

STEM ENGAGEMENT IN COLLABORATION WITH MUSEUMS AND SCIENCE CENTERS

ASTC WEBINAR PANEL DISCUSSION

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NASA STEM ENGAGEMENT IN ACTION



NASA STEM ENGAGEMENT – WHAT WE DO

VISION

We immerse students in NASA's work, enhance STEM literacy, and inspire the next generation to explore.

MISSION

We engage students in NASA's mission.

Strategic Goals



Create **unique opportunities** for a **diverse set of students** to contribute to NASA's work in exploration and discovery.



Build a diverse **future STEM workforce** by engaging students in authentic learning **experiences** with NASA's people, content, and facilities.



Attract **diverse groups of students** to **STEM** through learning opportunities that **spark interest** and **provide connections** to NASA's mission and work.



Increased emphasis on diversity, equity and inclusion



Focus Areas

1. **Expand NASA contributions in engaging K-12 students in STEM pathways, with an approach toward a continuum of experiences.**
2. **Implement strategies to broaden student participation to increase diversity, equity, and inclusion in STEM through NASA opportunities and activities.**
3. **Continue to build productive strategic partnerships and networks, expanding NASA's STEM ecosystem to magnify reach and impact.**



STEM ENGAGEMENT CONTINUUM



STEM Engagement Continuum



Grades K-4



Grades 5-8



Grades 9-12



Undergraduate



Graduate



Student STEM Pathways

INSPIRE – ENGAGE – EDUCATE – EMPLOY

*Attracting students
is the foundation of a successful model to build
a diverse future STEM workforce*

Key Elements Moving Forward:

- Evidence-based opportunities that attract students (Gr K-5)
- Accessible and engaging opportunities that enable STEM pathways (Gr K-8)
- Immersive, experiential learning that leads to STEM pursuits (Gr 9-12)
- Experiences to support successful workforce entry (Higher Ed)
- Strategies to broaden student participation at all points along the continuum
- Partnerships and networks to build essential connections to the STEM ecosystem

ATTRACT



NASA STEM ENGAGEMENT K-12 FRAMEWORK

K-12 STEM Engagement Continuum

Grades K-4



Grades 5-8



Grades 9-12



Student STEM Pathways

- Accessible, low barrier to entry classroom and out-of-school activities
- Informal education programs

- Classroom activities
- Out-of-school activities
- Competitions
- Camps and informal education programs
- Student engagement

- Capstone projects
- Challenges and competitions
- H.S. internships
- Student engagement

NASA Spectrum of Student Learning Opportunities

NASA STEM Workforce & Subject Matter Experts (SMEs) Cohort

Educator and Institution Communities

NASA STEM Engagement K-12 Framework

Next Gen STEM

Reaching students *where they are* using NASA's Missions, content, people, and facilities

K-12 Initiatives

Where? In school, after school, informal education institutions, and at home

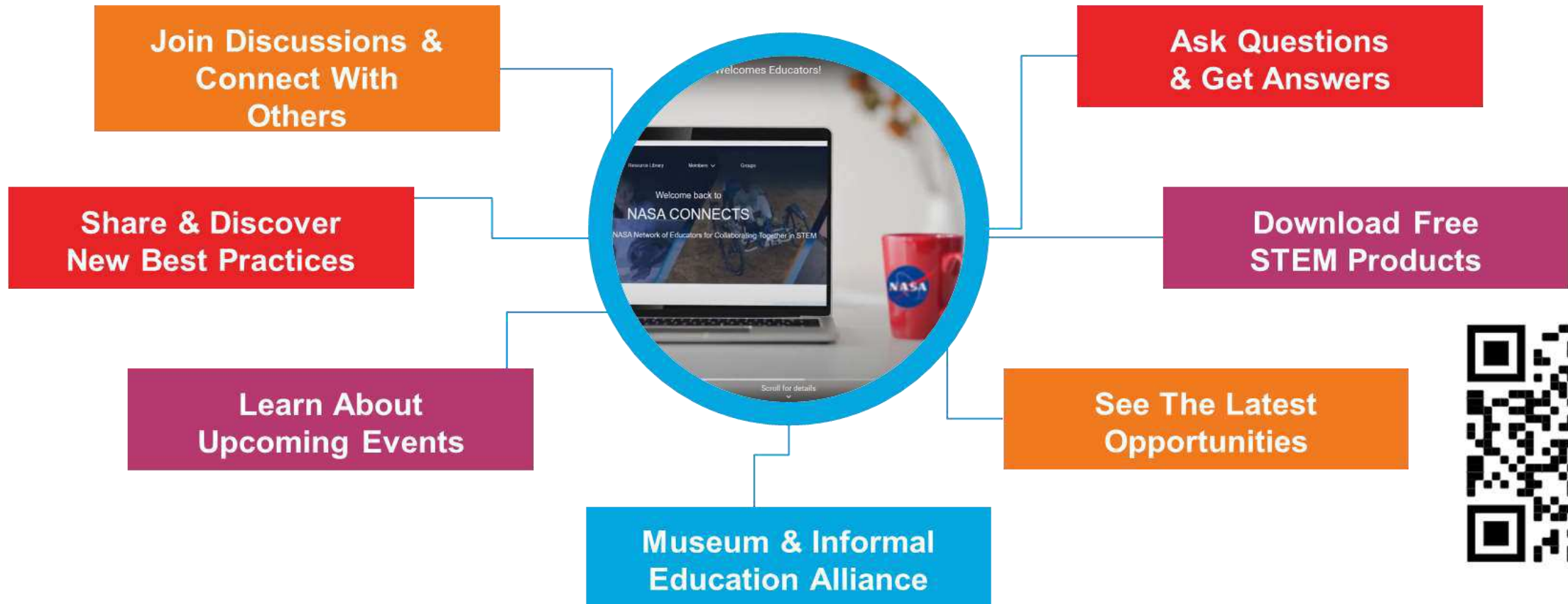
What? An integrated portfolio of products, experiences, challenges, and competitive awards that spans educational levels and reduces barriers to entry



