



NGSS-ESS Implementation Working Group

NGSS-ESS Working Group 2020-2021 Annual Report

Executive Summary:

Beginning in 2015 the American Geosciences Institute's Center for Geoscience and Society, the National Association of Geoscience Teachers, and the National Earth Science Teachers' Association collaborated on a working group focused on providing:

- A webinar series of 7-9 webinars per year
- Conference presentations
- Facilitating discussions, communication with, and seeking feedback from an Advisory Panel
- Teacher professional development workshops
- Developing additional programming to serve the NGSS-ESS community, such as GSA and AGU

NGSS-ESS Working Group core team:

Aida Awad, NAGT

Ed Robeck, AGI

Missy Holzer, NESTA

2020-2021 Webinar Series

The webinar series is designed to touch on a variety of topics of interest to educators implementing the NGSS-ESS. Broadly, the webinars fall into four categories: classroom teaching resources, teacher preparation and support, learning about the NGSS (e.g., NGSS basics), and extending NGSS-ESS (e.g., through curricular integration). The webinars provide opportunities for learning, sharing, and discussion, but more broadly they serve as a concrete demonstration of the long-term value given to K-12 education by members of the geoscience and geoscience education communities.

The 2020-21 webinar series included the following webinars:

September 9, 2021 - [Welcome Back! Making science education meaningful through designing authentic ESS learning to reach all students](#)

May 13, 2021 - [Geoheritage Elements to Enrich ESS Teaching](#)

April 9, 2021 - [Social Media, from the chat room to the classroom](#)

March 11, 2021 - [Inspiring ALL Geoscience Learners Nationwide with PBS](#)

February 13, 2021 - [Soil Biology, Chemistry, and Physics... Oh My!](#)

November 12, 2020 - [Using an American Museum of Natural History Teaching Case to Analyze and Interpret Patterns of Ice Mass Loss in Greenland and Antarctica](#)

October 10, 2020 - [Passing the Sniff Test: What Matters Most When Looking at Earth and Space Science Instructional Materials](#)

2021-2022 Webinar series - year 7 continues:

The 2021-22 webinar series kicked off September 9, 2021 with “Welcome back! Making science education meaningful through designing authentic learning to reach all students,” a webinar presented by representatives from 2 organizations: WestEd and NGSS Phenomena. It will be followed by webinars in October, November, January, February, March, April, and May (fall webinar topics and presenters are confirmed, some spring topics TBA).

October 21, 2020 - ESRI - title TBA

November 12, 2020 - NAP - Report and action items from the NGSS-ESS community from the NAP - Taking Stock of Science Standards Implementation: A Summit

January, 2022 - UCG, Understanding Global Change - UC Berkeley and HHMI

February, March, April and May 2022 TBA

GSA NGSS-ESS Working Group Workshop

Collecting Field-Based Assets: Honoring Leave No Trace Principles While Preparing Instructional Resources - On Tuesday, October 5, 7-8:30 p.m. ET prior to the GSA field trips and other excursions, the NGSS-ESS Working Group is offering a 90 minute workshop and discussion session for anyone interested in geoscience education, including those who participated in a field trip as part of the GSA meeting, addressing ways that educators can collect instructional assets in the field while maintaining ethical field travel principles (e.g., such as the “Leave No Trace” principles used in the National Parks). An optional second session will be held on Sunday, October 10, at 4 p.m. ET (1 p.m. PT), which will be an open workshop session in which participants will have support in assembling assets into their own custom-designed instructional resources.

AGU GIFT Workshop

The AGU GIFT (Geophysical Information For Teachers) workshop has been a project with collaboration between NESTA and AGU for several years. Following a successful transition to the NGSS-ESS Working Group, the GIFT Workshop continues in 2021 at the AGU Fall Meeting with a virtual workshop. We are still in the early stages of planning and recruiting presenters, and on a short timeline. The format for the half-day virtual workshop will be announced soon, but it is likely to include share-a-thon type presentations, and a longer deep dive workshop and a discussion segment. A call for presentations will be issued soon.

Needs Assessment

Needs assessment surveys of the NGSS-ESS community provide valuable guidance as we consider programming for the upcoming year(s). The most recent needs assessment was conducted in 2018. During the summer of 2021 we developed a new [needs assessment](#) which was distributed widely through the NGSS-ESS Working Group listserv, the Earth Science Week listserv and NESTA’s network.

The results from this survey will inform our programming in the near future. At the time this report was written the survey was still open. Results will be reported once they are available.

For those not familiar with the programming since 2015 please visit:

[NGSS-ESS Working Group Programming History](#)

Please feel free to reach out to me if you'd like more information or have thoughts/suggestions:

Aida Awad

aawad@tothecloudedu.com