NISE NATIONAL INFORMAL STEM EDUCATION NETWORK

EXPLORE SCIENCE Earth & Space

NISE Network Earth & Space

Project-Based Professional Learning Community 2021 Application OVERVIEW

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INTRODUCTION

The National Informal STEM Education Network (NISE Network) is pleased to offer a funded opportunity to participate in a project-based professional learning community focused on making Earth & Space science relevant and inclusive for your community. In collaboration with NASA, the NISE Network is making this new professional development opportunity available to 100 eligible NISE Network partner organizations within the United States to support their efforts in making Earth & Space science relevant and inclusive and to promote a more equitable STEM future for their communities.

Each successful organization will receive $2,000 in funding to participate in the program's professional development activities and develop a project that aligns with your organization's mission and to increase relevancy and inclusion for Earth & Space science.

Successful applicants will be required to:

- Attend an online plenary kickoff meeting (October 26, 2021)
- Participate in five online planning sessions (November 2021 - March 2022)
- Attend an in-person culminating meeting (April 19-22, 2022 in Tempe, Arizona) (travel expenses will be provided)
- Have access to Google Classroom and Zoom online collaboration tools.

Selection Process

A total of 100 applicants will be selected through a competitive award process. Successful applications will come from eligible organizations, comply with project requirements, demonstrate strong alignment with the project purpose of making Earth & Space science relevant and inclusive, and include a plan to sustain the proposed project activities. In addition, the project team will look to select a diverse range of projects that seek to broaden participation in STEM learning and achieve geographic distribution across the United States. Applicants will be informed of award status in September 2021.

Eligible Organizations

This funded opportunity is open to museum professionals who are currently employed by an eligible organization (see below). Each successful organization will receive a total of $2,000. It is possible for more than one person from an organization to attend the online plenary kickoff meeting and online planning sessions, but only one person from each organization will be eligible to travel to the in-person culminating meeting.

To be eligible to participate in the program, organizations must be:

- An existing NISE Network partner who has previously received at least one Explore Science: Earth & Space toolkit (2017-2020). If you are not sure if your organization has received an Explore Science: Earth & Space toolkit, please see the list of toolkit recipients on the NISE Network Partner Organizations page:
    - https://www.nisenet.org/nise-network-partners-across-country
    - or contact your regional hub leader: https://www.nisenet.org/contact
- Located in the United States, including the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, the Commonwealth of the Northern Mariana Islands, the Republic of the Marshall Islands, the Federated States of Micronesia, or the Republic of Palau.
- A public informal science outreach and education institution such as:
    - Science museum or science center,
    - Children's museum,
    - Natural history museum,
    - Public planetarium or observatory, or
    - A NASA visitor center.

Please note that K-12 schools, afterschool providers, libraries, parks, astronomy clubs, and organizations from outside the US are not eligible to participate.

Eligible Projects

Proposed projects must include plans to make Earth & Space science more relevant and inclusive for your community. Projects can include new or expanded public programs, educational programs, public events, installations or exhibits, professional development for museum staff and volunteers, or collaborations with community-based or youth-serving organizations related to Earth & Space science initiatives. Priority will be given to projects that broaden your organization's participation in learning about Earth & Space science and can be offered in an ongoing way. Proposed projects can vary according to the institution's mission, priorities, capacity, and degree of previous experience with Earth & Space science programming.

Please note that the project does not need to be completed prior to the in-person meeting in April 2022. As long as you are able to make meaningful progress during the planning sessions, that will satisfy the requirement.

Earth & Space Science Focus:

Proposed projects must focus on NASA Earth & Space science: Proposed projects **do not need to cover all of these topics** - proposed projects could cover one or more of these topics.

