

Florida State University's Commitment Statement in support of the National Academies of Sciences, Engineering, and Medicine Collaborative on Advancing Science Teaching and Learning in K-12

January 27, 2025

As a public, research-intensive university, Florida State University's mission is to preserve, expand, and disseminate knowledge in the sciences, technology, arts, humanities, and medical and legal professions, while embracing a philosophy of learning strongly rooted in the traditions of the liberal arts. The university is dedicated to excellence in teaching, research, creative endeavors, and service. The university strives to instill the strength, skill, and character essential for lifelong learning, personal responsibility, and sustained achievement within a community that fosters free inquiry and embraces diversity. A part of Florida State University's core values is *Transformative Daring*, in which the community supports thoughtful risk-taking that leads to successes that improve our world dramatically. We see our faculty's participation in the National Academies Collaborative on Advancing Science Teaching and Learning in K-12 as an avenue to act on this core value.

In 2012, the National Academies of Sciences, Engineering, and Medicine (NASEM) introduced in *A Framework for K-12 Science Education*, launching a decade-long nationwide initiative to enhance science education in the United States. Rooted in extensive research on science teaching and learning, the Framework guided the creation of new educational standards and spurred changes in curriculum, instruction, assessment, and professional development opportunities for science educators. While the Framework has driven substantial progress, including preparing students to engage in science-related public discourse and pursue scientific careers, research has documented time and time again that change in the work of science teaching requires concerted and synergistic efforts between education stakeholders at the national and state levels to develop evidence-based policies and practices that support more meaningful and empowering approaches to science teaching, and in turn, student learning (Southerland et al., 2007).

To advance these efforts, Florida State University is joining other institutions and the National Academies of Sciences, Engineering, and Medicine to form a Collaborative on Advancing Science Teaching and Learning in K-12 (CASTL K-12). This Collaborative will facilitate partnerships and joint action for identifying, designing, planning, enacting, and documenting short-term "actions" aimed at improving the implementation of state-level science standards. The work of this collaborative includes developing, sharing, compiling, exchanging, and identifying practices that are innovative, promising, and evidence-based for creating the conditions that support the implementation of state-level science standards.

It is anticipated that the tools designed by the CASTL-K12 can serve as a resource for state-level education leaders when state legislative rules call for a revision of standards.

CASTL-K12 will pursue four primary goals:

- develop a coherent strategy for supporting the 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.

Florida State University commits 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.

Sincerely,

Dr. Janet Kistner Vice President

Office of Faculty Development and Advancement