Center for Teaching and Learning

2021 - 2022 Annual Report

Center for Teaching and Learning

Message from the Director

Message from the Director

Dear Colleagues:

As higher education worked to move beyond the pandemic during the 2021-2022 academic year, many institutions reported a steady decline in faculty, staff and student engagement. It was clear that people were exhausted from the extra effort demanded by teaching and learning during COVID, and as a result some wanted to opt out of doing anything beyond what was required. Yet many others at Georgia Tech, in the true spirit of “we can do this,” looked to the Center for Teaching and Learning as they sought to re-establish their connections with each other and with their students. These faculty and TAs wanted to strengthen the education they provided their students by using what they had learned during the pandemic—no “returning to normal” for them! They partnered with CTL to contribute ideas to the Academic Well-Being Project (academicwellbeing.ctl.gatech.edu) about how to help students thrive, created new online study materials by adapting video recordings used during remote teaching, and used evidence-based teaching methods to design inclusive learning environments.

For more information about our specific activities during the year, let me share the 2021-2022 CTL Annual Report with you. Please note that the Center for Teaching and Learning had over 12,569 contact points with members of the Georgia Tech community, a 22% increase over the previous fiscal year. Our services included both in-person and online formats, and involved orientations, workshops, courses, consultations, awards, and online resources.

Details of the connections we made throughout the year are highlighted in the upcoming pages. We appreciate the many faculty, TAs, and campus units who partnered with us in order to provide Georgia Tech students with meaningful learning experiences. Together, we’re making an impact!

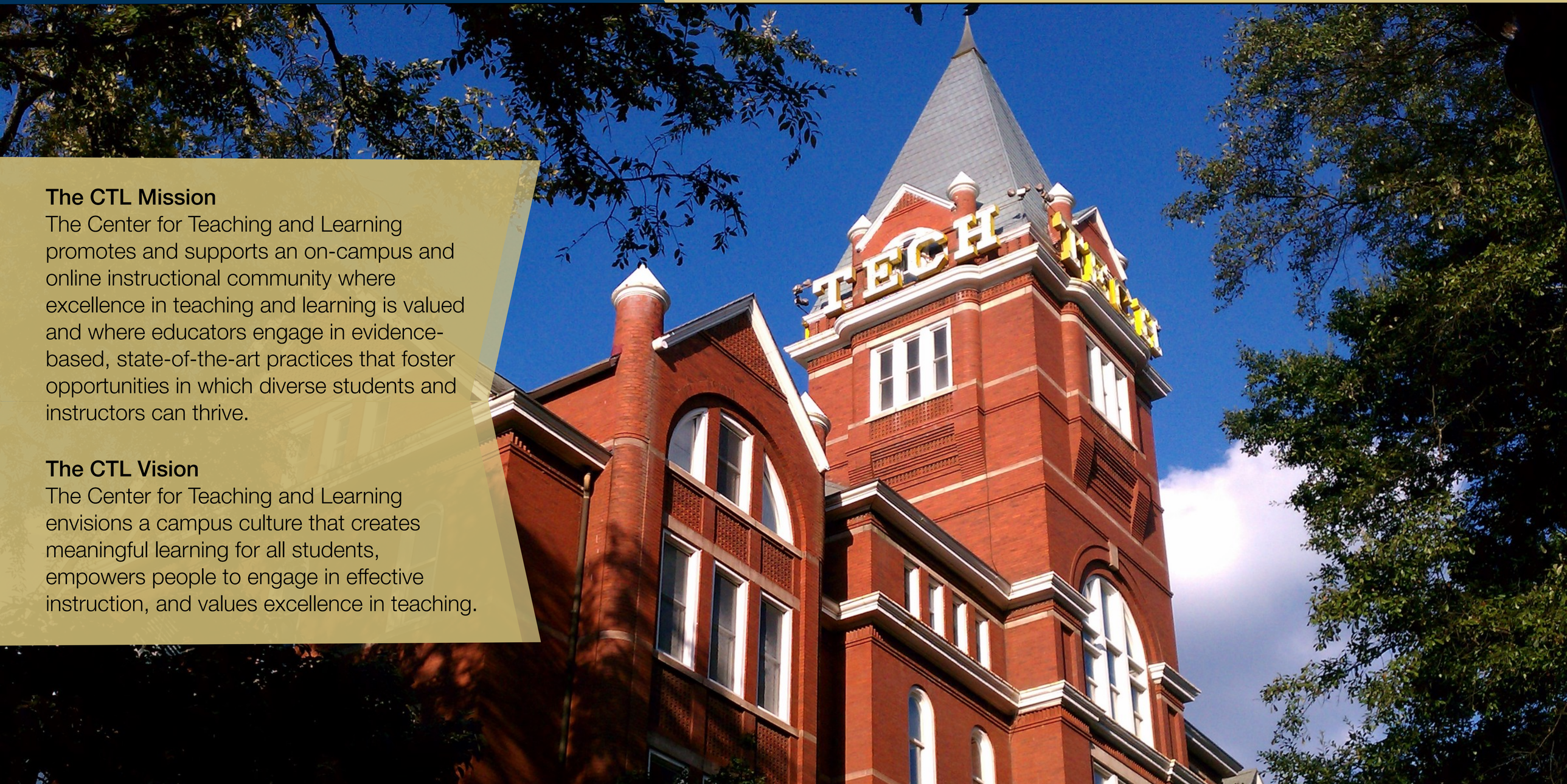
With best wishes,

Joyce Weinsheimer

Joyce Weinsheimer
Director of the Center for Teaching and Learning

Center for
Teaching and Learning

Mission & Vision Statements



The CTL Mission

The Center for Teaching and Learning promotes and supports an on-campus and online instructional community where excellence in teaching and learning is valued and where educators engage in evidence-based, state-of-the-art practices that foster opportunities in which diverse students and instructors can thrive.

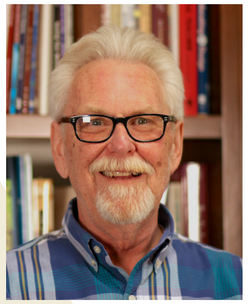
The CTL Vision

The Center for Teaching and Learning envisions a campus culture that creates meaningful learning for all students, empowers people to engage in effective instruction, and values excellence in teaching.

Center for Teaching and Learning

Faculty and Staff

Joyce Weinsheimer, Ed.D.
Director



David Lawrence, Ph.D.
Associate Director

Carol Subiño Sullivan, Ph.D.
Assistant Director of Faculty Teaching and Learning Initiatives

Rebecca Pope-Ruark, Ph.D.
Faculty Teaching and Learning Specialist

Chaohua Ou, Ed.D.
Assistant Director of Special Projects and Educational Initiatives

Vincent Spezzo, Ed.D.
Assistant Director of Teaching and Learning Online

Rui Hu, Ph.D.
Learning and Technology Initiatives Specialist

Kate Williams, Ph.D.
Assistant Director of TA Development and Future Faculty Initiatives

Tammy McCoy, Ph.D.
TA Development and Future Faculty Specialist

Sarah Kegley, M.A.
International TA Program Manager

Felicia Turner
Academic Program Coordinator II

Anastasia Volokhova
Administrative Professional II

Terri Dunbar
Graduate Teaching Fellow

Angela Yoo
Graduate Teaching Fellow

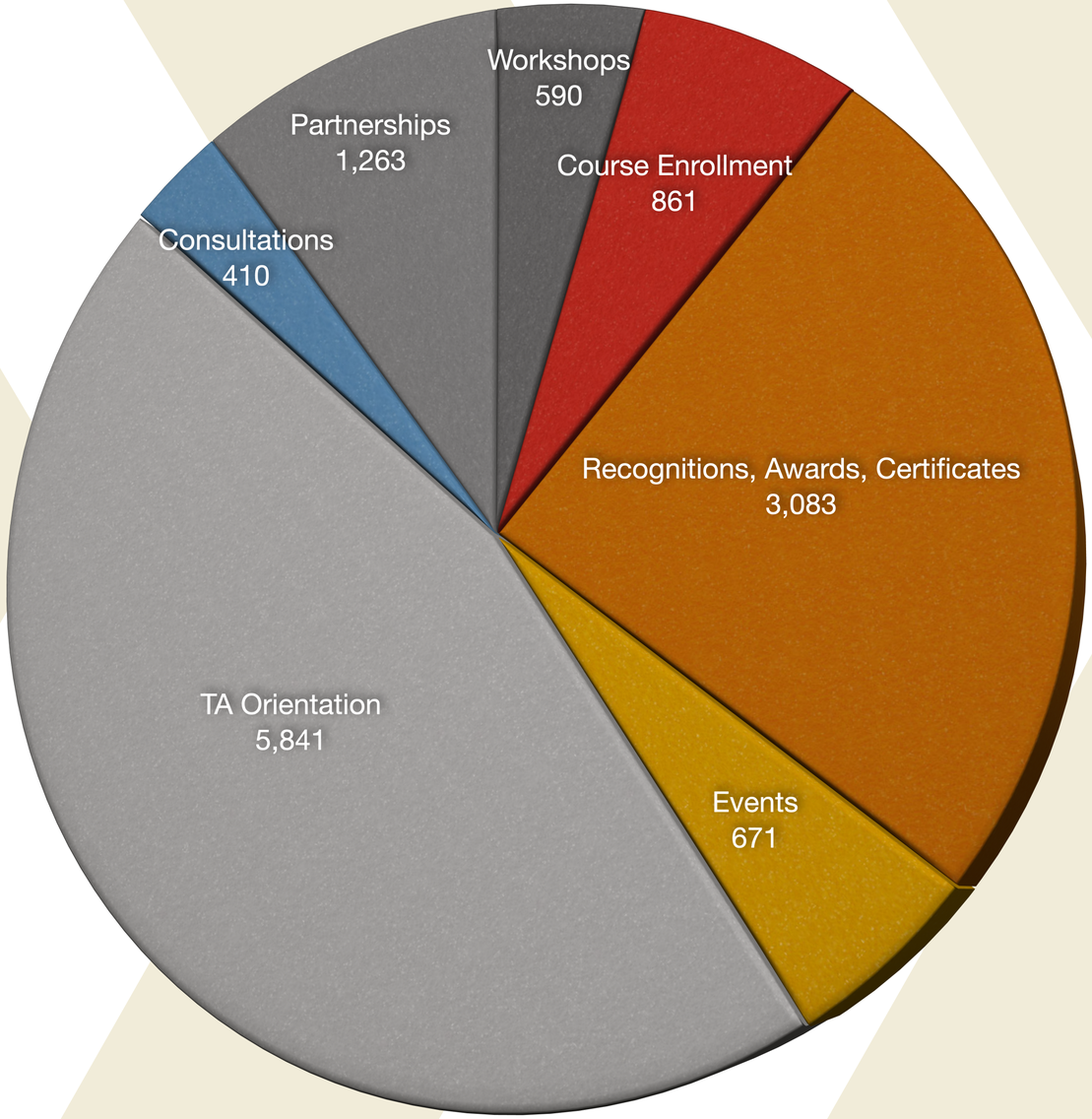
Camryn Burke
Student Writer

CTL faculty provided 410 consultations, classroom observations, and class dialogues in FY 2021 - 2022.

Center for Teaching and Learning

By the Numbers

CTL Programming and Services



In FY2021 - 2022, the Center for Teaching and Learning had over 12,719 contact points with members of the Georgia Tech community, a 22% increase over the previous fiscal year.

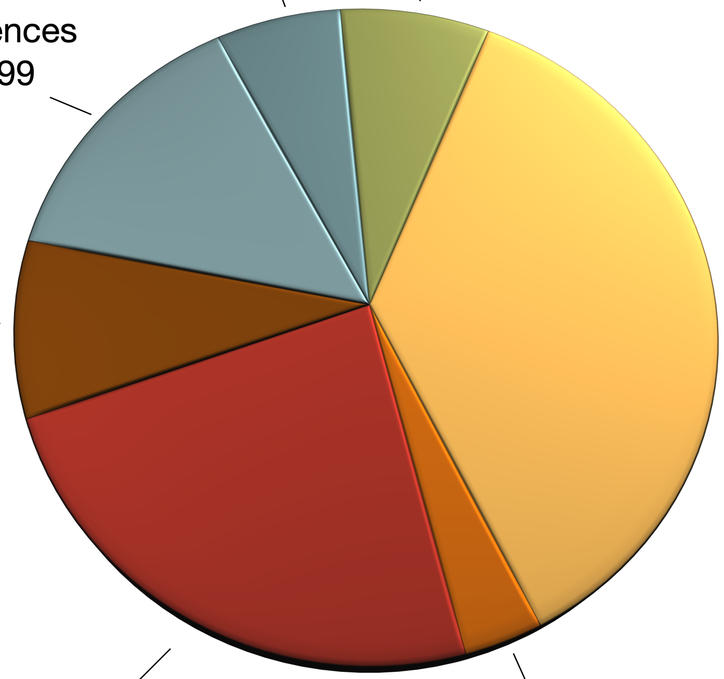
- Workshops
  - Attendees
- Courses
  - Students enrolled in CTL course offerings
- Recognitions, Awards, and Certificates
  - Thank a Teacher, CTL BP Awards, CIOS Recognitions, TA Awards, Tech to Teaching and CIRTL Certificates
- Events
  - Celebrating Teaching Day and Teaching and Learning Forum
- TA Orientation
  - Number of asynchronous training modules completed by graduate and undergraduate TAs (5,438) and number of TAs completing face-to-face or synchronous training (403)
- Consultations
  - One-on-one consults, class observations, and class dialogues
- Partnerships
  - Events and services conducted in collaboration with other stakeholders

NOTE: The data presented in the pie chart represents contact points, not unique individuals. For example, if a faculty member attends a CTL workshop and receives a Thank a Teacher note, then two contact points would be counted.

Center for Teaching and Learning

Thank a Teacher Program

2,791 ***Thank a Teacher*** **notes were submitted by students during FY2021-2022**



Biological Sciences - 82
Chemistry & Biochemistry - 53
Earth & Atmospheric Sciences - 20
Mathematics - 157
Physics - 55
Psychology - 32

Computer Science - 556
Interactive Computing - 164
Computational Science & Engineering - 70
OMS Analytics - 85
OMS Personnel - 145

Economics - 28
History & Sociology - 17
Literature, Media, & Communication - 75
Modern Languages - 55
Public Policy - 45
International Affairs - 21

Aerospace - 65
Biomedical - 49
Chemical & Biomolecular - 43
Civil & Environmental - 49
Electrical & Computer - 103
Industrial & Systems - 237
Materials Science - 8
Mechanical - 96

Architecture - 17
Building Construction - 14
City & Regional Planning - 17
Industrial Design - 38
Music - 8

The *Thank a Teacher* program recognizes outstanding contributors to the learning environment at Georgia Tech. Any student can submit a *Thank a Teacher* note to a faculty member, TA, or staff member on campus. Recipients are recognized at Celebrating Teaching Day.

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Events

Georgia Tech Retreat Exploring Effective Teaching (GTREET)

The Center for Teaching and Learning's biennial event, the Georgia Tech Retreat Exploring Effective Teaching (GTREET), is an opportunity for faculty across the Institute to gather and actively explore innovative ways to improving learning for Georgia Tech students.

Our time in January was guided by the question, "How can mentoring include professional skill development in and out of the classroom?" To explore this question, attendees reflected on their own experiences with mentoring, participated in an interactive workshop where they thought about how they could integrate learning about professional competencies into their students' classroom experiences, and listened to a panel of distinguished Georgia Tech faculty share their approach to mentoring.

This year's guest speaker was Dr. Jen Heemstra, Professor of Chemistry at Emory University. During her interactive workshop on "Professional Development as Pedagogy: Mentoring In and Beyond the Classroom," Heemstra engaged participants in thinking about common gaps in students' professional competencies. She then helped participants identify opportunities for professional skill building as students learned the content of the course.

Panelists further built on the mentoring theme by each sharing their mentoring philosophy and how they have addressed the challenges they've experienced in mentoring.

Panelists included:

- **John Cressler**, *Professor*, Electrical and Computer Engineering
- **Mary Peek**, *Principal Academic Professional*, Chemistry and Biochemistry
- **Bill Todd**, *Professor of the Practice*, Scheller College of Business
- **Ellen Zegura**, *Professor*, Computer Science

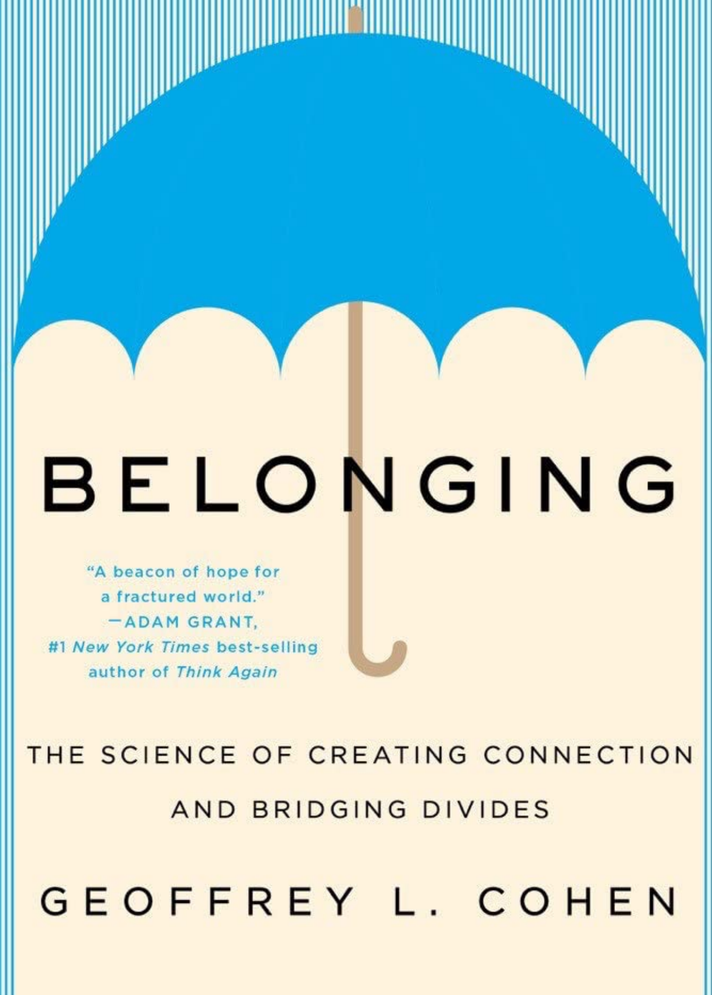
55 members of the Georgia Tech community participated in GTREET 2022.