Please note that the primary topic of your project should be NASA Science focused (https://science.nasa.gov - explore under "Science Topics")

The questions below represent a few possibilities and how these NASA topics connect to our society:

- **Earth science:** How and why are Earth's climate and the environment changing? How can we use Earth-observing satellites to understand changing systems on Earth? https://science.nasa.gov/earth-science
- **Heliophysics:** How and why does the Sun vary and affect Earth and the rest of the solar system? https://science.nasa.gov/heliophysics
- **Planetary science:** How does NASA explore other planets with rovers? What is the potential for life elsewhere? https://solarsystem.nasa.gov
- **Astrophysics**: Discover the origin and evolution of the universe, search for Earth-like planets, How does the universe work, and what are its origin and destiny? Are we alone? https://science.nasa.gov/astrophysics

Your project description:

In your application, please describe your proposed project, including:

- Your Earth & Space focus
- Your intended audience
- How you plan to make your project relevant and inclusive to your local audiences
- How your organization will build on existing Diversity, Equity, Inclusion, and Access work
- Collaborators such as community-based and/or youth-serving organizations and subject matter experts

Examples of Eligible Projects:

Below are some examples of eligible projects to help you think about the kind of project you might propose. The activities in the list below are not the only kinds of projects that can be proposed, but they illustrate a range of projects that would be eligible.

- Collaborating with a local Head Start organization that serves preschool children from low-income families to co-develop take-home family activities for parents and children to learn together about Earth & Space topics and encourage development of science process skills.
- Partner with an organization that serves Black, Indigenous, and People of Color (BIPOC) families to co-develop a discussion based program around global climate science and data literacy and the local impact and effects.
- Developing a new or significantly enhanced partnership with an organization that serves special needs audiences. Partner with your local organization to structure a way to deliver Earth & Space science programming customized for this audience. Use Universal Design principles to modify Earth and space toolkits to increase physical, cognitive, and cultural accessibility for this audience.
- Working with rural K-12 schools to reach audiences who otherwise would not have the ability to travel to your museum in person and to ensure more equitable access. Example projects could include: offering Earth & Space science distance learning and virtual field trips, creating a traveling Earth & Space kit and associated teacher workshop, or, connecting teachers and their students with Earth & Space science subject matter experts online.
- Developing new or significantly enhanced partnerships with subject matter experts (such as NASA research center staff, amateur astronomers, graduate students, or environmental agency personnel, etc.) to engage local community-based or youth-serving organizations in Earth & Space science science topics.
- Modifying existing exhibit signage to include relevant Earth & Space science content and societal connections. For example, work with subject matter experts focused on local

climate change to make connections for your community by connecting it to local trends for extreme weather.

- Working with a local community-based or youth-serving organization to take observations and contribute to an ongoing citizen science project. One example would be the GLOBE Observer program (https://observer.globe.gov) that includes connections to clouds, mosquito habitats, land cover, and trees.
- Use bilingual evaluation processes to incorporate community feedback and to co-create and modify science content, visuals, or activity/exhibits materials to better represent the community, increase participation, and develop deeper relationships.

Eligible Expenses

Successful organizations will receive a total of $2,000 in funds that can be used for costs directly related to planning and implementing their proposed project.

Some examples of eligible expenses include:

- Staff time – planning meetings, supervising staff, recruiting and training volunteers/staff/participants, developing new programming, adapting existing programming, evaluation
- Educational materials – materials and supplies to deliver programming
- Production and documentation – photography, videography, graphic design, writing
- Promotional materials – printing signs, graphic design
- Travel – to outreach audiences, for new audiences related to the project, to meetings with collaborators related to your project
- Honorarium for outside presenters or panelists
- Other – parking and incidental expenses for guest speakers, translations

Ineligible Expenses:

- Funds cannot be used to pay for indirect costs (overhead)
- Funds cannot be used for alcohol or food and refreshments
- Funds cannot be used as tuition or scholarships for participants, however funds can offset costs for staff time planning and running a workshop or camp, as well as materials and transportation costs
- Funds cannot be used to attend conferences or for conference registration

Timeline

The project-based professional learning community will be held from October 2021 through April 2022, with a total of 100 participating organizations. A timeline of major activities for the application and for each online planning session is provided below. All activities are required with the exception of the evaluation, which is optional. Please note that these dates are approximate; we may shift them slightly as needed.

