efforts to minimize infrastructure exposure, the CTL transitioned its QNAP internal file server (Sydney) to exclusive use for media production. All other current uses of Sydney were transitioned to cloud storage on Google Drive. Staff also transitioned from UserVoice to HubSpot's Service Desk to support help desk tickets from Columbia instructors, and the CTL Knowledge Base.

CTL staff developed a Media Loaner Equipment Service to enable Columbia instructors to use CTL media equipment in their courses on an as-needed basis. The service includes quick-start guides including video tutorials, and an FAQ.

CTL staff took part in Office of the Provost-led ADA compliance group meetings to discuss university policies and information around accessibility.

The group also improved processing for the CTL's Thanka-Prof/Thanka-TA initiative, automating the e-letter generation, emailing, and logging processes.

The group reflects and writes about its work in service to teaching and learning via the CompilED blog.

https://compiled.ctl.columbia.edu



Caption: CTL Project Manager Meesha Meksin and Media Producer Jon Hanford film a scene for the Provost-funded project with Professor Jean-Marie Alves-Bradford "Incorporating Technology in an Advocacy, Allyship and Upstander Skills Curriculum for Medical Students."

Internal and External Engagement

Publications

- Breyre, A.M., Vertelney, H., Sporer, K.A., Davenport, G.A., Issacs, E.D., Glomb, N.W. (2022). Emergency medical service interpretation of Physician Orders for Life-Sustaining Treatment (POLST) in cardiopulmonary arrest. *Journal of the American College of Emergency Physicians Open*, 3(2). https://doi.org/10.1002/emp2.12705.
- Chen, C.V.H.-H., Althouse, I., Declercq, C., Phillipson, M. (2022). Managing programmatic trade-offs for centers of teaching and learning: Applying a segmentation, targeting, and positioning approach to pedagogical offerings. To Improve the Academy: A Journal of Educational Development, 42.
- Chen, C.V.H.-H., Kearns, K., Eaton, L., Hoffmann, D.
 S., Leonard, D., & Samuels, M. (2022). Caring for our communities of practice in educational development.
 To Improve the Academy: A Journal of Educational Development, 41(1). https://doi.org/10.3998/tia.460
- Irvin, A. (2021, August 12). Designing self-care
 practices for this academic year. The Scholarly Teacher.
 https://www.scholarlyteacher.com/post/designing-self-care-practices-for-this-academic-year
- Irvin, A. (2021, August 11). How can we design more inclusive online learning communities?
 Inclusive online teaching at Columbia University.
 Enrollment Growth Podcast. Helix Education. https://enrollmentgrowthuniversity.sounder.fm/episode/inclusive-online-teaching-at-columbia-university
- Klaf, S. and Irvin, A. (2022, January 5). Putting teaching on the agenda. *Inside Higher Education*. https://www. insidehighered.com/advice/2022/01/05/how-chairscan-sustain-positive-changes-teaching-and-learningopinion?v2
- Reeves, P. M., Claydon, J. L., and Davenport, G. A. (2022). Program evaluation practices and the training of PhD students in STEM. Studies in Graduate and Postdoctoral Education, 13(1). https://doi.org/10.1108/ SGPE-04-2021-0029.

- Smith, A. H., Grupp, L. L., Doukopoulos, L., Foo, J. C., Rodriguez, B. J., Seeley, J., Boland, L. M., & Hester, L. L. (2022). Taking teaching and learning seriously: Approaching wicked consciousness through collaboration and partnership. *To Improve the Academy:* A Journal of Educational Development, 41(1). doi: https://doi.org/10.3998/tia.453
- Thieu, M. K., Foo, J. C., Marvin, C. B. (2022).
 Addressing the COVID-19 pandemic in introductory psychology using the Jigsaw method adapted for remote learning. *Journal of College Science Teaching*, 51(3), 7. https://www.nsta.org/journal-college-science-teaching/journal-college-science-teaching-januaryfebruary-2022/addressing

