

Published on *American Geosciences Institute* (<https://www.americangeosciences.org>)

Home > AGI Launches Initiative to Study Student Learning of 'Streams of Data'

---

## AGI Launches Initiative to Study Student Learning of 'Streams of Data'

November 1, 2019 (ALEXANDRIA, Va.) - The American Geosciences Institute (AGI) is pleased to announce a new initiative to conduct research on ways students currently use, and can more effectively use, the scientific data sets of federal agencies and other organizations to learn science and mathematics.

AGI is undertaking the "Streams of Data" initiative in collaboration with the Education Development Center (EDC), a major contributor to science and math curricula in the United States and abroad, and with funding provided by the National Science Foundation.

The three-year project will explore a key transition in the development of data literacy skills, as students move from working with small, self-collected data sets to the larger, professionally collected data sets of agencies such as the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Geological Survey (USGS). This work will leverage increasingly available geoscience data resources, which connect to observable aspects of the natural world, have personal relevance, and align with Earth science curriculum standards.

Specifically, the initiative will develop and test an approach that shows how fourth-grade students--supported by scaffolded learning experiences that help them gradually shed external assistance--can develop the analytical thinking skills necessary to work with large, complex data sets. Year one will focus on collecting data on student sense making with respect to data and phenomena. In year two, researchers will develop and test educational activities to help students explore and understand data with increasing independence. In year three, the project will assemble multi-component educational experiences based on previous findings.

"The 'Streams of Data' project offers a great deal in terms of understanding how educators can help develop students' data literacy," said AGI Director of Education and Outreach Dr. Edward Robeck, who is leading the initiative for AGI. "We are glad to have the partnership of EDC and local schools in this effort, which holds such promise for elevating young people's ability to navigate today's data-rich world."

### **About AGI**

The American Geosciences Institute (AGI) is a nonprofit federation of more than 50 scientific and professional associations that represents over a quarter-million geoscientists. Founded in 1948, AGI provides information services to geoscientists, serves as a voice of shared interests in the profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in society's use of resources, resiliency to natural hazards, and interaction with the environment.

AGI is a not-for-profit 501(c)(3) organization dedicated to serving the geoscience community and addressing the needs of society. AGI headquarters are in Alexandria, Virginia.

*The American Geosciences Institute represents and serves the geoscience community by providing collaborative leadership and information to connect Earth, science, and people.*

---

AGI Contact:

Geoff Camphire, Associate Director of Communications

[gac@americangeosciences.org](mailto:gac@americangeosciences.org)

---