	2021 - 2022						
Project Milestones	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**
Plenary Kickoff Meeting							
Online Session 1							
Online Session 2							
Online Session 3							
Online Session 4							
Online Session 5							
In-Person Meeting							
Project Reporting							
Planning/Implementation*							

**Please note that projects may extend beyond April*

- **Application and awards:**
  - Application opens: June 1, 2021
  - Application due: August 1, 2021
  - Awards announced: September 1, 2021
  - Confirmation of participation due from awardees: September 20, 2021
- **Plenary Kickoff Meeting (online, 2 hours, October)**
  - Plenary Kickoff Meeting will take place online (Zoom) on October 26, 2021, from 2:00 - 4:00 PM Eastern.
  - The Plenary Kickoff Meeting will feature introductions to the professional learning community, and a brief overview of resources about: Earth & Space science topics and ways to make them more relevant for learners, Diversity, Equity, Access and Inclusion (DEAI) best practices and resources, collaborations and community partnerships, and working with subject matter experts.
- **Online Planning Sessions (online, 1.5 hours/month, November 2021 - March 2022)**
  - A series of 90-minute planning sessions will be held each month designed to share best practices in a variety of topics. Small breakout groups will work together to develop and refine their project plans.
  - Participants will attend 5 online planning sessions between November 2021 - March 2022 *(one planning session per month)*.
  - Participants will be required to complete worksheets and homework using Google Classroom before each of the 5 planning sessions. We anticipate planning

session attendance and homework together will be less than 4 hours of work per month.
    - Four identical 90-minute planning sessions will be offered each month on different days of the week to accommodate schedules. Once awarded, successful applicants will choose which day works best and attend this session each month. These identical sessions will tentatively be offered on the following Monday, Tuesday and Thursday afternoons from 2:00 PM - 3:30 PM Eastern:
        - **November**: 4th, 9th, 15th, or 29th
        - **December:** 6th, 9th, 14th, or 16th
        - **January:** 10th, 18th, 25th, or 27th
        - **February:** 3rd, 8th, 14th, or 24th
        - **March:** 7th, 10th, 15th, or 21st
    - *Please note:* these online planning sessions require participants to have access to and use of Zoom and Google Classroom online collaboration tools. If you anticipate this being a barrier to participating (organizational firewalls etc.,) please contact your regional hub leader for options.
- **In-Person Culminating Meeting (April 2022)**
    - If health and safety allows, the in-person meeting will be held in Tempe, Arizona from April 19-21, 2022; if in-person is not possible, the meeting will be held online.
    - Hotel, flight, and all group meal expenses for the meeting will be paid for one participant from each of the 100 partner institutions. Partners will need to pay for their own incidental travel expenses (such as airport parking and ground transportation).
- **Project implementation (October 2021 - April 2022)**
    - Your project implementation can extend beyond April 2022 as long as you will make meaningful progress within the project planning timeframe.
- **Reporting (April 2022)**
    - Participants will be required to complete project reports which will describe their project and share their experience with the Network.
- **Evaluation (October 2021 and May 2022) (optional)**
    - Project evaluators are planning a pre-survey (in October 2021) and a post-survey (in May 2022).
    - Project evaluators also plan to conduct interviews with a subset of participants during the summer of 2022.

How to Apply

Overview:
This overview includes application instructions, eligibility requirements, and project expectations. Please read the overview and preview the application before applying.

Deadline:
Applications are due **August 1, 2021**

Online submission:
To be considered for this funded opportunity you must fill out the online application completely using the Alchemer (formerly SurveyGizmo) online form by August 1, 2021:
https://survey.alchemer.com/s3/6327743/EarthSpaceProjects2021Application

Preview the application:
Please note that it is NOT possible to save your work in the Alchemer online application form and return for additional edits. Applications left idle for too long will go blank when you progress to the next screen. Please plan to complete the online application in one session. You may want to write your responses in a Word doc, save, and then cut and paste that information into this application. You may download the application in PDF and Word document formats here:
https://www.nisenet.org/earthspaceprojects2021

Questions

After reading the overview information, if you have any questions about whether your organization or your proposed project meets the eligibility requirements and award criteria, please contact your regional hub leader. https://www.nisenet.org/contact

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