100% of attendees gave the event an overall rating of very good or excellent and an average rating of 4.7 / 5.0 with 5 being excellent.

Teaching and Learning Forum

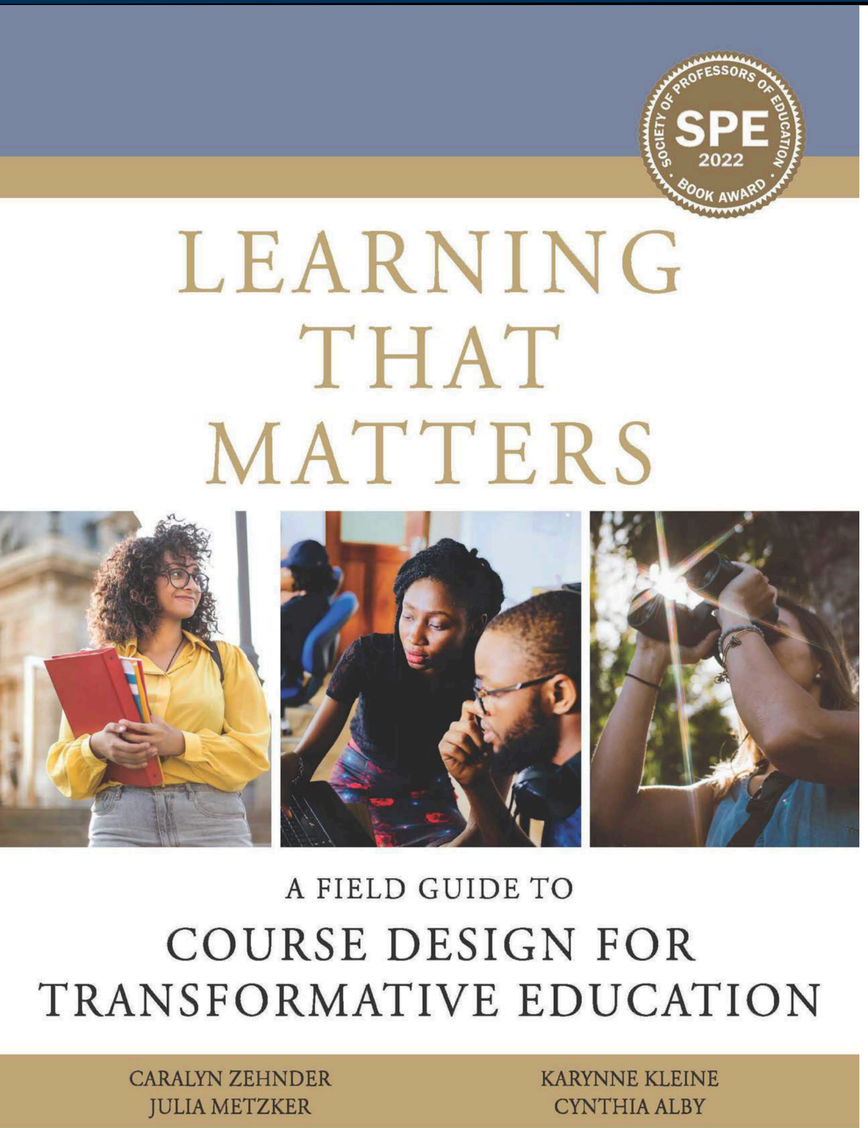
This event, co-hosted by the Center for Teaching and Learning and the Provost Teaching and Learning Fellows, provided participants with an opportunity to consider how they might foster a greater sense of belonging among their students.

This event featured Dr. Geoffrey Cohen, author of Belonging: The Science of Creating Connections and Bridging Divides. Cohen kicked off the Forum with a discussion of his research, its implications for teaching, and evidence-based strategies faculty can use to increase students' sense of belonging. Following this presentation, a student panel shared their experiences of belonging at Georgia Tech. Participants concluded the day by considering how to apply their new insights about belonging to their own teaching contexts.



Center for Teaching and Learning

Faculty Teaching & Learning Initiatives



Events

Fall Teaching Kickoff

Each August, the Center for Teaching and Learning hosts a day-long Fall Teaching Kickoff event, which is a series of interactive workshops to help get participants geared up and ready for the first day of class. In 2021, CTL offered three virtual workshops during Fall Teaching Kickoff.

Teaching Forward: Creating Inclusive Learning Environments with Technology

Over the course of the first 18 months of the pandemic, faculty learned a great deal about teaching and learning in different environments and found new technologies that engage students in multiple, more inclusive ways. Online discussion and collaboration tools as well as the chat feature in videoconferencing platforms opened up new opportunities for all students to effectively participate in class. So, how do we leverage the benefits of learning technologies like these in face-to-face courses? In this session, participants focused on tools integrated into Canvas including Ed Discussion and Annoto and explored options for using these inclusive collaborative technologies in the day-to-day classroom experience.

Facilitators included: Mr. Samba Diop, Instructional Technology Professional, Office of Information Technology, Dr. Rui Hu, Learning and Technology Specialist, Center for Teaching and Learning, Dr. Rebecca Pope-Ruark, Faculty Teaching and Learning Specialist, Center for Teaching and Learning

After Syllabus Day: Making Learning Matter

How can faculty use compelling dilemmas, issues and questions to get students engaged in their courses from the start? How might getting students motivated from the beginning impact student learning throughout the semester?

Caralyn Zehnder and her colleagues write in *Learning that Matters: A Field Guide to Transformative Education* (2021) that “Dilemmas, issues and questions (DIQs) can be used as a frame for a course. DIQs enhance discipline-specific content by providing students a compelling reason to learn the facts, models, concepts, and practices associated with the discipline. Additionally, they provide a means for students to think deeply about important, complex issues and problems they will face.”

Participants learned more about the DIQ framework, heard examples from colleagues of how they engage their students early on in their courses, and reflected on how they might use the DIQ framework to motivate student learning in their courses from the start.

Facilitated by: Dr. Carol Subiño Sullivan, Assistant Director, Faculty Teaching & Learning Initiatives, Center for Teaching and Learning

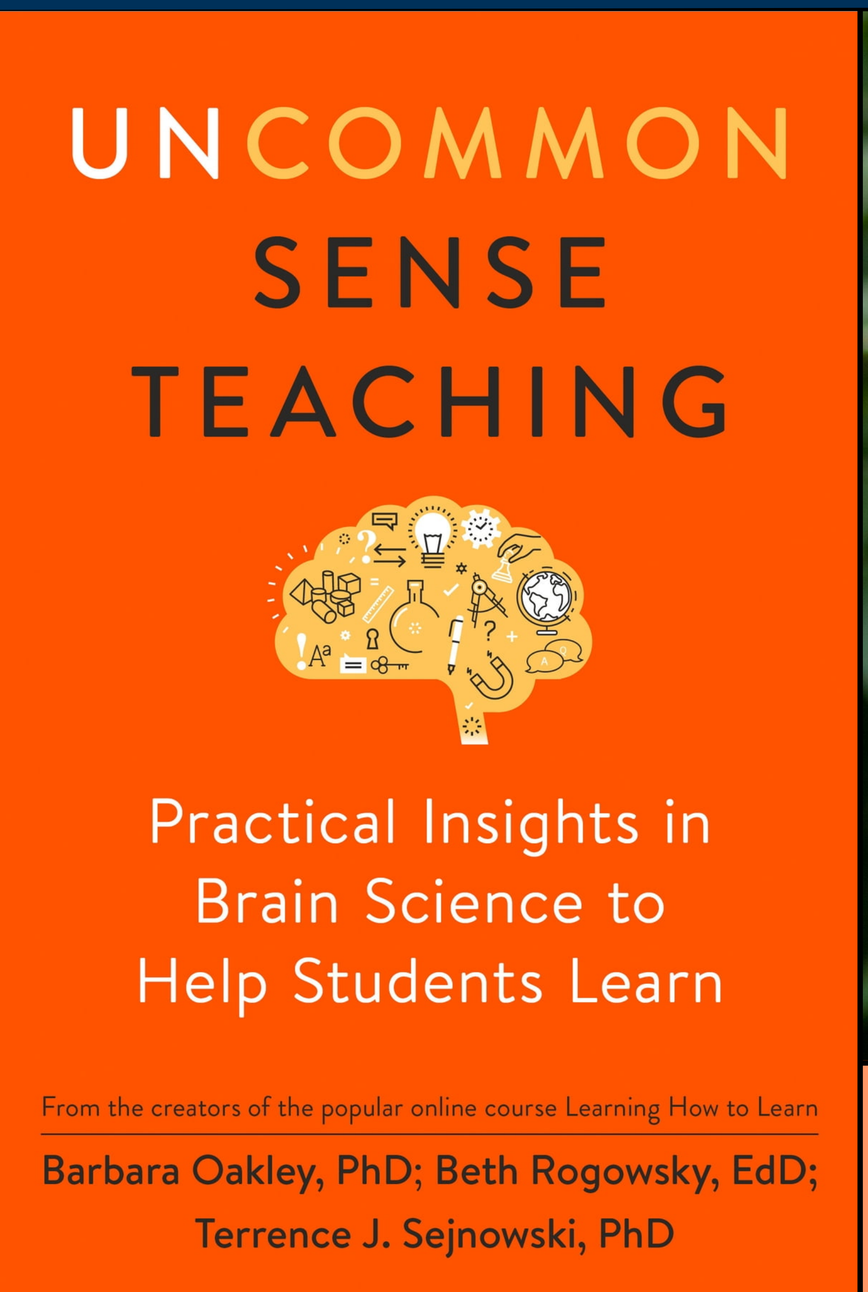
Great Expectations: Returning to Campus Ready Yet Changed

In this workshop, participants connected with teaching strategies designed to help them launch a semester of re-orientation--one that makes the most of where they have been and where they would soon like to be. Participants had the chance to refresh their class meetings with active, intrinsically motivating, sticky, and culturally affirming practices--and set their students up for meaningful learning throughout the term.

Facilitated by: Dr. Rebecca Pope-Ruark, Faculty Teaching and Learning Specialist, Center for Teaching and Learning and Dr. Joyce Weinsheimer, Director, Center for Teaching and Learning

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives



Keynote Speaker: Dr. Barbara Oakley

Events

Celebrating Teaching Day

This two-day event, designed to honor teaching excellence at Georgia Tech, took place on March 18th and April 7th. On the first day, Dr. Barbara Oakley, distinguished professor of engineering at Oakland University, joined Tech faculty virtually as the keynote speaker. Dr. Oakley's experiences in higher education includes teaching over four million students in Coursera's "Learning How to Learn" course. She is the author of two books, A Mind for Numbers and Uncommon Sense Teaching: Practical Insights in Brain Science to Help Students Learn. In her keynote address, Dr. Oakley highlighted connections between how the brain works to retain and retrieve information, then shared strategies that both teachers and students can use to promote effective learning.

The second day of the event featured a poster session. Presenters highlighted a total of 28 educational initiatives recently carried out by CTL's faculty fellows, faculty learning communities, Brittain Fellows, and other members of the broader Georgia Tech community.

Thank-a-Teacher recipients were honored at both the keynote and the poster sessions. Poster displays of notes and the verbal reading of notes exemplified the positive impact that Georgia Tech educators are having on their students' learning experiences.

155 members of the Georgia Tech community participated in Celebrating Teaching Day.

100% of attendees gave the event an overall rating of very good or excellent and an average rating of 4. / 5.0 with 5 being excellent.

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Partnership Events

Inclusive Teaching Symposium

The Center for Teaching and Learning (CTL) and Serve-Learn-Sustain (SLS) collaborated to produce the Liam's Legacy Inclusive Teaching Symposium in Fall 2022. Situated within the landscape of diversity, equity, and inclusion work at Georgia Tech, the symposium aimed to equip teachers with strategies and resources to create belonging and inclusivity in their classrooms—regardless of size, disciplinary focus, and mode. Many at Georgia Tech contributed to planning and presenting the event, which included opening remarks from Provost Steven McLaughlin and five sessions:

Best Practices Panel: Resources and Strategies for Creating Inclusive Classrooms

- **Tegra Myanna**, Director, LGBTQIA Resource Center
- **Carol Colatrella**, Professor, Literature, Media and Communication and Director, Center for the Study of Women, Science, and Technology
- **Manu Platt**, Professor, School of Biomedical Engineering
- **Delay Hernandez**, Associate VP, Institute Diversity, Equity, and Inclusion
- **Carol Subiño Sullivan**, Center for Teaching and Learning

Student Roundtable

Facilitated by Steven Girardot, Vice Provost for Undergraduate Education, Georgia Tech students offered perspectives on what constitutes an inclusive classroom and offered specific guidance on cultivating equity and belonging.

- **Josslyn Lally**, Biomedical Engineering 2021
- **Quynh Pham**, College of Architecture Alumna 2021
- **Jonathan Yun**, Aerospace Engineering 2023
- **Camryn Burke**, Ivan Allen College 2022

Hesitancy and Inclusive Teaching

GT faculty discussed navigating fears about embracing diversity, equity and justice-centered approaches to teaching.

- **Jennifer Leavey**, Assistant Dean for Faculty Mentoring, CoS
- **Kate Williams**, Assistant Director for TA Development and Future Faculty Initiatives, CTL
- **Laura Bier**, Professor, History and Sociology, IAC

The Caring Professor: Managing Microagressions and Responding to Classroom Incidents

- **Tia Jackson-Truitt,** Equity, Inclusion, and Community-Engaged Teaching
- **Sagdrina Jalal**, Director of Programs and Partnerships, Center for Civic Innovation
- **Jennifer Singh**, Professor, School of History and Sociology
- **Ruthie You**, Service learning and Partnerships Specialist, Center for Serve-Learn-Sustain

The Symposium concluded with remarks from Pearl Alexander, Executive Director of Diversity, Equity and Engagement. Seven faculty members were awarded Liam's Legacy mini grants to work on an inclusive teaching-related project.

Inclusive STEM Teaching Project: Teaching Fellows and Institute

The Inclusive STEM Teaching Fellows program is designed to advance the awareness, self-efficacy, and ability of STEM instructors to cultivate inclusive learning environments for all their students and to develop themselves as reflective, inclusive practitioners. The institute covered the following themes designed to help instructors construct classroom environments that support the complexities that contribute to student persistence: social identity and its impact on learning; power, positionality, and privilege; inclusive course design; interruption of oppression and microaggressions; and evidence-based teaching.

Format: During 2021-22, three cohorts of faculty participated in this program. In Summer 2021 and Fall 2022, cohorts of teaching fellows participated in weekly learning communities as a companion to completing the online course. In Spring 2022, participants engaged in the self-paced Inclusive STEM Teaching Project online course and culminated the experience with an in-person institute designed for deep engagement around diversity, equity, and inclusion in learning and teaching, instructor identity and authority, student identities and experiences, creating inclusive courses, and fostering an inclusive classroom climate. The institute was held 9am-2pm on May 11 & 12, 2022 at the Georgia Tech Global Learning Center. Selected participants in the Spring cohort received $1000 in discretionary funds to be used for professional activities.

This program was a partnership between the Georgia Tech College of Sciences, College of Computing, College of Engineering, the Center for Teaching and Learning, and Institute Diversity, Equity, and Inclusion. It was sponsored by the National Science Foundation Inclusive STEM Teaching Project and the Howard Hughes Medical Institute Inclusive Excellence 3 Learning Community.

A total of 33 faculty participated in these cohorts over the three semesters. For the Spring Inclusive STEM Teaching Institute, 93% of participants gave the event an overall rating of very good or excellent and an average rating of 8.86/10 with 10 being excellent.

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Partner Events and Initiatives

Serve-Learn-Sustain (Georgia Tech)

Teaching with the United Nations Sustainable Development Goals (SDGs)

This partnership initiative also included the Center for Excellence in Teaching and Learning (Kennesaw State University) and the Office of Sustainability (University of Georgia).

The UN SDGs are a set of 17 broad and interconnected goals that address the global challenges humanity faces. They are comprehensive and visionary, including ending poverty and hunger, reducing inequality, and strengthening the health of human communities and ecosystems globally. Incorporating the SDGs into our teaching can help students make connections between their disciplinary knowledge and skills and the world's most pressing challenges. These "real world" connections also often make course content more relevant to students, enhancing motivation.

During the 2021-22 academic year, the Center for Teaching and Learning partnered with Rebecca Watts Hull from Serve-Learn-Sustain and partners from Kennesaw State University and the University of Georgia to develop and facilitate three multi-institutional initiatives to support faculty who wished to integrate the UN SDGs into their teaching:

- Fall 2021: Faculty Learning Community on Teaching with the UN Sustainable Development Goals
- Spring 2022: Sustainable Development Teaching Fellows
- Summer 2022: Community of Practice on Teaching with the UN SDGs

Faculty Learning Community on Teaching with the UN Sustainable Development Goals

Facilitators for the learning community included Carol Subiño Sullivan (CTL), Rebecca Watts Hull (SLS), and Mandy McGrew (CETL-KSU).

