

Seeking **Grades 6-12 Educators** to Participate in Field-Based Professional Learning and Research Activities

Place-Based Learning to Advance Connections, Education, and Stewardship (PLACES) is a program for teachers who teach Earth Systems* topics to youth in grades 6–12.

This program is informed by WestEd's proven Making Sense of SCIENCE (MSS) teacher professional learning model to engage teachers in data-rich Earth Systems learning through the integration of NASA data sets, images, and resources with instructional activities/lessons. A goal of PLACES is to use a "placed-based" approach to develop "data fluency" among a diverse demographic of teachers, students, and places. Individuals with data fluency are confident and able to use and make sense of data, knowing when, how, and why to use data for a specific purpose such as solving problems and communicating ideas.

The PLACES program draws upon a "place-based" approach for promoting data fluency. In a place-based approach, learning is anchored in authentic engagement with local phenomena, physical landscapes, and connections to cultures and communities.

Anticipated educator benefits for participation include:

- Exploring instructional strategies to help students effectively interact with data
- Accessing NASA resources to use in your classroom
- Deepening your abilities to identify and address common student difficulties when making sense of data
- Expanding your knowledge and teaching strategies for utilizing placed-based approaches to support students' data fluency
- Connecting with other teachers who are passionate about using a place-based approach to expanding data opportunities to all students
- * Earth Systems topics can include any in-school learning activities that focus on systems thinking related to earth processes (e.g., climate, geology, oceanic and freshwater systems, biological systems.

Overview

Who:

Educators who are in a position to teach 6th–12th grade students about an Earth Systems topic as part of in-school, classroom teaching.

• What & When:

Summer Professional Learning June 11–13, 2024

Community of Practice

September 2024–May 2025 Short synchronous virtual sessions in collaboration with colleagues One classroom visit per semester

Where:

Northern Arizona University Center for STEM Teaching & Learning | Flagstaff.

Field experience at historic Hat Ranch on the Colorado Plateau.

Compensation:

\$1700 for participation in all commitments (see next page) Travel stipends are available.

Teachers from Phoenix, and/or who work with youth who are Indigenous or recent immigrants and/or who are in the APS service territory, are encouraged to apply.

We encourage applications from teams of two or more educators who will collaborate in the Community of Practice during the school year. Each educator needs to complete the application.

Details regarding commitments for participation are on the next page



















Commitments for Participation

Attend a 3-day, in-person, summer professional learning

- Three days of professional learning in **June 11–13, 2024** in Flagstaff, Arizona
- 1–2 hours of preparation work, including participation in a virtual planning meeting on June 5th.
- Up to 20 minutes of homework and reflection after days 1–2 of professional learning

Participate in a Community of Practice

- Develop and/or implement a placebased, data-rich lesson to teach an Earth Systems topic in a way that incorporates the strategies and tools presented in the professional learning sessions and makes use of NASA resources.
- Short, synchronous virtual sessions with teaching colleagues from September 2024 to May 2025

All teachers will also be asked to:

- Complete all necessary forms to participate (e.g., sign a participation agreement, obtain photo release forms)
- Participate in professional learning feedback surveys and an online interview about your experiences



Photo by Allison Shelley/The Verbatim Agency for EDUimages

Interested in participating?

Complete this **online application**

If interested, please have applications submitted in April. We will begin accepting participants on a rolling basis by late-April to early May.

For questions and more information, please contact:

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