www.nasa.gov/stem/nextgenstem

NASA CONNECTS COMMUNITY OF PRACTICE

An online, professional learning community for educators to collaborate with each other and NASA.



NEXT GEN STEM INFORMAL EDUCATION COMMUNITY OPPORTUNITIES



Full TEAM II Awards

Fewer, larger awards
20 active

Community Anchor Awards

More, smaller awards
21 active

NASA Museum and Informal Education (MIE) Alliance

1300+ orgs

Competitive, national award program for informal education institutions

- Projects focus on NASA missions & topics that support NASA STEM & missions
- Community Anchor Awards (added in 2021) position the awarded institutions as a local community resource for NASA Informal Education

Community of practice for informal science educators

- Expert live briefings, webinars, resource library, community forum, direct assistance



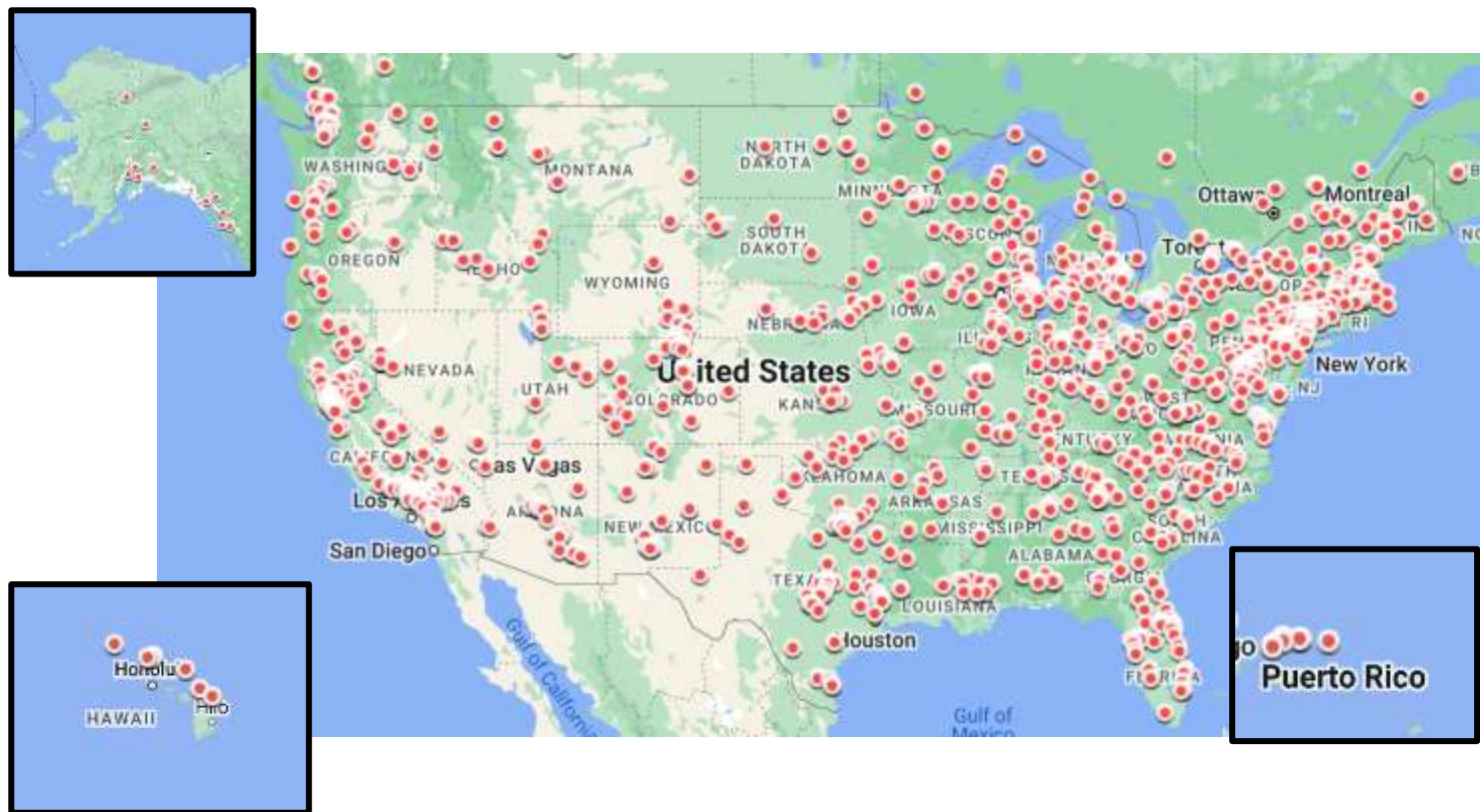
NASA MUSEUM AND INFORMAL EDUCATION (MIE) ALLIANCE