In this FLC, participating faculty worked collaboratively to explore questions such as:

- How can teaching with the SDGs enhance student motivation and learning?
- What can we learn from research and sustainability education literature about how to effectively integrate the SDGs with "traditional" course concepts and skills?
- How do we get started? What are the advantages of stand-alone units of instruction versus widespread integration of the SDGs through a course?
- What resources and models are available to guide us in this work?

Participants committed to biweekly meetings in Fall 2021 and developed a strategy or project that allowed them to integrate the UN SDGs into their own courses.

Work conducted by this group resulted in a presentation for the University System of Georgia's Teaching and Learning Conference in March 2022 entitled, "From HIPs to SDGs: Why the UN Sustainable Development Goals should be in your course and how to get started." The team presented a poster based on this conference presentation at Celebrating Teaching Day.

Members of the FLC on Teaching with the UN SDGs included:

- **Sanjeev Adhikari,** Construction Management, *Assistant Professor*, Kennesaw State University
- **Michael Best**, International Affairs, *Professor*, Georgia Tech
- **Luis Fernández-Carril**, Humanities and Education, *Professor*, Tecnológico de Monterrey
- **Cameron Greensmith**, Social Work and Human Services, *Associate Professor*, Kennesaw State University
- **Richard Halstead-Nussloch**, Information Technology, *Professor*, Kennesaw State University
- **Tiffini Eugene Jones**, Environmental Science, *Assistant Professor*, Kennesaw State University
- **Ali Keyvanfar**, Construction Management, *Assistant Professor*, Kennesaw State University
- **Jennifer Leavey**, *Principal Academic Professional of Biological Sciences and Assistant Dean for Faculty Mentoring in the College of Sciences*, Georgia Tech
- **Raghu Pucha**, Mechanical Engineering, *Principal Lecturer*, Georgia Tech
- **Matthew Realff**, Chemical and Biomolecular Engineering, *Professor*, Georgia Tech
- **Andrew Schulz**, *Postdoctoral Scholar,* Max Plank Institute for Intelligent Systems (Ph.D. in Mechanical Engineering from Georgia Tech 2022)
- **Lara Smith-Sitton**, *Assistant Professor of English and Director of Community Engagement*, Kennesaw State University

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Sustainable Development Teaching Fellows Program

The 2022 Sustainable Development Teaching Fellows Program, facilitated by Carol Subiño Sullivan (CTL), Rebecca Watts Hull (SLS), and Mandy McGrew (CETL-KSU), advanced the work of the participants to incorporate the Sustainable Development Goals (SDGs) and sustainability principles and competencies into their teaching.

Participants also advanced their professional development as leaders and mentors for other faculty in this arena. In addition, the Fellows contributed models and other resources that were shared with faculty just beginning their exploration of SDG course integration. In order to accomplish these goals, fellows attended a series of full group meetings and worked together to craft recommendations for next steps for instructor professional development in teaching that incorporates sustainability and the SDGs at their institutions and across institutions through the RCE Greater Atlanta. In addition, each participant completed an independent project that was added to a cross-institutional "library" of SDG teaching resources in higher education.

Sustainable Development Fellows included:

- **Tiffini Eugene Jones**, Environmental Science, *Assistant Professor*, Kennesaw State University
- **Anne Fuller**, Scheller College of Business, Strategy and Innovation Area, *Senior Lecturer*, Georgia Tech
- **Lionel Gall**, Modern Languages/French, *Senior Lecturer*, Georgia Tech
- **Jairo Garcia**, City and Regional Planning, *Adjunct Faculty*, Georgia Tech
- **Richard Halstead-Nussloch**, Information Technology, *Professor*, Kennesaw State University
- **Britta Kallin**, Modern Languages/German, *Associate Professor*, Georgia Tech
- **Steven Kangisser**, Building Construction, *Ph.D. Student*, Georgia Tech
- **Kyoko Masuda**, Modern Languages/Japanese, *Associate Professor*, Georgia Tech
- **Raghu Pucha**, Mechanical Engineering, *Principal Lecturer*, Georgia Tech
- **Carsten Sievers**, Chemical and Biomolecular Engineering, *Associate Professor*, Georgia Tech
- **Norah Sinclair**, Center for Inclusive Design and Innovation, *Staff*, Georgia Tech
- **Lara Smith-Sitton**, English, *Associate Professor*, Kennesaw State University
- **Teresa Snow**, Biological Sciences, Senior *Academic Professional*, Georgia Tech

Community of Practice on Teaching with the UN SDGs

This is a community of educators from multiple institutions in the greater Atlanta area. Many of the participants are working on this topic in their own institutions and this Community of Practice (CoP) will help participants expand their work by sharing resources, providing networking opportunities and more chances for learning. The CoP is being established by educational developers and sustainability professionals from Georgia Tech, Kennesaw State University and the University of Georgia and we hope to expand to include educators from other institutions.

The CoP held its initial meeting on May 12, 2022 and has 4 additional meetings planned for the 2022-23 academic year.

Participants in the CoP included:

- **Melissa Aberle-Grasse**, Georgia Tech
- **Michael Black**, Georgia State University
- **Stacey Blersch**, Columbus State University
- **Stephanie Boulard**, Georgia Tech
- **Tyra Byers**, University of Georgia
- **Kadian M. Callahan**, Kennesaw State University
- **Kevin Charles Caravati**, Georgia Tech
- **Denisse Del Monte**, 100Devs
- **Lionel Gall**, Georgia Tech
- **Beth Giddens**, Kennesaw State University
- **Richard Halstead-Nussloch**, Kennesaw State University
- **Michelle Head**, Kennesaw State University
- **Cecilia Herles**, University of Georgia
- **Allison Howard**, University of Georgia
- **Britta Kallin**, Georgia Tech

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Participants in the Community of Practice continued:

- **Steven Kangisser**, Georgia Tech
- **Veronica Kulon**, Kennesaw State University
- **Michael Marshall**, University of Georgia
- **Kyoko Masuda**, Georgia Tech
- **Mandy McGrew,** Kennesaw State University
- **Kim Rich Meister**, University of Georgia
- **Akanksha Menon**, Georgia Tech
- **Dori Pap**, Georgia Tech
- **Raghu Pucha**, Georgia Tech
- **Becky Rafter**, Georgia Tech
- **Norah Sinclair**, eorgia Tech
- **Teresa Snow**, Georgia Tech
- **Brigitte Stepanov**, Georgia Tech
- **Bruce Stiftel**, Georgia Tech
- **Georgia Strange**, University of Georgia
- **Carol Subiño Sullivan**, Georgia Tech
- **Matt Waller**, Kennesaw State University
- **Rebecca Watts Hull**, Georgia Tech
- **Diana Wrenn Rapp**, Georgia State University
- **Guichun Zong**, Kennesaw State University

Leveraging curricular expertise across departments: CTL (Center for Teaching and Learning) and Sustainability Center collaboration to advance Education for Sustainability (ESD) across the curriculum

In March 2022, Carol Subiño Sullivan (CTL), Rebecca Watts Hull (SLS), and Ruthie Yow (SLS) presented a session about their respective centers' collaborations at the Washington and Oregon Higher Education Sustainability Conference. In the interactive workshop, the presenters discussed the value of CTL unit/sustainability unit collaboration and introduced attendees to the resources and methods used for faculty support by engaging with these materials themselves. In the final portion of the session, the facilitators led a discussion about CTL/sustainability collaboration and brainstorm additional college/university units to consider for further cross-departmental collaboration in ESD across-the-curriculum.

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Partner Events and Initiatives

College of Sciences

Inclusive STEM Teaching Project

The Inclusive STEM Teaching Project is an online, asynchronous course developed through the NSF Improving Undergraduate STEM Education program. It aims to advance the ability and awareness of STEM faculty, postdocs, graduate students, and staff to cultivate inclusive learning environments for all of their students.

In the summer of 2021, Kate Williams and Carol Subiño Sullivan from CTL and Jennifer Leavey and Colin Harrison from the College of Sciences participated in the facilitator training program for the Inclusive STEM Teaching Project. This group facilitated faculty learning communities in the Summer and Fall of 2021 comprised of Georgia Tech faculty who were completing the Inclusive STEM Teaching Project online, asynchronous course.

Participants in the Summer and Fall 2021 cohorts included:

- **Aakanksha Agra**, Biological Sciences, *Academic Professional*, Georgia State University
- **Emily Alicea-Munoz**, Physics, *Academic Professional*, Georgia Tech
- **Mark Graves**, Biological Sciences, *Assistant Professor,* Georgia Tech
- **Therese Poole**, Biological Sciences, *Senior Lecturer*, Georgia State University
- **Carrie Shepler**, *Principal Academic Professional* of Chemistry and Biochemistry and *Assistant Dean* for Academic Effectiveness of the College of Sciences
- **Christopher Stanzione**, Psychology, *Senior Academic Professional*, Georgia Tech
- **Sara Schley**, Biomedical Engineering, *Principal Academic Professional*, Georgia Tech
- **Kerry Wallaert**, Materials Science and Engineering, *Staff,* Georgia Tech
- **Alonzo Whyte**, Neuroscience, *Academic Professional*, Georgia Tech

In Spring 2022, the Center for Teaching and Learning and the College of Sciences took this initiative to the next level by creating the Inclusive STEM Teaching Fellows. The Fellows participated in a two-day symposium on May 11-12, 2022, and completed the Inclusive STEM Teaching Project Online Course and weekly check-ins through Canvas. The Fellows received a $1000 professional development stipend.

The Inclusive STEM Teaching Fellows program was designed to advance the awareness, self-efficacy, and ability of STEM instructors to cultivate inclusive learning environments for all their students and to develop themselves as reflective, inclusive practitioners. The institute covered the following themes designed to help instructors construct classroom environments that support the complexities that contribute to student persistence: social identity and its impact on learning; power, positionality, and privilege; inclusive course design; interruption of oppression and microaggressions; and evidence-based teaching.

Additional partners for the Fellows program included: the Georgia Tech College of Sciences, College of Computing, College of Engineering, the Center for Teaching and Learning, and Institute Diversity, Equity, and Inclusion. This program was sponsored by the National Science Foundation Inclusive STEM Teaching Project and the Howard Hughes Medical Institute Inclusive Excellence 3 Learning Community.

Inclusive STEM Teaching Fellows included:

- **Meghan Babcock**, Psychology, *Academic Professional*
- **Carrie Bruce**, Interactive Computing, *Principal Research Scientist*
- **Michael Chapman**, Physics, *Professor*
- **Elizabeth Cherry**, Computational Science and Engineering, *Associate Professor*
- **Jennifer Curtis**, Physics, *Associate Professor*
- **Chaitanya Deo**, Mechanical Engineering, *Professor*
- **Michael Evans**, Chemistry and Biochemistry, Senior Academic Professional
- **Flavio Fenton**, Physics, *Professor*
- **Stefan France**, Chemistry and Biochemistry, *Associate Professor*
- **Edwin Greco**, Physics, *Senior Academic Professional*
- **Kelly Griendling**, Aerospace Engineering, *Lecturer*
- **William Howitz**, Chemistry and Biochemistry, *Academic Professional*
- **Tuba Ketenci**, Industrial and Systems Engineering, *Academic Professional*
- **Joshua Kretchmer**, Chemistry and Biochemistry, *Assistant Professor*
- **Raghuram Pucha**, Mechanical Engineering, *Principal Lecturer*
- **Amit Reddi**, Chemistry and Biochemistry, *Associate Professor*
- **Joseph Sadighi**, Chemistry and Biochemistry, *Associate Professor*
- **Dwanleen Shen**, Chemistry and Biochemistry, *Research Scientist II*
- **Chrissy Spencer**, Biological Sciences, *Senior Academic Professional*
- **Shuman Xia**, Mechanical Engineering, *Associate Professor*
- **Peter Yunker**, Physics, *Assistant Professor*

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Partner Events and Initiatives

Tutoring and Academic Support

Learning Assistant Program

During the 2021-22 academic year, the Center for Teaching and Learning continued our partnership with Stephanie Reikes from TAS to facilitate a cohort-based approach to supporting faculty in integrating Learning Assistants (LAs) into their courses. The faculty cohort included faculty who had been assigned a LA for their classes. The faculty met regularly to learn about best practices on how to best leverage LAs to support their students' learning. LAs are undergraduate students who facilitate small group collaboration inside the classroom by working alongside faculty during breakout activities. Learning assistants promote 1-to-1 and small group discussion to boost comprehension and problem-solving skills during class. LAs can help facilitate active learning and collaborative instruction in lecture, recitation, studio, and/or lab.

Tutoring and Academic Support (TAS) provided pedagogical training for LAs to assist them in promoting student learning outcomes. One of the biggest advantages of having an LA in the classroom is it provides another point of contact for the student. Learning Assistants decrease the student-to-teacher ratio, which can be valuable for larger lecture courses.

The Learning Assistant Program faculty cohort included:

- **Antonia Antoniou**, Mechanical Engineering, *Associate Professor*
- **Stephen Chininis**, Industrial Design, *Professor of the Practice*
- **Michael Evans**, Chemistry and Biochemistry, *Senior Academic Professional*
- **M.G. Finn**, Chemistry and Biochemistry, *Professor and Chair*
- **Sara Schley**, Biomedical Engineering, *Principal Academic Professional*, Georgia Tech
- **Jacqueline Garner**, Scheller College of Business, *Senior Lecturer*
- **Joshua Kretchmer**, Chemistry and Biochemistry, *Assistant Professor*
- **Lisha Li**, Library, *Librarian IV*
- **Wayne Li**, Industrial Design, *Professor of the Practice*
- **David Lynn**, Industrial Design, *Lecturer*
- **Lisa Marks**, Industrial Design, *Assistant Professor*
- **Noah Posner**, Center for Geographic Information Systems, *Research Scientist II*
- **Tatiana Rudchenko**, Scheller College of Business, *Senior Lecturer*
- **Himani Sharma**, Materials Science and Engineering, *Lecturer*
- **Jerry Seitzman**, Aerospace Engineering, *Professor*
- **Kevin Shankwiler**, Industrial Design, *Senior Lecturer*
- **Carrie Shepler**, Chemistry and Biochemistry, *Principal Academic Professional*
- **Kimberly Snyder**, Industrial Design, *Lecturer*
- **Chaowen Ting**, Music, *Assistant Professor*
- **David Torello**, Mechanical Engineering, *Senior Academic Professional*
- **Loren Williams**, Chemistry and Biochemistry, *Professor*
- **Turab Zaidi**, Aerospace Engineering, *Lecturer*

College of Design

Teacher of the Year Award

This is a new student choice award for instructors in the College of Design organized by the Provost Teaching and Learning Fellows for the College of Design (Pardis Pishdad-Bozorgi and Charles Rudolph) and the Center for Teaching and Learning (Carol Subiño Sullivan) in consultation with a committee of Design students. It recognizes educators in the College of Design who made a positive impact on their academic experiences, especially during the hybrid mode of teaching during the pandemic.

Awards Process

A committee of students from all 5 schools in the College of Design created the award criteria and process. The students invited their peers to submit nominations of CoD educators who went above and beyond to show how much they cared about students during the academic year. These professors kept supporting student learning throughout disruptions and made adjustments as necessary.

Eighty-two students representing all 5 schools in the College of Design, nominated 45 educators.

- Dr. Ryan Roark, Ventulett NEXT Generation Visiting Fellow, was selected Teacher of the Year in the College of Design based on the student reviewers' assessment. Dr. Roark was presented this award at the College of Design Spring Celebration in April 2022.

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Partner Events and Initiatives

Law, Science, and Technology Program, School of Public Policy

In the Summer of 2021, Dr. Carol Subiño-Sullivan, CTL's Assistant Director for Faculty Teaching and Learning Initiatives, was invited by the Law, Science, and Technology Program to facilitate a workshop for their faculty retreat on the topic of Inclusive Teaching.

The goals of the workshop were to help participants:

- Leverage their awareness of identity and perspectives on DEI to engage in inclusive teaching.
- Recognize and respond to microaggressions when they occur in the classroom
- Identify opportunities to make their syllabus and course more inclusive.

Master of Biomedical Innovation and Development (MBID), School of Biomedical Engineering

In the Fall of 2021, Dr. Carol Subiño-Sullivan, CTL's Assistant Director for Faculty Teaching and Learning Initiatives, was invited to facilitate a Course Design workshop for faculty of the Master of Biomedical Innovation and Development program in the School of Biomedical Engineering.

The goals of this workshop were to help participants:

- Apply the backwards course design process to course redesign.
- Identify the situational factors and student prior knowledge needed for your course and incorporate these insights into your course design.
- Write effective course learning goals.

Office of Student Integrity

The Center for Teaching and Learning (Carol Subiño Sullivan and Sarah Kegley) partnered with the Office of Student Integrity (Ronald Mazique, Associate Dean of Students) to prepare a workshop on Promoting Academic Integrity at Georgia Tech Shenzhen on August 12, 2021.

The goals of this workshop were to help participants:

- Identify how cultural differences may impact student understanding of academic integrity.
- Apply Georgia Tech policies and procedures around academic integrity.
- Identify campus resources (offices and technology) to support academic integrity.

College of Engineering

The Center of Teaching and Learning partnered with Provost Teaching and Learning Fellows from the College of Engineering to present the panel, "From Rapid Change to Refined Teaching: How the Pandemic Inspired Lasting Teaching Improvements," on March 30, 2022.

The goal of the panel was to reflect on how engineering faculty matured and retained teaching innovations beyond the early pandemic. Questions addressed by the panel included:

- How can we tell which of the changes best facilitate student learning and are worthy of keeping?
- How have these innovations impacted our students' experiences?
- How can we make these changes visible and demonstrate their impact?

The panelists each reflected on changes they had made to their teaching because of the pandemic, described the impacts they observed on student learning, and discussed how they refined these changes and integrated them into their courses permanently. The panelists included:

- **Brian Gunter**, Aerospace Engineering
- **Satish Kumar**, Mechanical Engineering
- **Adam Steinberg**, Aerospace Engineering
- **Linda Wills**, Electrical and Computer Engineering
- **Ying Zhang**, Electrical and Computer Engineering

The cohort presented a poster based on this panel at Celebrating Teaching Day in March 2022.