Conference Presentations and Invited Workshops and Discussions

- Althouse, I. (2022, January). Essentials of teaching and learning: Encounter, engage, reflect. Invited workshop series for the Masters in Design Studies capstone course at CENTRO, Mexico City, Mexico (Online).
- Chen C.V.H.-H., & Banta S. (2022, June). Redesigning to foster community in an online introductory chemical engineering course. Presentation, 2022 ASEE Annual Conference & Exhibition.
- DeClercq, C., Wright, M., & Schroering, A. (2021, November). Working together with what we have: Assessment techniques for resilience.
 Asynchronous Interactive Session, POD Network Conference (Online).
- Hentrich, N., & Kies, B. (2022, March). Universal design for learning in the media studies classroom. Workshop at Society for Cinema and Media Studies annual conference (Online).
- Hentrich, N., Navar-Gill, A. (2021, September).
 Innovative approaches to assessment and grading. Invited workshop for the Department of Communication and Theater Arts.

 Old Dominion University.
- Klaf, S. and Irvin, A. (2022, February). Five principles for inclusive teaching and learning. Digitally Enhanced Education Webinar Series. University of Kent (Online).

 Ross, C. (2021, November). Panel presentation for the Association for Undergraduate Education at Research Universities. (Online)

Representation at Conferences and Events

- 46th Annual POD Network Conference Evolving Beyond Crisis-Connecting to the Future, November 8-12, 2021 (Online).
- ASEE 2022 Annual Conference Excellence Through Diversity, June 26-29, 2022 (Minneapolis, MN).
- Ivy+ Teaching Transformations Summit for Graduate Students, May 6, 2022 (Online).

Columbia University Committee Work

- Foo, J. C.
 - CC-SEAS Academic Integrity Working Group.
 - SEAS Committee on Instruction (COI).
- Frazier, N.
 - CUIMC Anti-Racist Educator Community of Practice (ARECP).
- Irvin, A.
 - · Columbia University Committee to Address Bias.
- · Kingon, A.
 - CUIMC Education Resource Committee (ERC).
 - Dean of Students Bi-Weekly Planning Committee.
 - VP&S Care Curriculum Committee.
 - VP&S Educate Curriculum Committee.
 - Fundamentals Curriculum Revision Committee.
 - Education Technology Advisory Committee (ETAC).
 - CUIMC Equity & Justice/Sim & Technology Collaborative.
- Klaf, S.
 - Directors of Undergraduate Studies (DUS), Arts & Sciences.
- · Matiz, A. M.
 - Information Technology Leadership Council (ITLC).
 - Academic Technology Leadership Group (ATLG).
 - Provost's Faculty Committee on Education Innovation (CEI).

- Petitti, R.
 - Task Force for Inclusion and Belonging.
 - Diversity Officers.
- Ross, C.
 - Senate Education Committee.
 - Co-chair, Subcommittee on the Use of Student Surveys in Teaching Evaluation.
 - A&S Educational Policy and Planning Committee (EPPC).
 - Evaluation of Teaching Subcommittee.
 - Advisory Group (AG) on Uris Classrooms.
 - Teaching Modalities Implementation Committee.
 - Advisory Group Subcommittee on Morningside Classroom Renovations.
 - 2021 Academic Planning Committee.
 - Provost's Advisory Committee on the Libraries (PCAL) Education Working Group Subcommittee.

External Committees and Boards

- Foo, J. C.
 - 46th Annual POD Network Conference Research Presentations Co-Coordinator.
- · Hentrich, N.
 - Equity, Diversity, and Inclusive Teaching in Media (EDIT). Teaching Committee.
 - Society for Cinema and Media Studies.
 Critical Media Pedagogies Scholarly Interest Group Co-Chair.
- Irvin, A.
 - College Teaching. Associate Editor.
- Irvin, A. and Ross, C.
 - Trinity College (Dublin, Ireland) Inclusion and Equity Initiative Advisory Board.
- Althouse, I., Foo, J. C., Irvin, A., Kim, J., and Klaf, S.
 - City University of Hong Kong Teaching Development Grant Review Committee.
- Kim, J.
 - 46th Annual POD Network Conference Co-Creation through Partnership Special Interest Group (CCP-SIG) Session Co-Chair.

