



NGSS-ESS Implementation Working Group

NGSS-ESS Working Group 2019-2020 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 PD workshops
- Developing additional programming to serve the NGSS-ESS community

NGSS-ESS Working Group core team:

Aida Awad, NAGT
Ed Robeck, AGI
Missy Holzer, NESTA

2019-2020 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 community.

The 2019-2020 webinar series included the following webinars:

May 14, 2020 - [Promoting Diversity in the Geosciences: Meet the IF/THEN STEM Ambassadors](#)

April 9, 2020 - [Beyond earthquake locations: \(MORE\) Modern seismology in the NGSS classroom?](#)

March 26, 2020 - [How to "NGSS-ify" the Question Formulation Technique: A Deep Dive](#)

March 5, 2020 - [Teach Students How to Ask Their Own Questions To Explore Phenomena in an NGSS Classroom](#)

February 13, 2020 - [Beyond earthquake locations: Modern seismology in the NGSS classroom](#)

October 10, 2019 - [Webinar: Operationalizing the Earth Science Week theme in K12: Geoscience is for everyone](#)

November 7, 2019 - [Webinar: NASA Resources Support Instruction of NGSS Earth System Phenomena](#)

2020-2021 Webinar series:

The 2020-21 webinar series kicked off September 10, 2020 with “NGSS-ESS Mini-series part 1: Remote Teaching & Learning Resources,” a webinar presented by representatives from 11 organizations that provide freely available NGSS-ESS resources for virtual teaching and learning. 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).

November 12, 2020 - [Passing the Sniff Test: What Matters Most When Looking at Earth and Space Science Instructional Materials](#)

October 15, 2020 - [NGSS-ESS Mini-series: MORE! Remote Teaching & Learning Resources, part 2](#)

September 10, 2020 - [NGSS-ESS Mini-series: Remote Teaching & Learning Resources, part 1](#)

Upcoming scheduled webinars:

February 2021 - Soil Society of America - Title TBA

March, April and May 2021 TBA

NGSS-ESS Working Group Advisory Panel

August 18, 2020 Advisory Panel meeting

[The NGSS-ESS Working Group Advisory Panel was brought together for a 90 minute Zoom meeting in August.](#) The goals for the meeting were to: re-engage a variety of stakeholder groups interested in NGSS-ESS Implementation in discussions focusing on the status of NGSS-ESS implementation, stakeholder group needs and future programming of the NGSS-ESS Working Group. A pre-meeting survey was conducted, results are shown in the slides linked above, as well as a post-meeting feedback survey. Thirty people participated in the meeting representing the following stakeholder groups: K-12 teachers, professional organizations, federal level, professional development, and teacher prep. Information and feedback from the meeting are being used to plan future programming and to guide the efforts of the NGSS-ESS Working Group.

Working Group members: Aida Awad, representing NAGT; Ed Robeck, representing AGI; Missy Holzer, representing NESTA.

New Projects: NGSS-ESS GOLI Courses

In an effort to continue to support geoscience educators who are interested in NGSS-ESS implementation, the NGSS-ESS Working Group is developing plans to create Geoscience Online Learning Initiative courses, GOLI. The courses would allow participants to earn CEUs for viewing and implementing activities and resources that were the focus of NGSS-ESS Working Group webinars.

We have approached two presenter groups for permission to develop GOLI courses around the webinars they presented last spring:

- IRIS - Beyond EQ locations and MORE Beyond EQ locations

- Right Question Institute - Teach students how to ask their own questions to explore phenomena in an NGSS classroom and How to NGSS-ify the QFT

Here are some details about the course we'd create around the webinars:

- Each CEU translates into 10 contact hours. Since the course would be covering 2 webinars, 0.2 CEU would be offered.
- No additional work would be required from the presenters to develop or promote the course.
- GOLI courses consist of viewing the webinar video, oftentimes in small topic based chunks of about 10 minutes, and then answering quiz type questions.
- While there would be a small fee for taking the course, probably \$15-20 for 0.1 CEUs, the fee would be set to only cover the fee for the platform, accreditation agency and documentation. The CEUs are provided by an agreement between AGI (American Geosciences Institute) and AIPG (American Institute of Professional Geologists) which holds IACET (International Association for Continuing Education) accreditation. In other words, not-for-profit.
 - Here's a link to the AGI GOLI webpage:
<https://www.americangeosciences.org/workforce/goli>

AGU GIFT Workshop

The AGU GIFT (Geophysical Information For Teachers) workshop has been a project with collaboration between NESTA and AGU for several years. With moving the AGU Fall Meeting to a virtual presence, the GIFT workshop model had to be changed to a virtual workshop. NESTA suggested that the NGSS-ESS Working Group combine assets to organize and run the workshop. We are still in the early stages of planning, and on a very short timeline. The format for the 2-hour virtual workshop will be announced soon, but it is likely to include share-a-thon type presentations, and a discussion segment. A call for share-a-thon presentations will be going out soon.

Conference presentations:

AGU 2019 - [Technical session talk: Webinars to Support NGSS-Earth Science Implementation & Geoscience Community Engagement](#)

AMS - 2019 - [Technical session talk: Building an NGSS-ESS Community Through Engagement with Webinars](#)

GSA - 2019 - T185. Sponsored technical session Time to explore: Actively engaging with rigorous 3-dimensional learning materials

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:

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