Office of Faculty Affairs

New Faculty Orientation

The Center for Teaching and Learning partnered with the Office of Faculty Affairs to present workshops for new faculty at the new faculty orientation in August 2021 and at the New Faculty Welcome Event (for new part-time, visiting, temporary and graduate students of record) in August 2021 and January 2022.

At the New Faculty Orientation, Joyce Weinsheimer and David Lawrence presented a workshop on Teaching at Tech, engaging new faculty in conversations about how to teach effectively while promoting academic well-being. Carol Subiño Sullivan and Rebecca Pope-Ruark then engaged new faculty in an activity to familiarize them with policies pertaining to teaching at Georgia Tech.

At the New Faculty Welcome Event, the Joyce Weinsheimer and Rebecca Pope-Ruark engaged faculty in the activity around policies pertaining to teaching at Georgia Tech and shared Thank a Teacher notes to help the new faculty reflect on the qualities of effective teaching.

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Partner Events and Initiatives

Executive Vice President for Research

The Research Faculty Teaching Fellows program is a partnership with the Executive Vice President for Research, the Center for Teaching and Learning, and GTRI. It provides opportunities for research faculty to teach a course in an academic unit. Through this program, students are able to connect their courses with applied research and new opportunities for collaboration between the research units and the academic units are fostered.

Carol Subiño Sullivan (CTL) partnered with Crystal Hanson (Interdisciplinary Research), James Cannady (GTRI), and Wayne Whiteman (Mechanical Engineering) to recruit and select the 2022-23 cohort of Research Faculty Teaching Fellows. The Center for Teaching and Learning also provided teaching support to the 2021-22 cohort of Research Faculty Teaching Fellows through engagement in the Course Design Studio, check in meetings during the semester they taught their course, and by classroom observations and early course feedback.

Office of Faculty Professional Development

Women+ Faculty Burnout Group

The Center for Teaching and Learning and the Office of Faculty Professional Development offered a bi-monthly support and conversation group to address caregiving challenges, burnout, and overwhelming factors facing women+ faculty during the pandemic. This twice monthly conversation group explored:

- support for women+ faculty, safe space to discuss challenges and solutions
- opportunities to connect with other women+ faculty
- strategies and resources for moving through and beyond burnout, overwhelm, and other COVID-19-related challenges.

CTL Programming

Teaching and Technology Studio: Designing Effective Group Projects

Rebecca Pope-Ruark from the Center for Teaching and Learning developed and facilitated this virtual short course in July 2021. The Studio was a unique combination of workshop, asynchronous work time, and opportunities to engage peers. One primary goal for the Studio was to give participants the tools and time to think through a group project and the way collaboration can be introduced to help students succeed. Participants were invited to imagine a new assignment or rework an existing assignment, while exploring these questions:

- What distinguishes a collaborative team and a cooperative group, and which is most appropriate for your course? How do we design projects aligned with this choice?
- What opportunities can we leverage in team-project design to support student learning in the course material as well as effective collaboration/teamwork, project management, and conflict management skills?
- What strategies can you use to effectively assess student/team performance, and whose voices should be included in that assessment?

And by the end of the Studio program, participants were able to:

- Weigh the benefits and drawbacks of using team projects in a course
- Create or revise an assignment/assignment description for a team project aligned with learning goals of the course
- Outline an assessment plan for the project with formative and summative opportunities
- Develop a plan to set students up for successful collaboration and to address common problems associate with group dynamics

Course Design Studio

The Center for Teaching and Learning offers a professional development experience in course design. CTL offered this 12-hour short course in two formats, in-person and virtual, running parallel to each other. The in-person studio met on May 16, 18, 23 and 25, 2022. The virtual studio met on May 17, 19, 24, and 26, 2022.

In the virtual short course, participants accessed asynchronous modules via Canvas that provided frameworks, models, and structured exercises designed to help them build course elements. These elements included learning goals, assessments, and learning activities. Participants could select to focus on the fundamentals of backwards course design, integrating the UNSDGs, and/or making their courses more equitable and inclusive. Additionally, participants engaged in synchronous collaborative sessions via Zoom and shared their course element designs with colleagues and CTL consultants. Participants expressed appreciation for a dynamic mix of both synchronous and asynchronous work embedded in the Course Design Studio.

The in-person experience focused on the fundamentals of backwards course design, guiding participants through a process of developing their course learning objectives, identifying component skills, designing their assessment plan, identifying appropriate learning activities, and finalizing the overall structure and schedule of the course. As they thought about each course element, participants were encouraged to think about inclusive teaching and supporting academic well-being. The in-person studio seamlessly blended individual work, group discussion and peer feedback. In-person participants also had access to the same Canvas materials as virtual participants, allowing them to delve into particular interests at their own pace.

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Partner Events and Initiatives

Reflective Teaching Badge

During FY2021-2022 fiscal year, CTL awarded 78 badges to 52 faculty as part of the Reflective Teaching Badge program. This program encourages faculty to explore new teaching ideas and experiment with a teaching innovation in the classroom while having support from other faculty members. The intent of the program is to foster a community of instructors who will support each other in trying out innovative teaching ideas and documenting their effectiveness.

The Reflective Teaching Badge program provides a forum where faculty may reflect on how they are implementing innovative approaches to teaching into their practices. Engaging in this type of reflection increases the impact of attending professional development experiences on teaching and learning because faculty get the opportunity to make a plan on how to apply the insights.

In addition, participating in the program provides faculty an opportunity to get started on documenting the ways they are making their teaching more effective. As Georgia Tech expands its emphasis on teaching effectiveness, having this documentation will be useful.

CTL awarded 78 reflective teaching badges to 52 faculty members.

CTL Programming

CTL Newsletter

In 2021-22, the Center for Teaching and Learning continued producing the CTL newsletter, which shares information about teaching with over 1600 Georgia Tech faculty, including quick teaching tips, opportunities to connect with colleagues at workshops and events on campus, and external professional development opportunities. We produced 31 newsletters, which were opened 21,499 times (each newsletter averaged 693.5 opens) and garnered 888 clicks (ranging from 92-8 for any single newsletter).

CTL Programming

Faculty Teaching & Learning Workshops

Reflective Teaching Conversation

On October 29, 2021, Carol Subiño Sullivan engaged a group of faculty in a reflective conversation around the theme of inclusive teaching. Participants considered the following questions:

- How do you promote belonging in your classes? How do you bring diverse perspectives into your classes?
- How do you provide students with inclusive and equitable feedback about their progress and performance in your class?
- How do you address microagressions and incidents of hate in your classes?

Tech students bring their whole selves into their learning experiences including their social identities, academic backgrounds and life experiences. Just like in society in general, students may experience more or less privilege and/or disadvantage as a result of their positions within this diversity. As instructors, we can intentionally use inclusive teaching strategies to more effectively engage all students in meaningful and equitable learning experiences.

Sharing strategies, challenges, and lessons learned with colleagues is a great way to grow as an educator and to support the growth of our colleagues. Following the conversation, participants were invited to submit a short written reflection in order to earn a token towards the Reflective Teaching Badge.

Flourishing as a Teacher, Now and In the Future

On December 14, 2021, Rebecca Pope-Ruark offered this workshop to help faculty reflect on the year and consider their well-being and how it impacts their teaching. Flourishing, a measure of overall well-being that focuses on cultivating purpose, personal growth, resilience, and values-alignment, is one way to shape that reflection and look ahead to the future. During this workshop, participants engaged in individual and group reflection activities using the PERMA model of well-being and the Harvard Flourishing Measure to process a challenging year and gain clarity on how to move forward in a way that promotes well-being for both faculty and students. Participants began to develop a plan for flourishing as a teacher in the coming year.

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Ongoing Groups

Teaching Fellows

Grading Reimagined: Rethinking Assessment with Emerging Grading Techniques

On February 17 Kate Williams (CTL) and Will Howitz (Chemistry and Biochemistry) presented a workshop that invited faculty to consider alternative approaches to grading.

What if faculty could develop a grading structure that increases students' intrinsic motivation for learning and encourages them to use feedback to improve their learning while reducing their focus on points? At this interactive session, participants identified common challenges inherent in traditional grading. Attendees explored alternatives to traditional grading that could alleviate typical grading challenges while reinforcing student learning. Participants created an implementation plan that allowed them to begin to incorporate elements of an emerging grading system that fits their specific goals and situation.

Workshop goals:

1. Identify pain points in traditional grading systems and consider ways alternative grading approaches can better support student learning
2. Compare the impact of alternative grading and traditional grading on student learning and instructor experience
3. Identify an opportunity to get started with specifications grading in your own teaching

Class of 1969 Teaching Fellows

The Class of 1969 Teaching Fellows is an interdisciplinary group of early career faculty who meet regularly for pedagogically focused support and professional development. The Fellows explore evidence-based best practices and new and innovative teaching methods. In addition, the Fellows develop and pilot initiatives that can be used for the education component of major award applications.

The Class of 1969 Teaching Fellows also engaged in a variety of teaching projects and initiatives, using funds from the Class of 1969 Endowment to support their work:

- Hyoun-A Joo worked on a project to assess the intercultural communicative competence that her students developed in her course.
- Leila Alfatoony investigated the benefit, value and outcome of participatory design for undergraduate students.
- Leila Glass invested time in building a socio-intellectual community in her class, creating a strong foundation for students to take risks necessary for learning.
- Christopher Wiese developed a project to enhance the quality of his flipped classroom through creating more engaging out of class activities and improving the recording quality of the videos he produces.
- Vidya Muthukumar worked on a project to create original datasets for students to analyze in her course on online decision-making in machine learning.
- Abigail Vaughn examined whether active learning through board games increases students' mastery of the course content by comparing student performance on quizzes before and after the game and on the quality of content retention demonstrated in the final exam.
- German Vergara redesigned a major assessment in order to improve the depth of student understanding of and their interest in Latin American history.
- Debankur Mukherjee created new projects for his graduate course on Stochastic processes (II) in order to help his students connect the technical aspects to real world problems.

Class of 1969 Teaching Fellows 2021 - 2022:

- **Leila Aflatoony**, Industrial Design
- **Leila Glass**, Modern Languages
- **Hyoun-A Joo**, Modern Languages
- **Debankur Mukherjee**, Industrial and Systems Engineering
- **Vidya Muthukumar**, Electrical and Computer Engineering
- **Ashwin Pananjady**, Industrial and Systems Engineering
- **Abigail Vaughn**, International Affairs
- **German Vergara**, History and Sociology
- **Christopher Wiese**, Psychology

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Provost Teaching and Learning Fellows

The vision for the Provost Teaching and Learning Fellows (PTLF) program is to connect the expertise of evidence-based teaching and learning professionals in the Center for Teaching and Learning with the expertise of disciplinary faculty in each college/school. The goal of this hub-and-spoke model is to strengthen teaching and learning in the disciplines through an embedded system of on-going instructional support and special initiatives.

Each member of the 2020-2022 cohort of Provost Teaching and Learning Fellows becomes member of a Faculty Learning Community (FLC). The goal of each FLC was to study, understand, and contribute to an important issue related to teaching and learning at Georgia Tech. Each FLC worked together throughout the year to develop knowledge, materials, and activities to address one of the following Institute-defined strategic plan priorities:

- Promotion of student academic well-being and supportive classroom learning environments.
- Support for faculty in becoming anti-racist educators.
- Professional development for faculty who want to teach “blended” courses that incorporate best practices for both face-to-face and online teaching.
- Promotion of faculty pedagogical success in fully online courses and recommendations for appropriately assessing online teaching.

Kirk Bowman, International Affairs

I teach a course on soccer & global politics each year and include videos, readings, and discussions on identity and implicit bias. Students can easily see how we subconsciously categorize people by gender, country of origen, sexuality, and other subconscious or conscious patterns. This helps us understand that we all suffer from cognitive implicit bias.

Provost Teaching and Learning Fellows 2021-22

- **Laura Bier**, History and Sociology, *Associate Professor*
- **Kirk Bowman**, International Affairs, *Professor*
- **Polo Chau**, Computational Science & Engineering, *Associate Professor*
- **Karie Davis-Nozemack**, Scheller College of Business, *Associate Professor*
- **Brian Gunter**, Aerospace Engineering, *Associate Professor*
- **Satish Kumar**, Mechanical Engineering, *Professor*
- **Julia Melkers**, Public Policy, *Professor*
- **Pardis Pishdad-Bozorgi**, Building Construction, *Associate Professor*
- **Charles Rudolph**, Architecture, *Associate Professor*
- **Jake Soper**, Chemistry and Biochemistry, *Associate Professor*
- **Adam Steinberg**, Aerospace Engineering, *Associate Professor*
- **Ignacio Taboada**, Physics, *Professor*
- **Linda Wills**, Electrical and Computer Engineering, *Associate Professor*
- **Lizhen Xu**, Information Technology Management, *Associate Professor*
- **Josephine Yu**, Mathematics, *Associate Professor*
- **Ying Zhang,** Electrical and Computer Engineering, *Professor*

Hesburgh Award Teaching Fellows

The Hesburgh Award Teaching Fellows brings together mid-career and senior faculty who have demonstrated strength in the classroom and are interested in working on initiatives that further enhance student learning. This is an “invitation” program that honors individuals who are already successful in their own careers and who have the potential of providing leadership in teaching and learning to their colleagues as well.

The Hesburgh Award Scholars met weekly in the Fall. Over the course of the semester, they read excerpts from and discussed Susan Blum’s edited collection, Ungrading: Why Rating Students Undermines Learning (and What to Do Instead) (WVU Press, 2020). They also spent time discussing student mental health and well-being in the classroom as it connects to learning, stress, grading, etc.

Several of the Hesburghs presented posters at Celebrating Teaching Day based on work they developed following the cohort meetings:

- Raghu Pucha focused on the role of social and cultural context in freshman engineering design projects.
- Pamela Pollet presented an overview and comparison of strategies used for small enrollment (<50) and large enrollment (>200) lecture courses
- Mike Evans developed a new course design of CHEM 1315 aimed at allowing students to contribute to course content and assessment will be described.

The 2021-22 Hesburgh Award Teaching Fellows included:

- **Amy D'Unger**, History and Sociology
- **Mike Evans**, Chemistry and Biochemistry
- **Gabe Kwong**, Biomedical Engineering
- **Kamran Paynabar**, Industrial and Systems Engineering
- **Pamela Pollet**, Chemistry and Biochemistry
- **Raghu Pucha**, Mechanical Engineering

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Ongoing Groups

Chancellor's Learning Scholars

In 2018, the University System of Georgia (USG) launched an initiative across its 26 campuses in an effort to foster pedagogical leadership, develop collegiality among faculty, and create course enrichment products for faculty to share. In 2021 - 2022, the final year of this USG program, three Chancellor's Learning Scholars (CLS) led a Faculty Learning Community on a special topic. The 2021 - 2022 Chancellor's Learning Scholars included Ellen Yi Chen, Pamela Pollet, and Mary Lynn Realff.

Pamela Pollet
Chemistry and Biochemistry
Senior Academic Professional

Topic: Blended Course Design

Members:

- Linda Green, Biological Sciences
- Peter Hesketh, Mechanical Engineering
- Himani Sharma, Materials Science & Engineering
- Christie Stewart, Biological Sciences
- Aselia Urmanbetova, Economics
- Amanda Weiss, Modern Languages

Chancellor's Learning Scholars 2021 - 2022

Ellen Yi Chen
Mechanical Engineering
Assistant Professor

Topic: Remote and Hybrid Laboratory Classes

Members:

- David Smith, Mechanical Engineering
- Himani Sharma, Materials Science & Engineering
- Michael Evans, Chemistry and Biochemistry
- David Torello, Mechanical Engineering
- Emily Weigel, Biological Sciences
- Benjamin Galfond, Chemical & Biomolecular Engineering
- Edwin Greco, Physics
- David MacNair, Mechanical Engineering

Chancellor's Learning Scholars 2021- 2022 (cont.)

Mary Lynn Realff
Materials Science & Engineering
Associate Professor

Topic: Transforming Classroom Engagement to an On-Line Classroom

Members:

- Caroline Dotts, Campus Recreation Center and Well-being
- Lacy Hodges, Academic Engagement Programs
- Stephanie Merrick, College of Design
- Sharon Riehl, Gallup Certified Strengths Coach and Human Resources Expert
- Kelli Rockwell, Campus Recreation Center, Staff Development
- Gerome Stephens, Center for Student Engagement
- Christie Stewart, Applied Physiology
- Kerry Wallaert, Materials Science & Engineering and Education
- Usha Nair-Reichert, Economics

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Faculty Learning Communities

Research Faculty Teaching Fellows

The Research Faculty Teaching Fellows program is a partnership with the Executive Vice President for Research, the Center for Teaching and Learning, and GTRI. It provides opportunities for research faculty to teach a course in an academic unit. Through this program, students are able to connect their courses with applied research and new opportunities for collaboration between the research units and the academic units are fostered.

Carol Subiño Sullivan (CTL) partnered with Crystal Hanson (Interdisciplinary Research), James Cannady (GTRI), and Wayne Whiteman (Mechanical Engineering) to recruit and select the 2022-23 cohort of Research Faculty Teaching Fellows. The Center for Teaching and Learning also provided teaching support to the 2021-22 cohort of Research Faculty Teaching Fellows through engagement in the Course Design Studio, check in meetings during the semester they taught their course, and by classroom observations and early course feedback.