Appendix A:

CTL Leadership and Staff

Leadership Council

Soulaymane Kachani , Chair, Senior Vice Provost	Catherine Ross Executive Director, Center for Teaching and Learning
A. Maurice Matiz, Senior Director, Instructional Technologies	Amanda Irvin, Senior Director, Faculty Programs and Services
Mark L. Phillipson, Director, Graduate Student Programs and Services	Michelle Hall, Director, CUIMC Programs and Services

Below is a list of staff at the Center for Teaching and Learning.

Assessment and Evaluation

Glen Davenport, Associate Director

Communications and Outreach

Laura Nicholas, Manager

Faculty Programs and Services

Amanda Irvin, Senior Director	Suzanna Klaf, Associate Director	
Jessica Rowe, Associate Director, Instructional Design	John C. Foo, Assistant Director, Science and Engineering	
Jamie Kim, Assistant Director	Rebecca Petitti, Assistant Director	
Aurora Collado, Learning Designer	Andrew Corpuz, Learning Designer	
Nicole Hentrich, Learning Designer	Sam Sadeh, Learning Designer	
Paul Stengel, Senior Learning Designer	Michael Tarnow, Learning Designer, Science and Engineering	

CUIMC Programs and Services

Michelle Hall, Director, CUIMC Programs and Services	Ashley Kingon, Associate Director
Nigel Frazier, Learning Designer	Jason Guzman, Learning Designer

Graduate Student Programs and Services

Mark L. Phillipson, Director	lan Althouse, Senior Assistant Director
Christopher Chen, Senior Assistant Director	Caitlin DeClercq, Assistant Director

Instructional Technologies

A. Maurice Matiz, Senior Director	Susan Dreher, Associate Director
Stephanie Ogden, Associate Director	Vincent Aliberto, Senior Media Producer
Devon Anirudh , Senior Technical Specialist	Michael Brown, Assistant Media Producer
Frank DeStefano, Assistant Media Producer	Natalia Dittren, Associate Programmer
Jon Hanford, Media Producer	Meesha Meksin, Project Manager
Zarina Mustapha, Senior Front-end Developer	Nik Nyby, Senior Programmer
Evan Petersen, Assistant Programmer	Marc A. Raymond, Senior Designer

Administration

arah Carswell, Executive Assistant	Sayaka Tsuda, Programs Coordinator
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Appendix B:

2021-22 CTL Advisory Board

Soulaymane Kachani, Co-Chair Senior Vice Provost	Catherine Ross, Co-Chair Executive Director of the Center for Teaching and Learning
Carlos Alonso Dean, Graduate School of Arts and Sciences; Morris A. & Alma Schapiro Professor in The Humanities, Vice President for Graduate Education, Faculty of Arts and Sciences	Jonathan Amiel Associate Professor of Psychiatry; Senior Associate Dean for Innovation, College of Physicians and Surgeons
Sarah Cole Parr Professor of English and Comparative Literature; Dean of Humanities, Faculty of Arts and Sciences	Pat Grieve Nancy and Jeffrey Marcus Professor of the Humanities, Department of Latin American and Iberian Cultures, Faculty of Arts and Sciences
Fredrick Harris Professor of Political Science; Dean of Social Sciences, Faculty of Arts and Sciences	Julia Hirschberg Percy K. and Vida L. W. Hudson Professor of Computer Science, Fu Foundation School of Engineering and Applied Science
Lisa Hollibaugh Dean of Academic Affairs, Columbia College	Kris Kavanaugh Associate Vice President, Columbia University Libraries
Julie Kornfeld Vice Provost for Academic Programs; Associate Professor of Epidemiology, Columbia University Irving Medical Center	Ellen Meier Professor of Practice, Teachers College; Director of the Center for Technology and School Change
Janet Metcalfe Professor of Psychology; Director of Graduate Studies, Department of Psychology, Faculty of Arts and Sciences	Dennis Mitchell Executive Vice President for University Life; Senior Vice Provost for Faculty Advancement; Professor of Dental Medicine (Community Health and Periodontics)
Barclay Morrison Professor of Biomedical Engineering; Vice Dean of Undergraduate Programs, Fu Foundation School of Engineering and Applied Science	Letty Moss-Salentijn Edward V. Zegarelli Professor of Dental Medicine (in Anatomy and Cell Biology); Vice Dean for Curricular Innovation and Interprofessional Education in the College of Dental Medicine
Diana Rose Newby Graduate Student ('22), Department of English and Comparative Literature	Justin Pearlman Vice Provost for Communications and Engagement, Office of the Provost
Brent Stockwell Professor of Biological Sciences and Chemistry, Department of Biological Sciences, Faculty of Arts and Sciences	Ann Thornton Vice Provost and University Librarian, Columbia University Libraries
Greg Wawro	

Greg wawro

Professor of Political Science; Chair, Department of Political Science, School of Arts and Sciences

Appendix C:

Data Summary of AY 2021-22 Programs and Services ——

1. Unique Individuals Served by the CTL

By University Status/Affiliation

Graduate students	1,114
Faculty	1,636
Administrators and university staff	548
Postdocs	53
Research scientists	40
Undergraduate students	56
Total	3,447

By School

Arts and Sciences	1,535
Fu Foundation School of Engineering and Applied Science	313
Vagelos College of Physicians and Surgeons	223
Mailman School of Public Health	178
College of Dental Medicine	25
School of Nursing	118
Columbia Business School	88
Columbia Law School	142
Graduate School of Journalism	40
School of Architecture, Planning and Preservation	45
School of International and Public Affairs	146
School of Social Work	186
The Climate School	3
Teachers College	64
Barnard College	131
Jewish Theological Seminary	5
Union Theological Seminary	6

Centers and Institutes	74
Other units	130
Total Columbia-affiliated individuals	
	ı
Total external visitors	38
Total unique individuals served	3,490

2. CTL Interactions

By University Status/Affiliation

Faculty	4,417
Graduate students	4,599
Administrators and university staff	1,606
Postdocs	128
Research scientists	88
Undergraduate students	140
Total	10,978

By School

Arts and Sciences	5,590
Fu Foundation School of Engineering and Applied Science	796
Vagelos College of Physicians and Surgeons	858
Mailman School of Public Health	481
College of Dental Medicine	97
School of Nursing	627
Columbia Business School	183
Columbia Law School	244
Graduate School of Journalism	104
School of Architecture, Planning and Preservation	103
School of International and Public Affairs	316
School of Social Work	493
The Climate School	13
Teachers College	150
Barnard College	275
Jewish Theological Seminary	7
Union Theological Seminary	26

Centers and Institutes	159
Other units	461
Total Columbia-affiliated interactions	10,983
Total external visitor interactions	54
Total interactions	11,037

3. Programs and Events

Client Interactions By Program Type

Workshops	3,393
University-wide events	411
Self-paced courses	1,346
Institutes	141
Outreach events	652
Total program and event interactions	5,943

4. Services

Client Interactions By Service Type

Project consultations	1,279
Teaching and course consultations	709
Professional development consultations	688
CourseWorks consultations	718
Technology consultations	681
Total service interactions	4,075

Center for Teaching and Learning

Butler Library, Room 212 535 West 114th Street | New York, NY 10027 212-854-1692 ColumbiaCTL@columbia.edu

ctl.columbia.edu