The Eberly Center cultivates diversity, equity, inclusion, and belonging (DEIB), supports educational innovation, and enhances teaching and learning at CMU and beyond through 1-on-1 consultation services, group programs, DIY web resources, and scholarship.

Our expertise creatively combines data science, technology-enhanced learning, and research-based learning principles to meet emerging educational development needs.

Our DEIB- and student-centered approach is evidence-based, collaborative, and formative, rather than evaluative, allowing us to meet each instructor wherever they are in their development as educators and then help them iteratively refine their teaching and student learning.

Approximately half of our work supports CMU’s faculty and staff, with the other half supporting student and postdoctoral educators.

This annual report highlights the depth and breadth of our reach and contributions.

Foster & Sustain

"The Eberly Center intentionally prioritizes resources for 1-on-1 consultation services to foster sustained and impactful relationships with instructors."

"Over a three year period, we consulted with 840 faculty and staff, 1/3 of whom maintained ongoing collaborations with us for 2-3 years."

Annual Report 2022-23

Chad Hershock, PhD
Executive Director
At the university-, college-, and department-levels, we designed and facilitated 29 DEIB programs including:

13 programs for 259 faculty/staff instructors (who filled 311 seats).
16 programs for 444 graduate and postdoc students (who filled 541 seats).

We help instructors from all seven Schools/Colleges collect, analyze, and interpret rigorous quantitative and qualitative data on learning outcomes to iteratively refine teaching and learning, including:

183 instructors in 90 courses and/or 59 academic programs and student support units.
104 Early Course Feedback services gathering anonymous student feedback via focus groups or surveys for 75 instructors and 100 CMU courses.
87 program-level assessment services for CMU academic and student support units.

Improving teaching, learning through data-informed practices

Centering diversity, equity, inclusion, and belonging in our programs & services

At the university-, college-, and department-levels, we designed and facilitated 29 DEIB programs including:
13 programs for 259 faculty/staff instructors (who filled 311 seats).
16 programs for 444 graduate and postdoc students (who filled 541 seats).

We consulted with 148 instructors on technology-enhanced teaching/learning across multiple modalities: in-person, remote, and hybrid. Our services included:
3,322 technology help desk support services provided.
35 new TEL tools developed, vetted, and/or supported for use in CMU courses.
4 new CMU Online courses designed, implemented, and assessed.

Enhancing, innovating teaching & learning with technology
Demand for services continues to increase

Eberly Center supported 620 faculty/staff through consultations and group programs

We provided 430 faculty/staff educators (including 37 CMU-Qatar instructors) with consultations on evidence-based teaching strategies, technology-enhanced learning, and/or assessment of student outcomes, including:

- 435 CMU courses overall
- 296 instructors modifying pedagogical strategies and/or (re)designing courses

We also designed and facilitated professional development programs attended by 354 faculty and staff educators filling 491 seats, including these signature offerings:

- 6th Annual CMU Teaching & Learning Summit (58 faculty and staff)
- Incoming Faculty Orientation (53 faculty)
- Spotlight on Diversity, Equity, Inclusion, and Belonging in Teaching (42 faculty/staff)
- CMU-Qatar Workshops on Teaching and Learning (42 faculty)
- Provost’s Inclusive Teaching Fellows program (23 faculty)
- Innovative Models for Undergraduate Research program (9 faculty)
- Wimmer Faculty Fellows program (4 faculty)
- Teaching as Research Institute (4 faculty)
• **508 Teaching Assistants and Instructors of Record** attended campus-wide Graduate and Undergraduate Student Instructor Orientations, preparing them for their CMU teaching responsibilities across 44 academic units.

• **177 students filled 354 seats** at our other university-wide seminars and workshops on evidence-based teaching and learning principles.

• **141 graduate students and postdocs** received **246 individual consultations** on teaching.

• **29 graduate students and postdocs** attended the inaugural Mentoring Undergraduate Researchers Institute (co-hosted by the Office of Undergraduate Research and Scholar Development).

We supported **259 graduate students and postdocs** in our **Future Faculty Program**, preparing them to teach effectively and inclusively as junior faculty members.

• **92 new participants** enrolled in the program.

• **22 participants** finished the program requirements.

We trained **7 Graduate Teaching Fellows (GTFs)** in advanced, evidence-based teaching methods and teaching consultation techniques.

**GTFs provided:**

• 74 teaching consultation services for 60 graduate students and postdocs.