2021-22 Research Faculty Teaching Fellows included:

- **Laura Levy**, Interactive Media Technology Center, *Senior Research Scientist*
- **David Gaul**, Chemistry and Biochemistry, *Senior Research Scientist*
- **Nasrin Hooshmand**, Chemistry and Biochemistry, *Principal Research Scientist*
- **Suneesh Karunakaran**, Parker H. Petit Institute for Bioengineering and Bioscience, *Research Scientist II*
- **Taylor Shapero**, Advanced Concepts Laboratory, *Research Scientist II*
- **Richard Bryan**, Electronic Systems Laboratory, *Senior Research Engineer*
- **James Humpries**, Sensors and Electromagnetic Applications Laboratory, *Research Engineer II*

Academic Well-being

Georgia Tech's new strategic plan calls for the cultivation of well-being both in and out of the classroom where all can grow and learn. To promote this goal and contribute to its realization, this Faculty Learning Community (FLC) created a project on academic well-being that will feature faculty voices from across colleges and disciplines. This FLC developed a new web resource on academic well-being that includes information on 7 areas in which faculty can support student academic well-being along with specific examples contributed by Georgia Tech faculty. View the Academic Well-being web resource.

Members of the Academic Well-being FLC included four Provost Teaching and Learning Fellows:

- **Satish Kumar**, Mechanical Engineering, *Associate Professor*
- **Charles Rudolph**, Architecture, *Associate Professor*
- **Jake Soper**, Chemistry and Biochemistry, *Associate Professor*
- **Linda Wills**, Electrical and Computer Engineering, *Associate Professor*

The FLC was facilitated by CTL's director, Dr. Joyce Weinsheimer and associate director, Dr. David Lawrence.

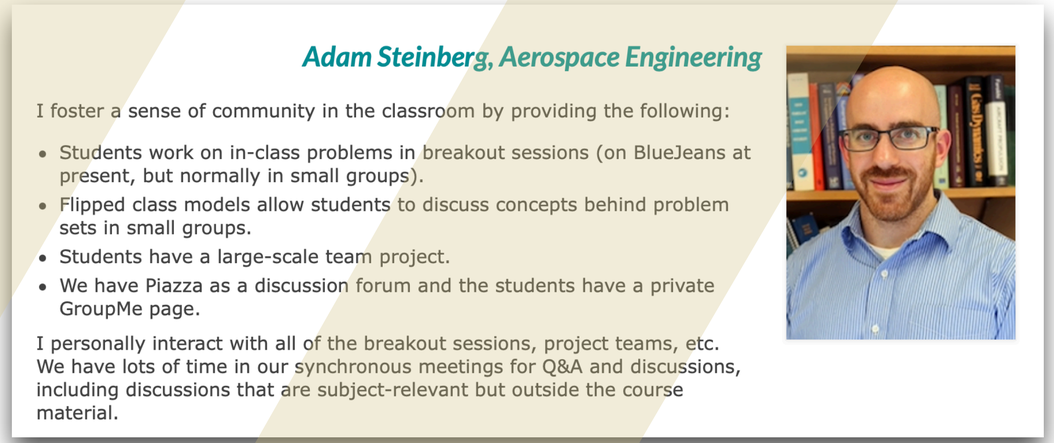
Blended Learning

Faculty members of the Blended Learning FLC explored the components of effective teaching and learning practices in blended learning environments. View this Celebrating Teaching Day poster from FLC member Pardis Pishdad-Bozorgi on tips and tricks for boosting student engagement in hybrid courses.

Members of this FLC included four Provost Teaching and Learning Fellows:

- **Pardis Pishdad-Bozorgi**, Building Construction, *Associate Professor*
- **Adam Steinberg**, Aerospace Engineering, *Associate Professor*
- **Ignacio Taboada**, Physics, *Professor*
- **Ying Zhang**, Electrical and Computer Engineering, *Professor*

The FLC was facilitated by CTL's Dr. Rebecca Pope-Ruark, faculty teaching and learning specialist, and Dr. Chaohua Ou, assistant director for teaching and learning technology.



Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Faculty Learning Communities

Anti-Racist Education

The mission of the Anti-Racist Education FLC was to engage in study and discussion of resources to deepen their understanding of inclusive teaching and anti-racist education, support each other in applying these insights into their respective teaching practices, and develop resources to support their colleagues in becoming anti-racist educators. This FLC hosted a book discussion group open to all faculty at Georgia Tech. View this Celebrating Teaching Day poster to see the titles they read and some quotes from participants on.

Members of this FLC included three Provost Teaching and Learning Fellows:

- **Laura Bier**, History and Sociology, *Associate Professor*
- **Kirk Bowman**, International Affairs, *Professor*
- **Josephine Yu**, Mathematics, *Associate Professor*

The FLC was facilitated by Dr. Carol Subiño-Sullivan, assistant director for faculty teaching and learning initiatives in CTL, and Dr. Ruthie Yow, service learning and partnerships specialist in Tech's Center for Serve-Learn-Sustain.

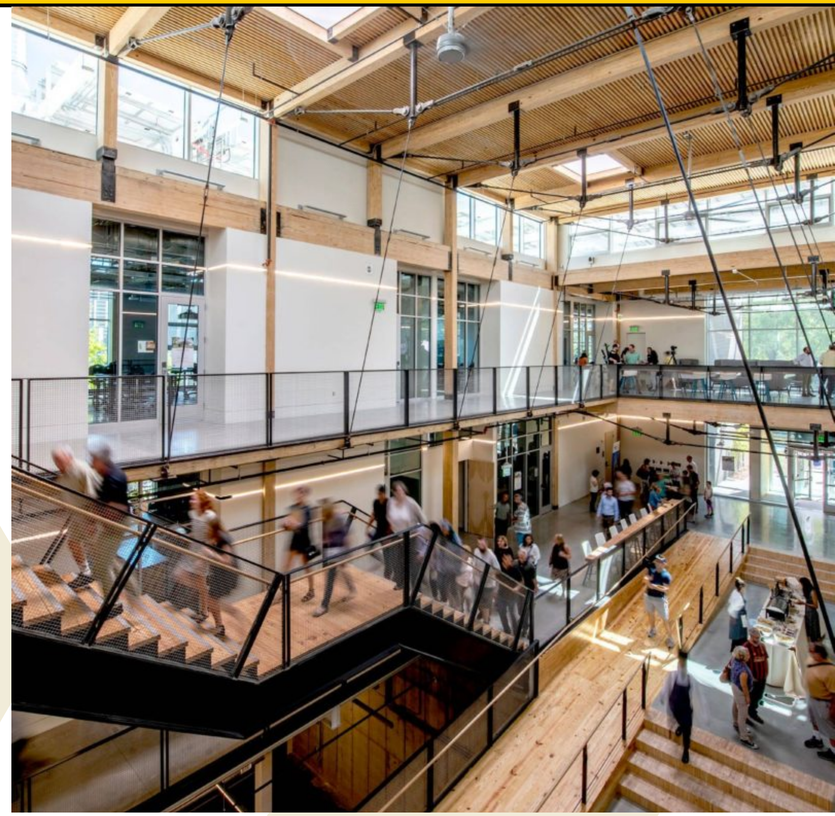
Assessment of Online Teaching

The Assessment of Online Teaching FLC spent time this past year exploring the challenges and issues relevant to how teaching is assessed in the online environment. Additionally, the FLC launched a project to discover how various areas of campus were constructing high quality online learning environments as well as their plans to measure them.

Members of the Assessment on Online Teaching FLC included:

- **Polo Chau**, Computational Science & Engineering, *Associate Professor*
- **Brian Gunter**, Aerospace Engineering, *Associate Professor*
- **Julia Melkers**, Public Policy, *Professor*
- **Christopher Poch**, Division of Computing Instruction, *Lecturer*
- **Joel Sokol**, Industrial and Systems Engineering, *Professor*
- **Lizhen Xu**, Information Technology Management, *Associate Professor*

The FLC was facilitated by CTL's Dr. Vincent Spezzo, assistant director for teaching and learning online, and Troy Courville, academic professional in GTPE.



Ellen Yi Chen Mazumdar, Mechanical Engineering

In my class, I frame all of the homework problems from the perspective of an engineer trying to solve a problem at work. This teaching strategy makes it clear how the class problems can relate to their future. I also discuss in class which controller design techniques are typically used in industry and which techniques are typically used in research, this gives students an idea how the techniques they are studying can be used. Finally, I describe in class how previous students have used their final project presentations and videos for interviews or job talks. This often helps students become more invested in their projects since they can be integrated directly into design portfolios.

William Todd, Scheller College of Business

The case method, the preferred mode of instruction in business education, is an ideal medium in which to study resilience. We learn as much from the failures described in these stories of real situations as we do from successes. My courses are part of the leadership minor and we look carefully as lessons in leadership in both situations. In successes we identify the exemplary leadership that made it possible and in failures we identify a lack of leadership. Many of our students have never experienced failure and I work hard to have them empathize with the leader who fails by "getting inside his skin" and understand what happened with our benefit of hindsight. Hopefully, I am exposing students to failure without catastrophic results.

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

Faculty Awards and Recognitions

Each year, the Center for Teaching and Learning coordinates campus awards to honor outstanding faculty contributions to the educational mission of Georgia Tech, including the following:

- CTL/BP Junior Faculty Teaching Excellence Award
- Curriculum Innovation Award
- Education Partnership Award
- Faculty Award for Academic Outreach
- Geoffrey G. Eichholz Faculty Teaching Award
- Innovation and Excellence in Laboratory Instruction Award
- Innovation in Co-curricular Education Award
- Scholarship of Teaching and Learning Award
- Student Recognition of Excellence in Teaching: Class of 1934 CIOS Award
- Teaching Excellence Award for Online Teaching
- Undergraduate Educator Award

In Spring 2022, 21 faculty members received teaching excellence awards, winning a combined total of $51,000. CTL annually updates the names of all campus faculty award winners and USG Regents' Teaching Excellence Awards on the CTL Teaching Award Wall on the fourth floor of Clough Commons.

CTL/BP Junior Faculty Teaching Excellence Award ($3000 Each)

- **Katie Badura** *Assistant Professor*, Scheller College of Business
- **John James Blazeck,** *Assistant Professor*, Chemical and Biomolecular Engineering
- **Neha Garg,** *Assistant Professor*, Chemistry and Biochemistry
- **Allen Hyde,** *Assistant Professor*, History and Sociology
- **Natalie Khazaal,** *Assistant Professor*, Modern Languages
- **Annabelle C Singer,** *Assistant Professor,* Biomedical Engineering

Curriculum Innovation Award ($3000)

- **Fani Boukouvala,** *Assistant Professor;* **Martha Grover,** *Professor;* **A.J. Medford,** *Assistant Professor;* **J. Carson Meredith,** *Professor; and* ***David Scholl,*** Professor — Chemistry and Biochemistry

Faculty Award for Academic Outreach ($3000)

- **James R. Sowell,** *Principal Academic Professional,* Physics

Geoffrey G. Eichholz Faculty Teaching Award ($3000 each)

- **Michael Evans,** *Senior Academic Professional,* Chemistry and Biochemistry
- **Christie N. Stewart,** *Senior Academic Professional,* Biological Sciences

Innovation and Excellence in Laboratory Instruction Award ($3000)

- **Christy O'Mahony,** *Senior Academic Professional,* Biological Sciences

Innovation in Co-curricular Education Award ($3000)

- **Mary Hudachek-Buswell,** *Lecturer* and **Fisayo Omojokun,** *Senior Lecturer — Computing*

Scholarship of Teaching and Learning Award ($3000)

- **Emily G. Weigel,** *Senior Academic Professional, Biological Sciences*

Teaching Excellence Award for Online Teaching ($3000)

- **Michael Evans,** *Senior Academic Professional,* Chemistry and Biochemistry

Undergraduate Educator Award ($3000 each)

- **Jacqueline Garner,** *Senior Lecturer,* Scheller College of Business
- **Amit S. Jariwala,** *Senior Academic Professional,* Mechanical Engineering

Center for Teaching and Learning

Faculty Teaching & Learning Initiatives

New "Honor Roll" Recognition of Teaching

At the end of Fall 2021, the Center for Teaching and Learning announced the **Student Recognition of Excellence in Teaching: Class of 1934 CIOS Honor Roll.** Instructors must have a minimum of 70% CIOS response rate to be eligible for the recognition and place in the top 25% of the composite CIOS scores for items #16, 17, and 18 to be eligible for the Honor Roll.

The Honor Roll is compiled and announced at the end of each semester. Then, at the end of each calendar year, the 40 Honor Roll recipients with the highest rankings are notified in January that they have won the Student Recognition of Excellence in Teaching: Class of 1934 CIOS Award.

During Calendar Year 2021, there were a total of 223 individuals recognized on the Semester Honor Rolls. There were 98 individuals on the Spring Honor Roll, 33 on the Summer Honor Roll, and 92 on the Fall Honor Roll. For a full listing of honorees, , see https://ctl.gatech.edu/content/student-recognition-excellence-teaching-class-1934-honor-roll.

Student Recognition of Excellence in Teaching: CIOS Award

This award is one of CTL's annual initiatives to honor outstanding teaching. Specifically, the award recognizes faculty members with exceptional scores and response rates on the Course Instructor Opinion Survey (CIOS). During the 2021 calendar year (Spring 2021 and Fall 2022), fifty Georgia Tech instructors were recognized for their excellence in teaching. While the number of awards is typically forty, the Georgia Tech administration providing funding for 20 more awards this year. The sum of student responses on three CIOS scale items constituted the criteria for selection for this award: (#16) Instructor's respect and concern for students; (#17) Instructor's level of enthusiasm about teaching the course; (#18) Instructor's ability to stimulate interest in the subject matter. Ties were broken by response rate.

Award Winners for Calendar Year 2021

- **Meghan Babcock,** Psychology, *Professor*
- **Katie Badura,** Scheller College of Business, Operations Management, *Assistant Professor*
- **Sonit Bafna,** Architecture, *Associate Professor*
- **Nivedita Bhattacharya,** Electrical and Computer Engineering, *Professor*
- **Amy Bruckman,** Interactive Design, *Professor*
- **Julie Champion,** Chemical and Biomolecular Engineering, Associate *Professor*
- **Seung-Eun Chang,** Modern Languages, *Lecturer*
- **Satoma Suzuki Chenoweth,** Modern Languages, *Lecturer*
- **Ahmet Coskun,** Biomedical Engineering, *Assistant Professor*
- **Karie Davis-Nozemack,** Scheller College of Business, *Associate Professor*
- **Francesco Fedele & Rachel Grant,** Civil and Environmental Engineering, *Associate Professor & Instructional Associate*
- **Lionel Gall,** Modern Languages, *Senior Lecturer*
- **Jacqueline Garner,** Scheller College of Business, *Senior Lecturer*
- **Matthew Gombolay,** Interactive Computing, *Assistant Professor*
- **Aaron Hackett,** Scheller College of Business, *Professor*
- **Koki Ho,** Aerospace Engineering, *Assistant Professor*
- **Manpreet Hora,** Scheller College of Business, *Associate Professor*
- **Marty Jacobson,** Biomedical Engineering, *Professor*
- **Bo Kyoung Kim,** Modern Languages, *Visiting Lecturer*
- **Julie Kim,** Architecture, *Associate Professor*
- **Yongtaek Kim,** Modern Languages, *Associate Professor*
- **Gary Lavigne,** Mathematics, *Professor*
- **Laura Levy,** Psychology, Vertically Integrated Projects, *Senior Research Scientist*
- **Jin Liu,** Modern Languages, *Associate Professor*
- **Eric Marks,** Civil and Environmental Engineering, *Professor of the Practice*
- **Dan Margalit,** Mathematics, *Professor*
- **Eliza Markley,** International Affairs, *Lecturer*
- **Mary McDonald,** History and Sociology, *Professor*
- **Melinda Millard-Stafford,** Biological Sciences, *Professor*
- **Alexandra Muscalus,** Civil and Environmental Engineering, *Institute Fellow*
- **Lee Oh,** Modern Languages, *Lecturer*
- **Eric Overby,** Scheller College of Business, IT Management, *Catherine & Dewin Wahlen Professor*
- **John Peponis,** Architecture, *Professor*
- **Melissa Pilkington,** Modern Languages, *Lecturer*
- **Dobromir Rahnev,** Psychology, *Associate Professor*
- **Tatiana Rudchenko,** Scheller College of Business, Operations Management, *Senior Lecturer*
- **Brendan Saltaformaggio,** Electrical and Computer Engineering, *Assistant Professor*
- **Joseph Salyer,** Literature, Media, and Communication, *Professor*
- **Ruth Schowalter,** Language Institute, *Lecturer*
- **Andrew Schulz,** Mechanical Engineering, Vertically Integrated Projects *Graduate Research Assistant*
- ***Kevin Shankwiler,*** Industrial Design, *Senior Lecturer*
- ***Molly Slavin,*** Literature, Media, and Communication, *Professor*
- **Ravi Subramanian,** Scheller College of Business, Operations Management, *Professor*
- **William Todd,** Scheller College of Business, Strategy and Innovation, *Professor of the Practice*
- **Kyriakos Vamvoudakis,** Aerospace Engineering, *Assistant Professor*
- **Maria Warren,** Civil and Environmental Engineering, *Graduate Teaching Assistant*
- **Damon Williams,** Industrial Systems and Engineering, *Senior Lecturer*
- **Danielle Willkens,** Architecture, *Assitant Professor*
- **Linda Wills,** Electrical and Computer Engineering, *Associate Professor*
- **Gregory Zinman,** Literature, Media, and Communication, *Associate Professor*

Center for Teaching and Learning

Learning and Technology Initiatives

Teaching with Technology Partnerships

Teaching with Technology Partnership is a learning and technology initiative that aims to support and promote the effective and innovative use of technology in teaching and learning. The partnerships are a collaboration between faculty, who sponsor a project, and CTL. Dr. Vincent Spezzo and Dr. Rui Hu from CTL meet with individual and groups of faculty fellows regularly and serve as a creative partner for developing and implementing their projects. All faculty fellows meet as a cohort and discuss their projects, as well as other topics related to teaching with technology.