The Museum & Informal Education Alliance (MIE) works directly with museums, science centers, zoos, libraries, and other places people learn, to help them bring NASA STEM to their community.

The MIE Alliance offers a full calendar of NASA-related events, opportunities and anniversaries for everyone to browse, search, share, or subscribe to.

To learn more, visit

<https://go.nasa.gov/mie-alliance>



NASA CONNECTS to become the new host for the [Alliance](#), its resources, and member engagement.

NASA TEAMS ENGAGING AFFILIATED MUSEUMS & INFORMAL INSTITUTIONS (TEAM II)

NASA Teams Engaging Affiliated Museums and Informal Institutions (TEAM II) is a competitive funding opportunity for NASA-related projects at museums, libraries, and youth serving organizations.

New TEAM II Standard Awardees were announced in January and June 2022

For future opportunities, visit:

[NASA TEAM II Grant Forecasting | NASA](#)



INSPIRE - ENGAGE - EDUCATE - EMPLOY
The Next Generation of Explorers

NASA TEAM II COMMUNITY ANCHOR AWARDS

- New designation and NOFO element – first cohort started in February 2022; 21 sites in 16 states announced:
- Enables awarded institutions to:
 - ✓ Establish themselves as a **new or emerging** local NASA STEM informal education community resource
 - ✓ **Implement authentic NASA STEM experiences** that benefit a diverse audience in their local community
 - ✓ Participate in a NASA Informal Education **Learning Cohort**, which is managed by NASA's MIE Alliance and connects awardees to NASA STEM engagement resources and personnel
- Awardees have significant and successful direct service in delivery of STEM in primarily underserved areas
- *2021-2023 TEAM II Notice of Funding Opportunity (NOFO) projected during Fiscal Year 2022 Quarter 4 (July-September) for 2022 Community Anchor Awards for TEAM II (TEAM II-ANCHR)*



For more information, please contact:

Shelley Canright

Community Anchors Cohort Coordinator

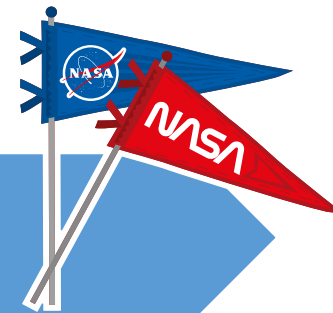
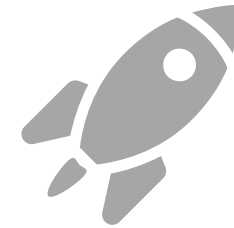
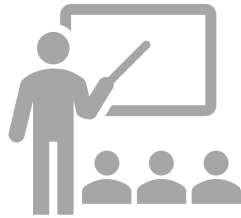
shelley.canright@nasa.gov

Or learn more at: <https://go.nasa.gov/team-ii>



BACK TO SCHOOL 2022

Campaign timeframe: August 8-26



August 8



August 15

August 22

Week 1:

Teach

Content and opportunities
for teachers

Week 2:

Learn

Content for
students

Week 3

Join

Opportunities and experiences



CONNECT WITH NASA STEM ENGAGEMENT



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NASA STEM



