

Vanderbilt Collaborative for STEM Education and Outreach | Department of Teaching and Learning

Commitment Statement in support of the National Academies of Sciences, Engineering, and Medicine Collaborative for Advancing Science Teaching and Learning in K-12 (CASTL-K12)

July 1, 2025

The mission of the Collaborative for STEM Education and Outreach (CSEO), a unit within the Department of Teaching and Learning at Vanderbilt's Peabody School of Education, is to create and enhance partnerships, develop and share resources, and provide opportunities that engage K-12 students and educators in the process of STEM discovery. The programs we develop and implement closely align with the best practices and core ideas outlined in the [Framework for K-12 Science Education](#). The CSEO's largest partnership is between Vanderbilt University and Metro Nashville Public Schools. Through several programs at both the middle and high school levels, curriculum is structured to engage students in the scientific and engineering practices outlined in the *Framework*. In part, we leverage scientific and engineering expertise at a large Research I university to bring authentic inquiry-based projects to the classroom where students are the drivers in planning and carrying out investigations. Student research is a vehicle for students to not only learn STEM content, but to put concepts into practice and communicate ideas, truly becoming participants in the process of discovery.

The CSEO and the Department of Teaching and Learning are committed to working with other entities nationwide towards actions that result in high-quality science education for all students, in part through coordinated efforts to retain and sustain high-quality science educators. We endeavor to share best practices from our programs and partnerships as well as learn from other organizations about effective and innovative practices that make the process of science accessible to everyone.

Together, CASTL-K12 members will pursue four primary goals to:

- develop a coherent strategy for supporting implementation of science standards across states and districts,
- launch and coordinate a networked community of practice for stakeholders at all levels and across sectors,
- build on and share existing evidence-based policies, tools, and examples,
- develop a coherent communication and engagement strategy for advancing K-12 science and engineering education broadly.



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Department of Teaching and Learning*

**We, the CSEO, commit to supporting the goals of the National Academies of Science, Engineering, and Medicine's Action Collaborative on Advancing Science Teaching and Learning in K-12.**

A handwritten signature in black ink that reads 'Angela Eeds'.

Angela Eeds, Ph.D.

Executive Director, Collaborative for STEM Education and Outreach