During the 2021-2022 cycle, five faculty fellows partnered with CTL to work on their teaching with technology projects:"

MARY PEEK

Department:

School of Chemistry & Biochemistry

Partnership Project:

Biochemistry Teaching Laboratory (BTL) Simulations

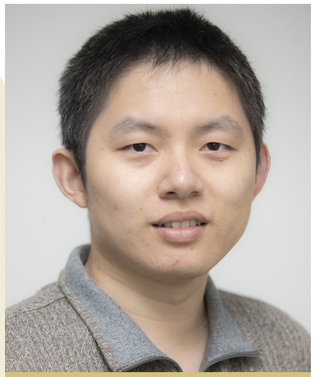
DEXTER DEAN

Department:

School of Chemistry & Biochemistry

Partnership Project:

Biochemistry Teaching Laboratory (BTL) Simulations



QIRUN ZHANG

Department:

School of Computer Science

Partnership Project:

Adopting a Web Integrated Development Environment (IDE) for Teaching Compiler Classes

STEPHANIE REIKES

Department:

School Mathematics, Tutoring and Academic Support

Partnership Project:

Training Videos for Peer Tutoring (CETL 2001)

JUSTIN BOONE

Department:

Tutoring and Academic Support

Partnership Project:

Training Videos for Peer Tutoring (CETL 2001)

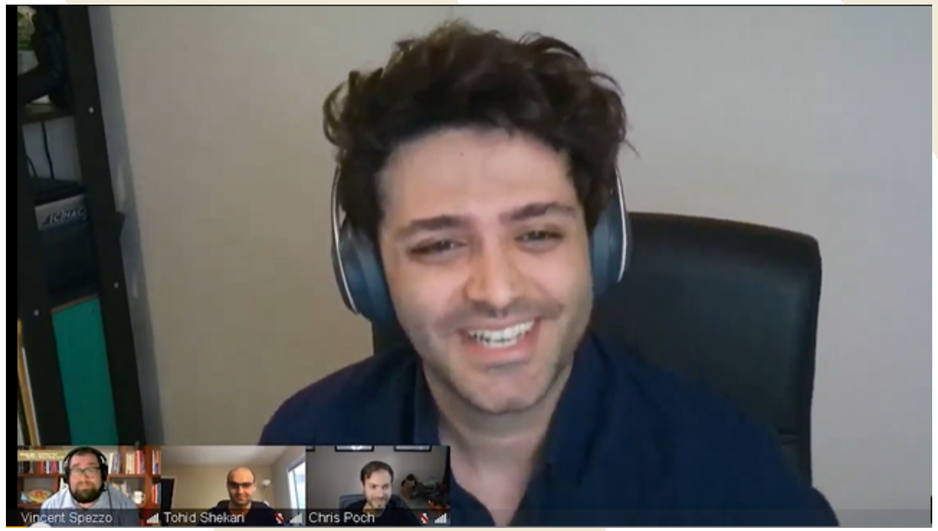
For more information about Teaching with Technology Partnerships, please visit http://ctl.gatech.edu/ttp.

Center for Teaching and Learning

Learning and Technology Initiatives

Teaching with Technology Spotlights

Serving as an OMS TA in a Massive Online Course: Words from the Wise(r)



This event, led by CTL's Dr. Vincent Spezzo, provided participants with an opportunity hear from a panel of award-winning Head TAs and former Head TAs (who now serve as faculty) as they answered questions and discussed their experiences teaching in the largest online learning environments Georgia Tech has to offer. The Online Master of Science TA/faculty panel consisted of current head TA, Shahrokh Shahi, former head TA and current instructor, Chris Poch, and former head TA and recent Alumni, Dr. Tohid Shekari.

The panel offered stunning facts, such as how their largest class involved 1050 students and a team of 16 TAs. They discussed their insights and experiences around leading these large groups, working in classes with so many students, what effective communication in an environment of that size looks like, secrets to success, and many more questions asked by various audience members.

Active Learning Through Videos

Georgia Tech faculty are now creating and using videos in their courses in record numbers. But how are students using these resources? Watching videos can be a passive activity--but it doesn't have to be! In this spotlight Dr. Vincent Spezzo and Dr. Rui Hu of CTL focused on the innovative new technologies of Kaltura and H5P to demonstrate how adding interactive features and gradable items to videos can transform them into active learning activities that excite students and engage them with course materials on a deeper level.

This spotlight explored the technology and pedagogy involved in introducing interactive elements into videos, discussed how to enhance the most important elements of videos, described how to create asynchronous active learning opportunities, and discussed how to best leverage these technologies in the participants' own courses.

Center for Teaching and Learning

Learning and Technology Initiatives

Teaching with Technology Summer Institute

To learn more about the Teaching with Technology Summer Institute, please visit http://ctl.gatech.edu/summerinstitute

The 2022 Teaching with Technology Summer Institute was conducted virtually in June 2022. The four-day institute, facilitated by the learning technology professionals from the Center for Teaching and Learning, the Georgia Tech Professional Education, the Office of Information Technology, and Center for 21st Century Universities, spent each day focused on exploring and better understanding the relationship and usage of educational technologies in our teaching and learning environments. This year's goal was for participants to learn about mindfulness in using teaching technologies and create a mindful implementation plan for the next new tool they would introduce to their course.

Each day focused on a different step on the path to mindful teaching with technology. The participants of the summer institute had opportunities to:

- Learn about mindfulness in technology and foundational theories on integrating technology into the classroom.

- Explore the latest technologies available at Georgia Tech with a range on invited experts from across campus.

- Walk through the process of creating a mindful technology implementation plan including planning for how to self-assess the implementations success

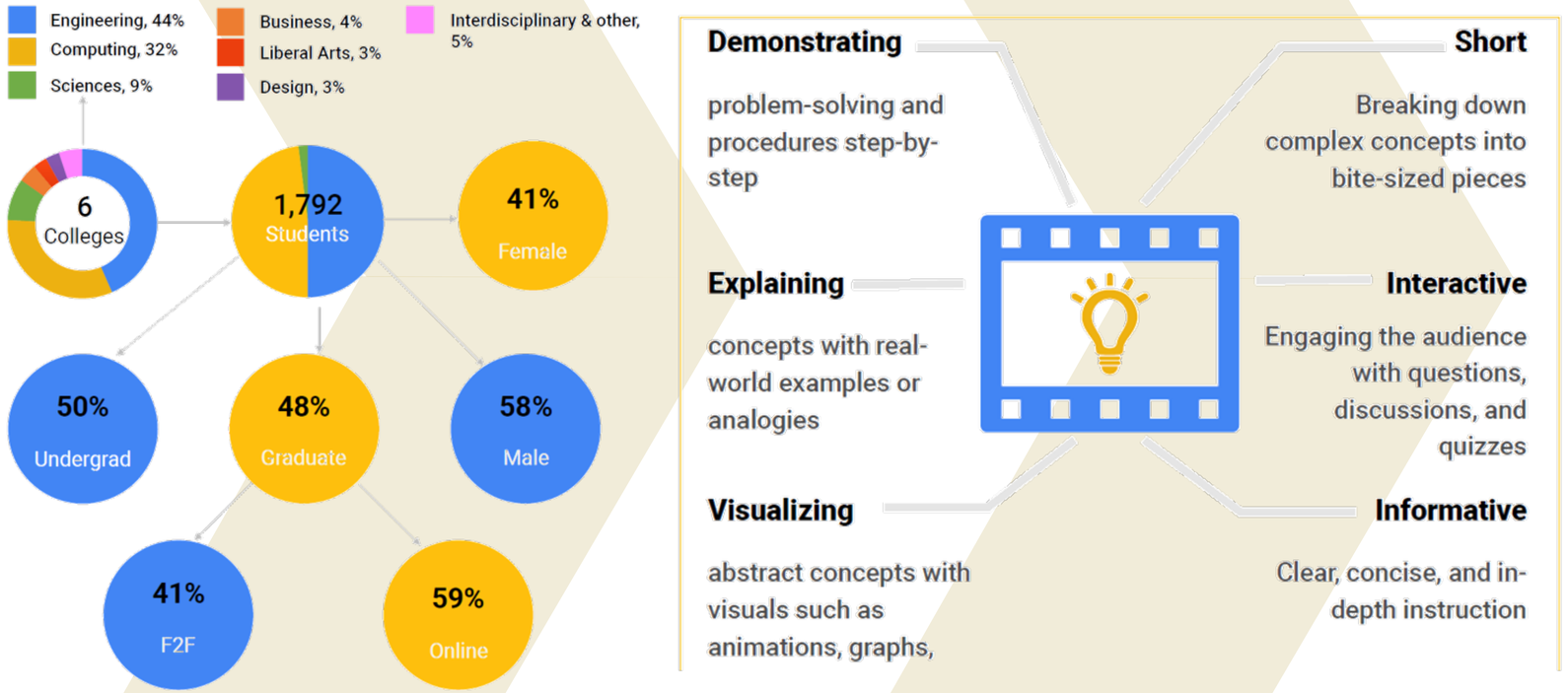
- Share plans with colleagues and campus experts for feedback, suggestions, and formation of lasting communities and partnerships.

A total of **61 participants** attended the four-day Summer Institute and rated its overall effectiveness at **4.8 / 5.00** with 5 being excellent.

Center for Teaching and Learning

Learning and Technology Initiatives

Teaching with Technology Featured Workshop



Plan, Design, Develop & Implement Videos for Your Class

During the past few semesters, more Georgia Tech faculty began incorporating videos in their teaching in order to support their students' learning. Some faculty used video to engage students with specific ideas, some used videos as a way of introducing new topics, and others used video to record lectures so that students could review course concepts at their own pace.

As we moved forward, the Center for Teaching and Learning and the Library wanted to encourage faculty to further consider what role videos play in their current and future courses. To this end CTL's Dr. Rui Hu, Dr. Vincent Spezzo, and the Library's Alison Valk created and facilitated a multi-day workshop series delivered in Fall and Spring called "**Plan, Design, Develop & Implement Videos for Your Class**." In this workshop series, faculty gathered ideas, explored new video concepts, toured the new Teaching Studio in the Library, and developed a video to use in their own courses.

Response to this workshop series was great with 73 faculty engaging in the exploration and refinement of their video pedagogical skills and expanding their video creation and engagement knowledge.

A total of 73 participants attended the workshop series either in Fall 21 or Spring 22 and rated its overall effectiveness at 4.8 / 5.00 with 5 being excellent.

Center for Teaching and Learning

Learning and Technology Initiatives

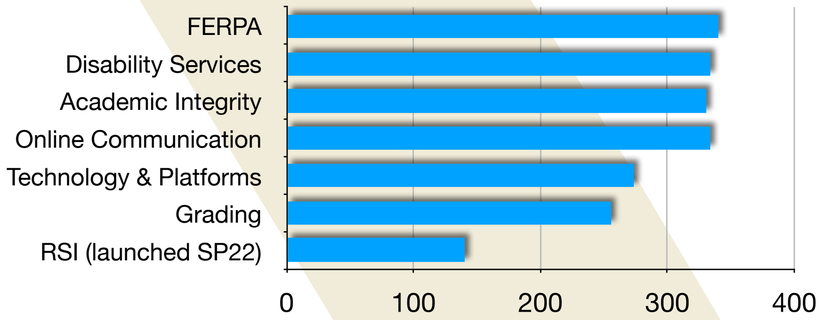
Georgia Tech OMS TA Training & Development Course

The Online Master of Science (OMS) TA Training and Development course is housed in Canvas for new and existing Teaching Assistants who are teaching in Georgia Tech's Online Master of Science programs. Through a series of asynchronous modules and synchronous sessions, participants are provided with an overall orientation to some of the key elements of their job responsibilities, Georgia Tech policies, and skills needed to provide a high-quality online experience for students in the OMS programs.

The training series features modules on what online TAs need to know about FERPA, Disability Services, Academic Integrity, grading, and online communication, as well information around the technologies and platforms utilized in the OMS programs.

During FY 2021-2022, 402 OMS TAs participated in one or more of the seven available modules. TAs were required to pass an evaluation at the end of each module to earn a completion badge. In total, these TAs successfully completed 2009 modules. Additionally, six OMS focused synchronous events were offered throughout the year and recorded for later viewing; in total, 216 TAs attended or viewed these sessions.

Total Completed Modules by OMS Teaching Assistants



A Collaborative Project

The OMS TA Training and Development course was a collaborative project created and refined over multiple semesters. The project was a joint effort of the CTL Learning and Technology team and individuals from the CTL TA Development and Future Faculty team, GT Professional Education, the OIT Digital Learning Team, and GT Language Institute.

The creation of the course involved an in-depth assessment of the training and development needs of OMS Teaching Assistants, review and reconstruction of three existing Online TA Orientation modules to fit the needs of TAs teaching in a fully online environment, and the creation of several new content items such as additional modules and development of synchronous training offerings. While much work has already been completed, more modules and developmental offerings are being planned for future release.

In total, **402** OMS TAs participated in one or more of the seven available training modules. These TAs successfully completed **2009** modules.

Center for Teaching and Learning

Learning and Technology Initiatives

Date	Partner(s)	Event	Attendance
July 13, 2021	GTRHTA	GTRHTA Experts Ask Me Anything	9
July 20, 2021	GTRHTA and DLT	Administering and Grading Exams with Gradescope	88
August 16, 2021	FTL	Fall Teaching Kickoff - Creating an Inclusive Learning Enivironment	36
August 19 & 25, 2021 January 7 & 11, 2022	GTPE and DLT	OMS Technology and Platform Experts Ask Me Anything	28
September 28, 2021	College of Computing	Serving as an OMS TA in a Massive Online Course	42
October 18 & 25, 2021 February 8 & 24, 2022	Library	Plan, Design, Develop, and Implement Videos for Your Class	73
October 20, 2021	TAFF	TA - Teaching with Technology Workshop	35
November 9, 2021	Library	Active Learning Through Videos	29
March 31, 2022	DLT	Working with Ed Discussion Ask Me Anything for OMS	16
April 20, 2022	TAFF	TA and Future Faculty Awards Day	165
June 27-30, 2022	DLT, GTPE, and C21U	2022 Teaching with Technology Summer Institute	61
		Total	**582**

Learning Technology Campus Partnerships and Outreach

The Learning and Technology team partnered with others in the Center for Teaching and Learning that included the faculty teaching and learning team, as well as the TA development and future faculty team. These collaborations consisted of projects and events that incorporated technologies to enhance teaching and learning.

The team also worked with other campus units to support and promote effective use of learning technologies in different learning environments, such as:

- Georgia Tech Remote and Hybrid Teaching Academy (GTRHTA)
- OIT Digital Learning (DLT)
- Faculty Teaching and Learning Initiatives (FTL)
- Georgia Tech Professional Education (GTPE)
- TA Development and Future Faculty Initiatives (TAFF)
- Georgia Tech Library

A total of 582 participants attended various events by the learning technology team in CTL with its campus partners.

Center for Teaching and Learning

Learning and Technology Initiatives

2022 Blended and Online Learning Design (BOLD) Graduate Fellows

Declan Abernethy

History and Sociology

Michael Biehler

Industrial Engineering

Hejintao Huang

Geotechnical Engineering

Steven Kangisser

Construction Management

Mohammad Nikbakht

Electrical & Computer Engineering

Abhishek Shankar

Industrial Design

Lynnae Stypulkowski

Geotechnical Engineering

Boni Yraguen

Mechanical Engineering

Open Education Initiatives

2022 Blended and Online Learning Design (BOLD) Graduate Fellowship Program

The Blended and Online Learning Design (BOLD) Graduate Fellowship Program is an open education initiative supported and funded by the Provost Funds for Excellence in Graduate Studies. The program aims at enabling and empowering graduate students to become knowledge producers through designing, developing, and contributing open educational resources (OER) for blended and online learning. Eight graduate students from various disciplines were selected as the second cohort of the BOLD graduate fellows. In Spring 2022, they worked on an OER project of their interest and all of them successfully fulfilled the requirements of the fellowship. The program was led by the four Affordable Learning Georgia champions at Georgia Tech: Dr. Chaohua Ou in CTL (Design Champion), Dr. David Joyner from Computing (Faculty Champion), Dr. Liz Holdsworth from Library (Librarian Champion), and Dr. Eric Lanni from Computing (Program Coordinator).

All graduate students at Georgia Tech are eligible to apply for the BOLD graduate fellowship. The BOLD Fellows received a stipend of $2,000. The program is not intended to replace graduate students' regular funding, so employed graduate students could also apply. This second cohort started on January 18, 2022, and ended on June 17, 2022. Fellows committed to working on an OER project of their interest for about 4 hours per week. Fellows had virtual meeting with the cohort and the program advisors once every other week as they worked to complete their OER initiatives."

Visit the project website to learn more about the various Open Educational efforts at Georgia Tech.

Center for Teaching and Learning

TA Development & Future Faculty Initiatives

"The Tech to Teaching Program gave me the skills and the confidence necessary to pursue a teaching career. The capstone class in particular gave me the support I needed to feel confident in my role as a graduate student instructor, my first experience teaching my own class. The entire Tech to Teaching course and my experiences as a graduate student instructor helped me enormously in the faculty interview process. I am flourishing in my current role due in large part to what I learned through the Tech to Teaching courses!"

Dr. Marguerite Matherne
Assistant Teaching Professor
Mechanical & Industrial Engineering
Northeastern University

"As a new assistant professor, I drew heavily upon my Tech to Teaching experience at a time when students are increasingly distracted and unengaged. At the end of my first semester, the course evaluation results were glowing. Although I had conviction about how I ought to teach, I was still shocked at how much the students appreciated the CTL-learned style I brought to the classroom. As we say where I'm from: the proof is in the pudding."

