K-12 Professional Development Programs

Education GeoSource

These resources provide visitors with the widest possible collection of curricula, classroom activities, teacher professional development opportunities, science education standards, & much more.

EarthComm

(High School)
Acquire information about how to plan and lead workshops on Earth System Science in the Community (EarthComm) at this comprehensive professional development website.

IES

(Middle School)
Information about providing professional development on Investigating Earth Systems (IES) can be found on this website.

ESBD

(Middle School)
Earth Science by Design (ESBD) is a professional development program to enhance the capacity of middle and high school teachers of Earth science.

K-5 GeoSource

(Primary School)
This one-stop professional development website for teaching Earth science at the elementary level offers content, activities, and services.

NASA Triad

(Grades 6-12)
An online professional development guide for lead teachers to use in conducting workshops for peers using NASA’s extensive collection of geoscience, technology, engineering, and mathematics resources.
AGI: Earth and Space Science 2021

Introductory Earth science course for teachers in grades K-12 who will be teaching Earth and Space Science during or shortly after taking the course.

- Course flyer
- Course introduction
- Overview of course components
- Correlation to the TEKS
- Correlation to the NGSS

Earth Science Teacher Leadership Academy K-8

A week-long academy, funded by ExxonMobil, will be held virtually July 19, 20, 21, 26, 27, 29 in 2021. K-8 teachers will be provided with hands-on activities, educational resources, and leadership development opportunities. Email us at tla@americangeosciences.org.

Featured Member Society Programs

AGI is a federation of 52 member societies. Many of those member societies also provide outstanding resources for teachers. Three of those are featured below.

AGU/NESTA GIFT Workshops
The American Geophysical Union (AGU) works with the National Earth Science Teachers Association (NESTA) on the annual Geophysical Information for Teachers (GIFT) Workshops. The GIFT Workshops allow science teachers to hear about the latest geosciences research from the scientists making the discoveries explore new classroom resources for their students, and visit exhibits and technical sessions of the AGU meeting for free.

GSA TAP
The Teacher Advocate Program (TAP), from the Geological Society of America (GSA), provides K-12 Earth science teachers with professional development opportunities, digital resources, and connections to attend field experiences during the summer. TAP is a source of minds-on, easy-to-use, and inexpensive resources that are made available for classroom use. Resources are developed and maintained by a distinguished Earth science teacher in residence.

PRI Virtual Fieldwork
ReaL Earth System Science is a project of the Paleontological Research Institution (PRI) and its Museum of the Earth that helps introduce Regional and Local Earth system science using an inquiry approach. The project is grounded in the idea of using the local environment to understand the global environment.

NESTA Events at NSTA
The National Earth Science Teacher Association (NESTA) offers a full program of events at the National Science Teacher Association (NSTA) conferences. These happenings include field trips, multiple professional development workshops, Share-a-Thons, rock and mineral raffles, lectures, receptions, and membership meetings.

For more information about these and other programs, visit the Center for Geoscience and Society. There you will find databases of information about curricula, professional development, policy concerns, and much more.