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**Our award-winning website provides a treasure trove of DIY resources on evidence-based teaching and learning**

>2.5 million visitors annually to [https://www.cmu.edu/teaching/](https://www.cmu.edu/teaching/)

**Highlights include:**

• New resources regarding **generative AI in education**

• Guidance on **centering diversity, equity, and inclusion** in teaching

**Spotlight on Innovative CMU Teaching**

CMU instructors are innovators. Faculty and student instructors share their creative, transferable solutions to common teaching and learning challenges.

[https://www.cmu.edu/teaching/spotlight/](https://www.cmu.edu/teaching/spotlight/)

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**Our TEL team significantly contributed to broader CMU initiatives**

**CMU Online**

• **Designed 4 new online courses** in preparation for the Fall 2023 launch.

• Supported the design of and **launched the public-facing website** for CMU Online. [https://www.cmu.edu/online/](https://www.cmu.edu/online/)

• **Online TEL ecosystem: 5 new tools** were vetted, integrated, or developed to support the ecosystem for online learning.

**Core Competencies Initiative (CCI):**

• **CCI website**: Developed and delivered the Core Competencies website for CMU educators to use. [https://www.cmu.edu/corecompetencies/](https://www.cmu.edu/corecompetencies/)

• **CCI Dashboard**: Began process of collecting data sources to analyze and display students’ core competencies progress.
The Eberly Center contributes to the scholarship on teaching, learning, and educational development

How effective is asynchronous, online training for graduate and undergraduate student instructors?

Chad Hershock, Michael C. Melville and Jacqueline Stimson
Eberly Center for Teaching Excellence and Educational Innovation, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA, and Harvard DigiDiv

See also: Teaching as Research faculty projects and publications www.cmu.edu/teaching/teaching-as-research/

Thin-Sliced Embedded Direct Assessment (T-SEDA): Measuring Impacts of Development Workshops on Participants’ Learning Gains

Chad Hershock, Jacqueline Stimson, Laura Ochs Pottmeyer, Michael C. Melville, Jessica Harrell, Emily Daniels Weiss, Mariella Rodriguez, Sophie le Blanc, & Alexis Adams

Cultivating and Sustaining a Faculty Culture of Data-Informed Teaching: How Centers for Teaching and Learning Can Help

Marsha Lovett, Chad Hershock, and Judy Brooks
Carnegie Mellon University


How Learning Works: Eight Research-Based Principles for Smart Teaching, 2nd Edition

Lovett, Marsha C.; Bridges, Michael W.; DiPietro, Michele; Ambrose, Susan A.; Norman, Marie K.
Jossey-Bass, An Imprint of Wiley

As educators in the ever-evolving landscape of higher education, we are continuously challenged to keep our courses effective, engaging, relevant, and inclusive. The updated and expanded second edition of "How Learning Works" can help. It incorporates the latest research, provides a wider range of strategies, and adds a new principle to your toolkit. Readers will find eight essential learning principles that distill the overwhelming research literature into: (1) Real-world teaching and learning scenarios, (2) Examples that reflect a diverse set of teaching environments and learner populations; and (3) 150 practical strategies you can apply to your teaching context. With these practical, broadly applicable insights, you can: (1) Understand why your successful
Eberly Center Team

Leadership Team
Chad Hershock, PhD
Executive Director

Judy Brooks, MDes
Director of Design, Technology-Enhanced Learning (TEL) & CMU Online Programs

Emily Weiss, PhD
Associate Director, Faculty Teaching Initiatives

Jacqueline Pincus, PhD
Associate Director, Graduate Student & Postdoc Teaching Initiatives

Michelle Pierson
Business Administrator

Teaching Consultant Team
Sophie Le Blanc, PhD
Senior Teaching Consultant

Phoebe Cook, PhD
Teaching Consultant

Yoko Nakamura, PhD
Teaching Consultant

Patrick Walsh, PhD
Teaching Consultant

TEL Team
Zachary Minoff
Senior Learning Engineer

Harley Chang, Ed.M., M.S.
Learning Engineer

Avi Chawla
Learning Engineer

Lynn Kojtek, MSIT
Learning Engineer

Alex McGough
Educational Technology Consultant

Roberta Serbin
Educational Technology Consultant

Meg Richards
Senior Systems Software Engineer

Martin van Velsen
Senior Systems Software Engineer

Nathan Mazur
Senior Multimedia Designer

Data Science Research Team
Michael Melville, PhD
Senior Data Science Research Associate

Laura Pottmeyer, PhD
Senior Data Science Research Associate

Allison Connell Pensky, PhD
Data Science Research Associate

The Eberly Center reports to
Marsha Lovett, PhD
Vice Provost for Teaching & Learning Innovation

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