Dr. Aaron Bivens
Assistant Professor
Civil & Environmental Engineering
Louisiana State University

Future Faculty Initiatives

The Center for Teaching and Learning offers extensive programming, support, and recognition for teaching assistants at the undergraduate, graduate, and postdoctoral levels, as well as pathways for those interested in a faculty career. In addition to courses in teaching and learning, TAs and future faculty can choose from a number of workshops, online training modules, and other opportunities to increase their knowledge of effective pedagogy in the college classroom.

Teaching Certificate Programs

Tech to Teaching and CIRTL
The Tech to Teaching certificate program helps prepare Georgia Tech graduate students and postdocs for college teaching positions. Participants develop a thorough understanding of the scholarship of teaching and learning and demonstrate their ability to apply skills in the classroom.

When participants complete the ten learning outcomes through a combination of classes, workshops, and online programming, they earn an Associate Certificate from the Center for the Integration of Research, Teaching, and Learning (CIRTL). Next, they complete a significant teaching experience, most often through co-teaching a course or serving as instructor of record, and engage with future faculty peers in a weekly learning community seminar.

In 2021-2022, Tech to Teaching enrolled 388 participants, a 12% increase over the previous year. This year, 64 participants earned the CIRTL Associate Certificate and 41 participants completed the full Tech to Teaching certificate, a 7% increase from the previous year.

Courses
As one route to earning the Tech to Teaching certificate, courses offer an in-depth study of learning theory to prepare future faculty for teaching positions in higher education. This year, 123 graduate students completed one of the three Tech to Teaching courses, a 22% increase from the previous year.

- CETL 8713 Fundamentals in Teaching and Learning
- CETL 8717 Course Design
- CETL 8718 Teaching Practicum

Teaching Workshop Series
The 9-part teaching workshop series provides graduate students and postdocs the opportunity to explore central tenets of effective pedagogy. A total of 216 participants attended these workshops over the course of the year, a 14% increase over the previous year. The workshops were delivered through a combination of face-to-face and remote modes, receiving an average rating of 4.5 out of 5.0.

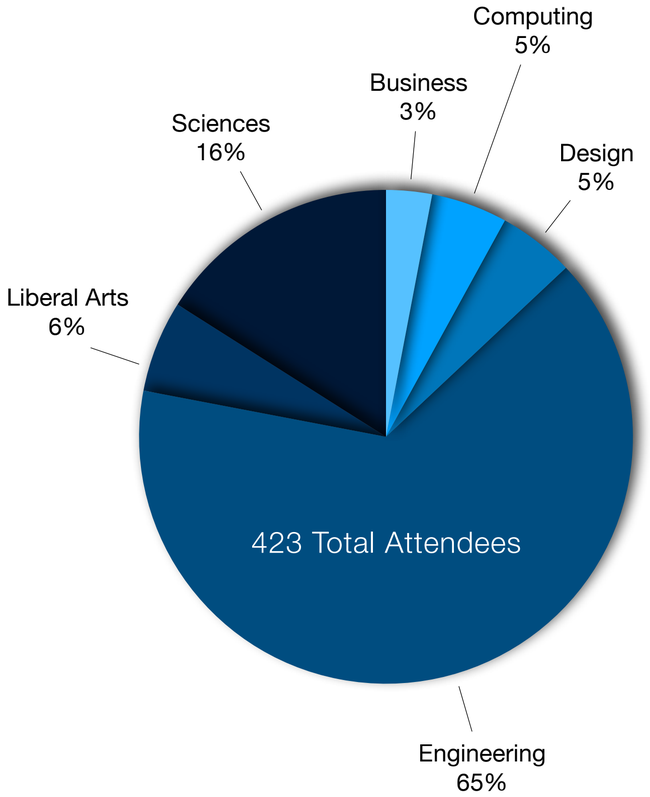
Classroom Observations
Feedback on instructional practices helps novice instructors identify strengths in their emerging pedagogy and opportunities for improvement. In the capstone experience, CTL representatives observe and record live lessons, and provide written feedback. After an observation, participants are encouraged to meet with a CTL representative to discuss topics including learning goals and assessment, instructional strategies, classroom climate, and presentation skills. Each participant in the teaching capstone receives two classroom observations, and other graduate students and postdocs can request individual observations. In 2021-2022, CTL faculty and Graduate Teaching Fellows conducted 120 classroom observations.

41 Tech to Teaching Certificates and **64** CIRTL Associate-Level Certificates were awarded to graduate students and postdoctoral scholars during FY2020—2021.

Center for Teaching and Learning

TA Development & Future Faculty Initiatives

Workshop Attendance by College



423 graduate students and postdoctoral scholars participated in career development and teaching workshops during FY2021—2022.

93% of participants gave the career and teaching workshops an overall rating of very good or excellent.

Future Faculty Initiatives

Academic Career Support

Individual Consultations

Future faculty entering the academic job market receive additional support through individual consultations. CTL provided individual consultations to 103 consultations about the academic job search, an increase of 7% over the previous year.

Future Faculty Job Search Academy

CTL typically offers a series of workshops for graduate students and postdocs to prepare them for all aspects of the faculty hiring process. This year, CTL transformed this series into the Future Faculty Job Search Academy, a multi-week learning community that leveraged prerecorded videos and independent activities that prepared participants to engage in flipped-format workshops. The fall Academy introduced academic job searching and crafting an effective job search packet, including the CV, cover letter, and teaching, research and diversity statements. The spring series focused on conducting successful interviews, presenting dynamic job talks, and managing professional online presence.

The Future Faculty Job Search Academy workshops were attended by 207 graduate students and postdocs. Of these participants, 95% rated the Academy as “very good” or “excellent”.

Postdoctoral Development

AGEP

The purpose of the National Science Foundation’s Alliances for Graduate Education and the Professoriate (AGEP) program is to increase the number of underrepresented minority (URM) faculty in STEM disciplines and education research. The AGEP alliance connecting Georgia Tech, Rice University, Florida A&M University, and the University of Colorado at Colorado Springs is developing and implementing an innovative model that increases the number of URM engineering postdoctoral scholars who transition successfully into tenure-track faculty positions. CTL’s Dr.Tammy McCoy provides academic enrichment to the alliance, covering teaching and learning in higher education, course design, and practical teaching experience.

Postdoc Course

Each spring, CTL offers a non-credit course on teaching for postdocs. This year, the course was redesigned to fully align with the Tech to Teaching outcomes and **35 postdocs completed the course, an increase of 52% over the previous year.**

"Participating in the Future Faculty Job Search Academy was instrumental in helping me find my dream job. In the Academy, I learned how to craft an excellent application packet. In particular, I believe devoting time to the teaching statement and the diversity statement really made a difference. Additionally, I had the luck to have the CTL team review my documents and ensure that everything was spotless. Finally, I was able to prepare for the interviews and craft my answers beforehand by attending the Academy's mock interviews. The experience was unique! Thank you CTL team!"

—Ana Maria Estrada Gomez, Assistant Professor, Industrial Engineering, Purdue University

Center for Teaching and Learning

TA Development & Future Faculty Initiatives

TA Development Programs

TA Orientation

New undergraduate and graduate TAs serving in traditional residential courses are introduced to their job responsibilities and Georgia Tech policies through TA Orientation (TAO). This year, CTL expanded a series of online interactive modules about FERPA, academic integrity, and disability services to include additional modules on online communication skills and efficient grading. Along with optional modules to help TAs working in remote courses, new TAs were able to prepare for their TA positions from anywhere prior to the start of classes. In addition to the asynchronous resources, CTL offered a series of engaging remote workshops on facilitating remote learning, equitable grading, and supporting student wellbeing. A total of 853 new TAs completed the asynchronous training with 187 attending at least one synchronous or face-to-face workshop.

The Center for Teaching and Learning partnered with the Online Masters programs to produce a series of synchronous and asynchronous training materials for TAs in the OMS programs. A total of 402 online TAs were trained through these resources.

GSI Teaching Seminar

Teaching for the first time can be a challenging experience for graduate student instructors. The GSI Teaching Seminar is a non-credit weekly cohort meeting to provide support to first-time GSIs. Participants discuss effective lecture techniques, engaging students in active learning, designing assessments and grading strategies, managing difficult classroom situations, and more. This program creates a community of graduate student instructors and provides space for experimentation and reflection on teaching.

"The most helpful part is to be able to talk about my concerns and know about how others have also had the same concern, or have used different ways to resolve them. This provides me with confidence in my teaching" ***—Spring 2022 GSI Teaching Seminar participant***

Residential TA Orientation Programming

Required asynchronous TA Training modules:

- Module 1: What You Should Know About FERPA
- Module 2: What You Should Know About Disability Services
- Module 3: What You Should Know About Academic Integrity
- Module 4: What you Should Know About Online Communication
- Module 5: What you Should Know About Grading

Optional TA Training module:

- Module 6: Canvas Tips for TAs

TA Orientation Workshop Series

- Preparing for the First Day of Class
- Canvas Hacks
- Planning for Effective Teaching
- Helping Students Learn
- Advanced Grading
- Academic Well-being
- TA Orientation Panel Discussion
- International TA Orientation

853 residential teaching assistants completed the online training modules during FY2021—2022, a 110% increase.

402 online teaching assistants completed the orientation modules during FY2021—2022.

Center for Teaching and Learning

TA Development & Future Faculty Initiatives

TA Development Programs

CTL 2000, 2001, and 8000

In addition to TA Orientation, new TAs from certain departments develop teaching, tutoring, and other relevant skills through CETL 2000 and 2001 for undergraduate TAs and CETL 8000 for graduate TAs. This year, 301 graduate students completed CETL 8000 and 287 undergraduate students completed CETL 2000/2001.

International Teaching Assistant Program

The International TA (ITA) program offers a two-credit course:
CETL 8802: Special Topics in ITA Development, with enrollment of 17 students in this
academic year. The course was delivered on campus both fall and spring.
After ITAs completed the course, Sarah Kegley
(program manager) provided a follow-up observation of ITAs in their TA roles.

Schools/programs represented were Aerospace Engineering, Electrical and Computer
Engineering, Biomedical Engineering, Industrial and Systems Engineering, Biochemistry, Machine Learning, Physics, Building Construction, Mechanical Engineering, and Public Policy.

In addition, a second year of the PEGS funding supported the ITA Liaisons fellows, a CTL initiative which offers a leadership position for individual ITAs. Seven liaisons in Fall 2021, and nine in spring 2022 were funded through this program.

Institute-Wide Partnerships and Outreach

Preparing Future Faculty Partnerships

Although many graduate students and postdocs learn about CTL's future faculty programming through CTL marketing and word of mouth, a growing number of schools have established partnerships with CTL to formalize and encourage their students' participation. These Preparing Future Faculty Partnerships created a consistent flow of students from participating schools, which demonstrates those schools' commitment to fully preparing their graduate students and postdocs for careers in the academy.

Civil and Environmental Engineering (CEE)
Each year, CEE select a cohort of three to five graduate students to join the Preparing Future Faculty program. Selected participants complete the Tech to Teaching program and receive a monetary stipend from CEE to support their ongoing professional development.

Economics
Ph.D. students in the School of Economics are required to participate in the Tech to Teaching program as part of their graduate training. Incoming students complete the Tech to Teaching courses in their first or second year and can become eligible to teach as instructor of record beginning in their third year.

Biomedical Engineering (BMED)
The course BMED 7004 Teaching & Research Practicum I satisfies four of the foundation level outcomes in Tech to Teaching. Participants from this field can use any pathway to satisfy the remaining outcomes and then participate in the teaching capstone.

Industrial & Systems Engineering (ISyE)
ISYE students can enroll in ISYE 8802 Fundamentals of Teaching & Learning to satisfy the foundation level outcomes. Future faculty with an ISYE teaching assignment can then enroll in ISYE 8811 to satisfy the teaching capstone. Participants receive observation and feedback from CTL faculty.

Psychology, Mechanical Engineering, Materials Science & Engineering
These schools offer a teaching practicum course that students may complete instead of the CTL teaching capstone. Students in these practicum courses still participate in the two classroom observations and submit the capstone portfolio to satisfy the capstone learning outcomes.

LEAD (Leadership Education and Development) Program
LEAD hires co-instructors for leadership sections of GT 1000 and for the Public Policy section of PUBP 4140 Foundation of Leadership for PUBP students. Preference for these teaching assignments is given to Tech to Teaching members. The teaching assignment can be used for the capstone requirement.

Center for Teaching and Learning

TA Development & Future Faculty Initiatives

Institute-Wide Partnerships and Outreach

Date	Partner	Event	Attendance
September 2021	MSE	Teaching Effectively in Large and Small Classes	6
September 2021	ISYE	Intro to Classroom Observations	6
September 2021	CoC	Advanced Grading Workshop, CETL 8000 CoC	13
October 2021	CoC	Advanced Grading Workshop, CETL 8000 CoC	26
January 2022	ISYE	Intro to Classroom Observations	12
January 2022	CHEM	Communication Essentials for Scientists Workshop (CHEM 8002 class)	27
February 2022	Computing	Advanced Grading Workshop, CETL 8000 CoC	23
February 2022	ME	ME 7757 Teaching Practicum	28
February 2022	AE	AE 8002 Lecture: Teaching in Higher Education	90
April 2022	Postdoc Srvices	Postdoc Event: Identifying Marketable Skills	20
April 2022		TA and Future Faculty Awards DAy	174
Spring 2022	Math	Spring Math GSI Teaching Seminar Series	18
June 2022	Computing	CoC Conflict Workshop for TAs	14
June 2022	All	TA Partners Meeting	15
June 2022	Grad Education	Graduate Education Town Hall	90
Summer 2022	Math	Math GSI Teaching Seminar: Active Learning	18
		Total	580

580 members of the Georgia Tech community participated in TA Development and Future Faculty partnership and outreach events, which was an increase of 29% from the previous year.

Center for Teaching and Learning

TA Development & Future Faculty Initiatives

Graduate Student Ambassador Programs

Graduate Teaching Fellows Program

The Graduate Teaching Fellows (GTF) program launched in summer 2018. Designed on the hub-and-spoke model developed for faculty outreach programs, the GTFs consist of a cohort of 11 advanced graduate students who serve as peer leaders for teaching development. The Fellows designed and delivered TA Orientation, conducted classroom observations and feedback sessions, and independently created individual projects to further support graduate student teaching developing in their home academic unit.

"What I like best about participating in the GTF program is that it has connected me to people across campus who are incredibly passionate about teaching. These connections have inspired me to continually improve and reflect on my own teaching as well as help support effective instruction for students across campus."

- Terri Dunbar, GTF

Graduate Teaching Fellows 2021 - 2022

David Ancalle-Reyes, Mechanical Engineering
Paloma Casteleiro Costa, Electrical and Computer Engineering
Terri Dunbar, Psychology
Theodore LaGrow, Electrical and Computer Engineering
Julian Rose, Biomedical Engineering
Andrew Schulz, Mechanical Engineering
Lynnae Stypulkowski, Civil and Environmental Engineering
Jelly Vanderwoude, Biological Sciences
Liqing Yan, Civil and Environmental Engineering
Yushuo Yang, Economics
Angela Yoo, Psychology

International TA Liaisons Program

In Spring 2021, The Center for Teaching and Learning offered a pilot initiative, International TA Liaisons for CTL. This initiative, supported by a PEGS grant, brought together seven qualified ITAs from five schools to design and create materials that would support the development of incoming ITAs. Each ITA liaison completed CETL 8802, Special Topics in ITA Development, and successfully served as a TA in his or her respective school. The pilot program was facilitated by Sarah Kegley, ITA program manager in CTL. As a leadership team of graduate students, ITA Liaisons for CTL is an extension of the hub-and-spoke model that CTL created with the Provost Teaching & Learning Fellows (PTLFs) and the Graduate Teaching Fellows (GTFs).

