Science Collaborative

The Science collaborative supports state science supervisors and science assessment leads in cross-state efforts to improve science teaching and learning across the country through strategic support for high-quality instructional materials, assessments, professional learning, and state policies. The Science collaborative supports better science standards implementation by:

- Providing opportunities for cross-state conversation and strategic planning.
- Collaboratively developing high-impact resources to support state education agencies (SEAs) as they move science forward in their states.
- Connecting state leaders with research and policy expertise to grow state networks and science leaders’ capacity.

2018-2019 Highlights:

- Strategic planning to support states as they determined how to address the biggest challenges facing science education, within and across states. This includes both the development of necessary resources as well as cross-state support for how to leverage these resources to move science education forward for all learners across member states.
- Development of several tools and resources that are designed to place equity at the forefront, including:
  - A teacher-centered self-monitoring tool to promote teacher empowerment in the shift toward three-dimensional standards with an emphasis on recent research focused on the intersection between rigorous science expectations and culturally responsive and sustaining teaching and learning environments.
  - An elementary science brief highlighting the importance of science in early grades for all learners.
  - A framework to guide states’ efforts focused on building systems of assessment, with a focus on the decision points needed to develop coherent and meaningful interim assessment systems, with an emphasis on equity considerations for these assessments.
  - A framework to help states support local efforts in family and community engagement in science as a pathway for better supporting diverse learners.
- School visit to Camino Nuevo Schools to observe science teaching and learning with emerging bilingual students from diverse cultural and linguistic backgrounds.
- Opportunities for professional learning from and collaboration with nationally recognized experts, including researchers from CU-Boulder and Stanford; leaders of the Mid-Atlantic Equity Consortium; connections to work with the ACESSE project and SPA-LC.
- As a result of this work and the centered emphasis on equity, state members have had strategies, tools, and resources to use within their SEAs to move equity to the forefront of their work.

2019-2020 Goals

CCSSO believes it is incumbent on states to set high expectations for student success by creating opportunities and removing barriers for all learners, particularly those traditionally underserved.
students. The Science SCASS is working toward this vision by leveraging and building its state members’ collective expertise to create change within and across states to support effective science teaching and learning for all students. This year, the Science SCASS will:

- Learn from experts and researchers in the field as well as other state teams to better connect state efforts to support educators and the implementation of high standards in the classroom;
- Offer opportunities for professional learning guided by nationally recognized experts in science education, standards implementation, instruction, and assessment;
- Build on current efforts to explicitly leverage state initiatives and policies to better support equity in science education. This may include:
  - Leveraging the interim assessment framework to incorporate research-based supports for diverse learners into formal systems of assessment;
  - Developing strategies for SEAs to better enable and support local efforts to engage communities and families in students’ science education;
  - Exploring state initiatives as access points and opportunities for SEAs to signal and incentivize best practices at the intersection of rigorous expectations in science and supports for diverse learners.

Anchor Document:

Framework for K-12 Science Education

Biography of Advisor:

Matt Krehbiel is Director of Science at Achieve. Matt is specifically responsible for managing Achieve’s Educators Evaluating the Quality of Instructional Products (ÉQuiP) initiative for science and the Primary Evaluation of Essential Criteria (PEEC) instructional alignment tool.

Aneesha Badrinarayan joined the Achieve staff in 2014 and serves as the Director for Special Projects & Initiatives. She provides support for the implementation efforts surrounding the Next Generation Science Standards, with a particular emphasis on supporting states and districts with the development and use of high-quality assessment systems.

2018-19 State Members Included:

AR, CA, CT, DC, DoDEA, DE, GA, HI, ID, IL, IA, ME, MD, MI, MO, NE, NM, NC, OH, OR, SC, SD, TN, UT, USVI, WA, WI, WY

2018-19 Partners Included:

AIR, DRC, Measured Progress, NWEA, Pearson, Texas Instruments, WestEd