International TA Liaisons FY2020 - 2021

Top Row
Rui Chen, Mechanical Engineering

Middle Row (L-R)
Mohammad Nikbakht, Electrical and Computer Engineering
Jung Hyun Lee, Building Construction
Arpit Bhardwaj, Civil and Environmental Engineering

Bottom Row (L-R)
Daniyar Omarav, Mathematics
Fan Jiang, Computer Science, Robotics
Ximena Pizarro Bore, Public Policy

Center for Teaching and Learning

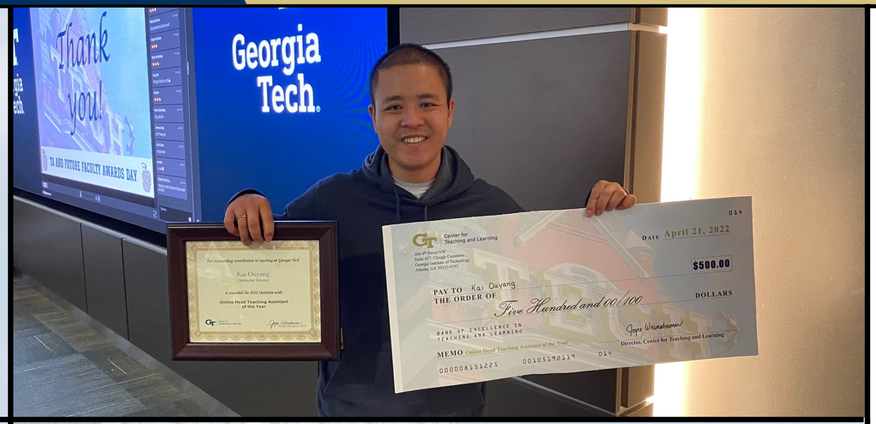
TA Development & Future Faculty Initiatives

Institute-wide Graduate Student Instructor of the Year

Elizabeth Jones
Chemistry and Biochemistry

Alexandra Muscalus
Civil and Environmental Engineering

Boni Yraguen
Mechanical Engineering



Institute-wide Graduate TA of the Year

Vinodhini Comandur
Aerospace Engineering

Jiayu Yao
Scheller College of Business

Tao Yu
Mathematics

Institute-wide Online TA of the Year

Addison Malone
History and Sociology

Alicia Robang
Chemical and Biomolecular Engineering

Raghav Tandon
Biomedical Engineering

Institute-wide Undergraduate TA of the Year

Bryan Clark
Mathematics

Kevin Li
Computational Science and Engineering

Shawn Wahi
Computer Science

Institute-wide Online Head TA of the Year

Jaewoo Jung
Mathematics

Kai Ouyang
Computer Science

Joanne Truong
Interactive Computing

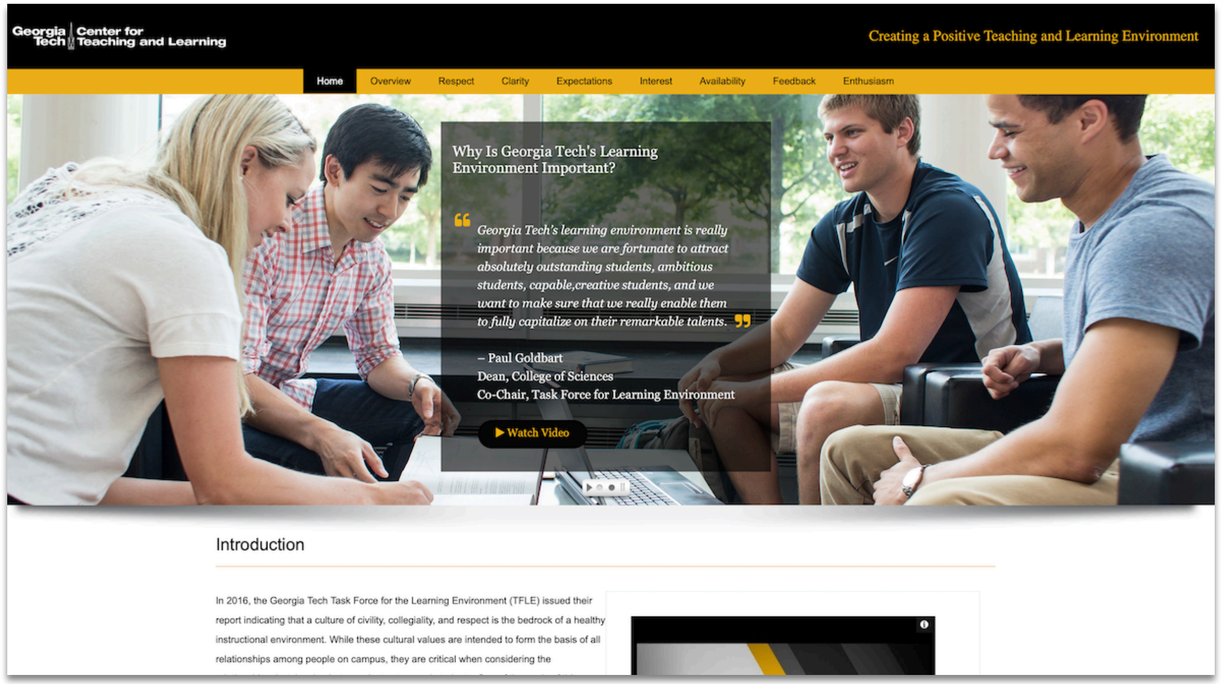
TA & Future Faculty Awards

CTL celebrates the contributions to teaching excellence at Georgia Tech made by our graduate and undergraduate teaching assistants. This year CTL recognized graduate and undergraduate TA Award winners, Tech to Teaching and CIRTL certificate recipients, Thank a Teacher recipients, and TA Fellows. This year's ceremony featured a hybrid format with 107 attendees in the Bill Moore Student Success Center and 65 attendees viewing the live-streamed ceremony from around the world.

The annual awards process opened in January. CTL requested all schools/departments conduct an internal competition to produce one person per each category: (1) Graduate Student Instructor of the Year; (2) Graduate Teaching Assistant of the Year; (3) Undergraduate Teaching Assistant of the Year; (4) Online Head Teaching Assistant of the Year; and, (5) Online Teaching Assistant of the Year. Each school-level winner was invited to submit an application to participate in the institute-wide TA of the Year competition. Each of the three institute-wide winners in each category received an award of $500.

Center for Teaching and Learning

CTL Online Resources



Creating a Positive Teaching and Learning Environment: An Online Toolkit for Faculty

In 2016, the Georgia Tech Task Force for the Learning Environment issued their report indicating that a culture of civility, collegiality, and respect is the bedrock of a healthy instructional environment. In response to this report, CTL was tasked with developing an online toolkit to help faculty recognize how instructional strategies and interactions with students contribute to a positive learning environment. One of the goals of this online resource is for faculty members to understand how the values of civility, collegiality, and respect translate into concrete strategies and measures that are considered effective teaching. The content of the Toolkit aligns directly with the student perceptions of teaching effectiveness found in the Course Instructor Opinion Survey (CIOS).

Visit the website

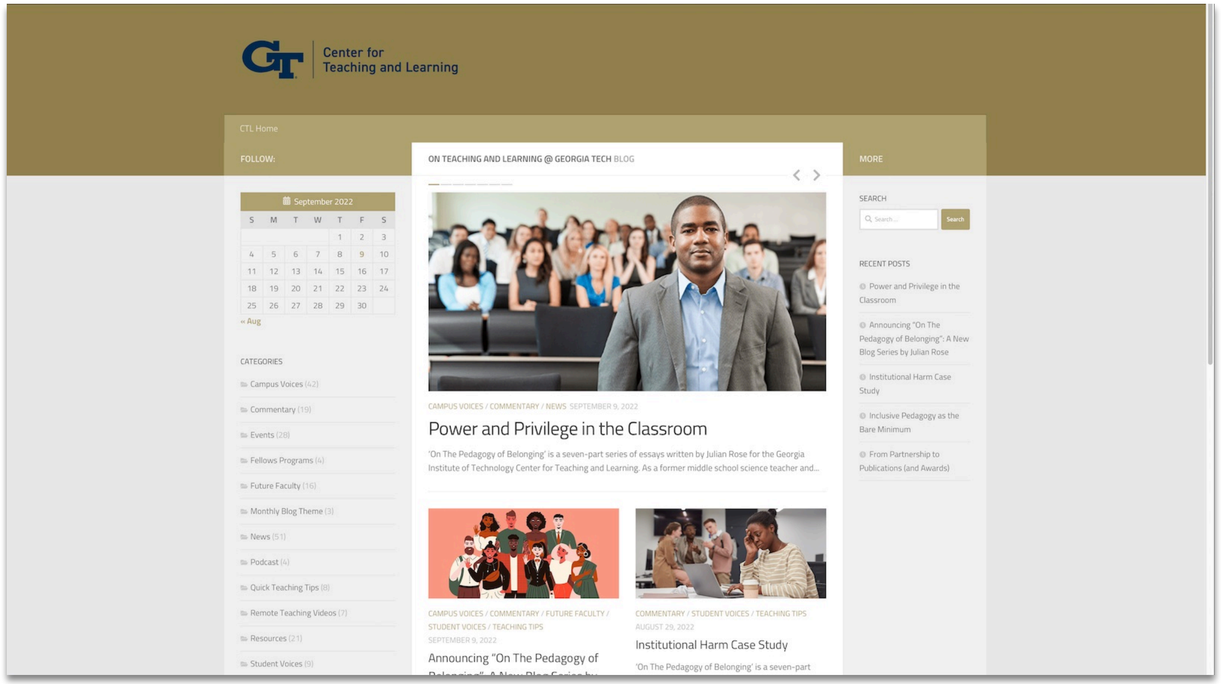
TA Online Training Program

CTL offers a variety of resources to enhance the teaching effectiveness of Georgia Tech's undergraduate teaching assistants (UTAs) and graduate teaching assistants (GTAs). CTL TA Development specialists conducted six TA orientations during the academic year, four in fall term and two in the spring term. To support TAs unable to attend these in-person orientations, CTL designed and deployed a series of TA training modules accessible via Canvas, Georgia Tech's learning management system. The modules cover academic integrity, FERPA, and disability services. Each module has interactive components and built-in assessment tools. Upon successful completion of the modules, students can print a document verifying participation.

Georgia Tech graduate and undergraduate teaching assistants completed **5,438** online modules in FY2021-2022.

Center for Teaching and Learning

CTL Online Resources



On Teaching and Learning @ Georgia Tech: CTL News and Resources Blog

On Teaching & Learning @ Georgia Tech, CTL's blog, features a range of articles from CTL staff and various contributors, with content such as teaching tips, inclusive teaching, reviews of workshops, and many more. Currently, users can access over 140 articles. During FY2021-2022, over 45,000 users accessed the blog with overr 115,000 page views.

Visit the blog

Over 45,000 users and 115,000 page views on CTL's blog during FY2021-2022.

Teaching and Learning Buzz Podcast

Teaching and Learning Buzz, a monthly podcast from the Center for Teaching and Learning at Georgia Tech, highlights teaching and learning topics important to the Tech community. Each month, we talk to campus and visiting experts as we explore challenging questions related to teaching and learning and share practical strategies for helping our students (and colleagues) learn and thrive at Georgia Tech and beyond. The first episodes of the podcast looked at the ethical implications of grading on the curve, student academic well-being, and an interview with Dr. Susan Blum, University of Notre Dame, who visited campus to discuss students' "superpowers." Post-spring shut down, the podcast compiled interviews with faculty experience teaching online.

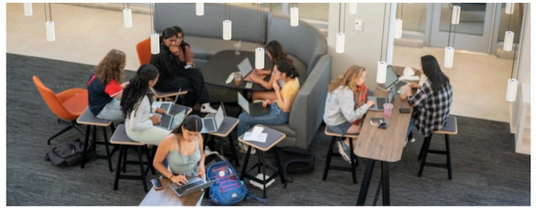
Listen to CTL Podcasts

Center for Teaching and Learning

CTL Online Resources

At Georgia Tech, our students are our top priority. We measure our success by their achievements and by the positive impact they have on the lives of others. Our faculty play an essential role in their growth, well-being, and development. The Institute is committed to providing you with the resources and tools you need to create an inclusive learning environment where every student can thrive and contribute to human progress.

Ángel Cabrera
President, Georgia Institute of Technology



Welcome Letter from Georgia Tech's Provost

Dear Colleagues:

Greetings! If you are new to our academic community, welcome. We are so glad you are here. And to those returning for another academic year, welcome back!

At Georgia Tech, we are working hard to deliver on the commitment and vision laid out in our Institute strategic plan. As a leading technological and research university committed to progress and service, our mission is developing exceptional leaders from all backgrounds, ready to produce novel ideas and create solutions that change people's lives for the better. At the heart of it all, for each of us, are our students. They are our top priority, and the reason we are here.

Our admissions process cultivates a student body with a demonstrated commitment to excellence and public service, and we are proud to be their institution of choice. As faculty, our job is not only to ensure they have the skill set and tool set to solve problems – but also to ensure they know how to seek out the most impactful problems to solve. Our graduates are globally minded, cross-culturally competent leaders who understand that the best solutions are those developed by and for all people.

These are qualities and skills nurtured in an inclusive environment of holistic learning, where the gifts and perspectives of all students are valued and developed. This kind of environment doesn't just happen; it must be intentionally cultivated. As faculty, we have a responsibility to our students and remarkable opportunities to nurture their well-being, to value their diverse perspectives, and to empower them to learn, discover, and try new things. We tend to think of this as the result of the things we do in the classroom over hours, days, and weeks – but it can also be the result of just a few moments, like an encouraging five-minute conversation.

I encourage you to check out the Academic Well-Being Project (academicwellbeing.ctl.gatech.edu) as well. This site is a place where faculty across all Colleges and disciplines can find and share best practices for academic well-being in large and small classes, studios, and labs. I hope you will take a moment to explore what your fellow faculty members are doing to create a healthy and vibrant learning community and contribute your own techniques and strategies to the conversation as well.

I look forward to this year. Thank you for all you do for our students and this community.

Sincerely,

Teaching at Georgia Tech
A Guidebook for Faculty, Instructors, and Teaching Assistants

Every year, CTL produces a guidebook for instructors. Due to the pandemic, the printed version of the 15th and 16th editions were not produced. However, an interactive, electronic version of the Guidebook was made available to participants in New Faculty Orientation and part-time faculty at the New Faculty Welcome Event in fall. Instructors of CETL 8000, a TA development course, also used the guidebook as a resource in their classes. The online version of the guidebook is highly interactive with numerous links to additional information and relevant offices. While not technically released in FY2021-2022, the 17th Edition of the guidebook is included here so that faculty can download the latest version (also available in print).

Access the Guidebook Online

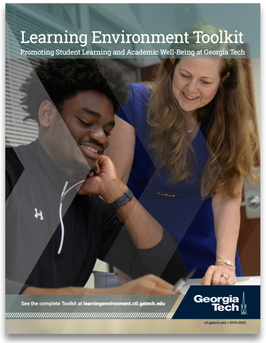
Inclusive Teaching Strategies

A sense of belonging in relationship to underrepresented students is particularly important since research shows that women, students of color, first-generation students, and economically disadvantaged students are more likely to experience uncertainty about their belonging and potential than majority students. Thus, creating a learning environment that supports all students' need for belonging will foster a student's sense of well-being.

Inclusive teaching strategies include

- Learning students' names; using name tents.
- Providing opportunities for students to

Learning Environment Toolkit, 2nd Edition
Promoting Student Learning and Academic Well-Being at Georgia Tech



A second edition of the Learning Environment Toolkit booklet was created during spring term 2020. The new version of the booklet contains six new pages dedicated to student academic well-being. Grounded in self-determination theory, the new section provides numerous teaching strategies and course design ideas to facilitate a student's need for autonomy, competence, and belongingness. When satisfied, these basic needs contribute to student motivation and a sense of well-being. The booklet also contains an 18-page section on student perceptions of teaching effectiveness and how those perceptions align with Tech's Course Instructor Opinion Survey (CIOS).

Access the Toolkit Online

Center for Teaching and Learning

CTL Online Resources

1. **Facilitating Group Discussions** A resource for preparing and facilitating engaging, active discussions any course.
2. **Dealing with the Unexpected** Practical strategies for classroom challenges such as canceled classes, distressed students, "hot" discussion moments, and traumatic events.
3. **Connecting Across Generations** Advice for understanding and working with this generation of students.
4. **Grading and Assessing Student Learning** A comprehensive resource on anything and everything related to grading and assessment at the collegiate level.
5. **Gathering and Responding to Feedback about Teaching** A compendium of strategies for collecting and using student feedback on teaching, including short in-class assessments and facilitator-led focus groups.
6. **Teaching with Technology** A set of blog posts from CTL faculty on leveraging technology in the classroom to engage students.
7. **Learning Environment Toolkit** An extensive online resource to support instructor awareness of the learning environment and its significance in guiding teaching and learning. (PDF version)

Developing as a Teaching Professional

1. **Using Individual Development Plans in Mentoring** A tool that can be used to chart a personal plan to reach a career goal as well as a mentoring strategy.
2. **Engaging with CTL** CTL faculty are available to observe a class meeting, conduct a small group discussion with your students, and consult with you individually on your development as an instructor.
3. **CTL Events** and **Ongoing Groups** CTL offers a variety of events, workshops, and faculty groups that focus on understating and improving teaching and learning.
4. **Growing as a Future Faculty Member or Teaching Assistant** Events offered through the Tech

Teaching and Learning Resources

Teaching and learning at Georgia Tech is an exciting endeavor core to the mission of the Institute. This section of the CTL website provides quick links to important policies, practices, offices and campus support structures as well as a variety of resources created by the Center for Teaching and Learning to support instructors in the pursuit of excellent teaching. Resources cover different aspects of effective courses, engaging students, and growing as a teaching professional.

Access the Resources

Satish Kumar, Mechanical Engineering

I look for common mistakes in assignments/tests, discuss them during class lectures after assignments/tests were returned. I make problems which emphasize these mistakes, and work with students to solve them during class lectures.

A good distribution of grades over few exams, projects and assignments helps students to not give up after one bad exam. I encourage students to share the problems they are facing in understanding course materials or performing well in the exams and give them opportunities for make-up exams if they have done poorly in one of the tests.

Danielle Willkens, Architecture

We complete project reflections that allow students to evaluate their work shortly after submission, identifying their strengths, developments, and other opportunities for growth.

To create supportive learning conditions, we move between group reviews and one-on-one sessions.

There are multiple projects, scaffoldings skills, so students have several opportunities to push through workflows and no one project can sink their grade.

Community and Social Connection
Sense of Purpose
Inclusivity and Equity
Mindfulness
Balance
Partnership
Resilience and Growth
Contact Us

Credits / Contact Us

The academic well-being website is the culmination of work conducted by a Georgia Tech faculty learning communit comprised of Provost Teaching and Learning Fellows.

Participants included:

Dr. Satish Kumar, ME
Dr. Charles Rudolph, ARCH
Dr. Jake Soper, CHEM
Dr. Linda Wills, ECE

Academic Wellbeing Project

Georgia Tech's new strategic plan calls for the cultivation of well-being both in and out of the classroom. To promote this goal and contribute to its realization, a Center for Teaching and Learning (CTL) Faculty Learning Community (FLC) developed a website with best practices for academic well-being, which feature faculty voices from across colleges and disciplines.

The FLC identified seven factors that contribute to the academic well-being of students in higher education with an emphasis on Tech. These contributing factors for academic well-being include: (1) resilience and growth; (2) inclusivity and equity; (3) sense of purpose; (4) mindfulness; (5) equilibrium; (6) partnership; and, (7) community and social connection. Visit the website to learn more about what Tech faculty are doing to foster academic well-being for students enrolled in their courses. CTL also invites you to contribute to the site.

Access the Project

Center for
Teaching and Learning

2021 - 2022 Annual Report

ctl.gatech.edu

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