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

2019 NATIONAL SPACE GRANT DIRECTOR’S MEETING

M I K E  K I N C A I D
ASSOCIATE ADMINISTRATOR FOR STEM ENGAGEMENT
2019 National Space Grant Director’s Meeting

1. Status of 5th year extension
2. FY2019 Plan ($44M)
3. Evaluation Results
4. OEPM
5. USIP
6. Mega PI Meeting/Reverse Site Visit
7. Upcoming Webinars
8. NIFs

Tomorrow’s Conversation
FOOD FOR THOUGHT

Have a question? Submit it through: jsc.cnf.io

Please submit questions to: jsc.cnf.io
Don’t forget to vote responses up!
NASA STEM Overview

CoSTEM 5Y Plan
Forward to the Moon & Apollo’s 50th
Communication Updates
Q&A

Have a question?

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Vision
We immerse the public in NASA’s work, enhance STEM literacy, and inspire the next generation to explore.

Mission
We engage the nation in NASA’s mission

FOCUS AREAS
Create unique opportunities for students and the public 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.

Strengthen public understanding by enabling powerful connections to NASA’s mission and work.
MISSION-DRIVEN STRATEGIC ENGAGEMENT

Engaging the nation in NASA’s mission

Mission Directorate Office

STEM Engagement

Public Engagement

Field Centers

EXPLORE
EARTH FLIGHT
SPACE TECH
SOLAR SYSTEM BEYOND
MOONtoMARS
HUMANSinSPACE

INSPIRE - ENGAGE - EDUCATE - EMPLOY
The Next Generation of Explorers
NEW ARCHITECTURE ENABLING STUDENT OPPORTUNITIES & CONTRIBUTIONS

FOCUS AREAS

Evidence-based strategies
- Create unique opportunities for students to contribute to NASA’s work.

Rigorous planning
- Build a diverse future STEM workforce by engaging students in authentic learning experiences.

Integrated operational model
- Strengthen public understanding by enabling powerful connections to NASA’s mission and work.

Strategic, balanced portfolio
- NASA-unique learning experiences

Student contributions to NASA’s work in action
-的好处

SCALABILITY TO MAGNIFY NASA’S REACH AND IMPACT

NASA MISSION DIRECTORATE

DRIVERS & REQUIREMENTS

EVIDENCE-BASED STRATEGIES

RIGOROUS PLANNING

INTEGRATED OPERATIONAL MODEL

STRATEGIC, BALANCED PORTFOLIO

STUDENT CONTRIBUTIONS TO NASA’S WORK IN ACTION

K-Elementary

Middle School

High School

Undergraduate

Graduate

BENEFICIARIES OF NASA’S STEM ENGAGEMENT PORTFOLIO
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Committee on STEM Education (CoSTEM)
- Co-Chaired by NASA & NSF
  - Jim Bridenstine & France Cordova
- Coordinates STEM activities and programs
- Monitors overlap in federal STEM programs across agencies
- Develops strategic plan every 5 years

Federal Coordination in STEM Education (FC-STEM)
- Co-Chaired by NASA & NSF
  - Mike Kincaid & Karen Marrongelle
- Development & coordination of 5Y plan
- Communicate priorities across agencies
- Develops implementation structure

STEM Education Advisory Panel:
Advises and evaluates CoSTEM’s progress in meeting its progress. Established in 2018 by NASA, NSF, NOAA and Dept. of Education with 18 panel members selected in 2018.
Vision:
A future where all Americans will have lifelong access to high-quality STEM education. The United States will be the global leader in STEM literacy, innovation, and employment.

Aspirational Goals:
• Build Strong Foundations for STEM Literacy
• Increase Diversity, Equity, and Inclusion in STEM
• Prepare the STEM Workforce for the Future

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<td><strong>1. Foster STEM ecosystems</strong></td>
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<td><strong>2. Increase work-based</strong></td>
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<td><strong>3. Encourage</strong></td>
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**NASA’S CHOSEN OBJECTIVES**

1. Foster STEM ecosystems that unite communities
2. Increase work-based learning and training through educator-employer partnerships
3. Encourage transdisciplinary learning
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APOLLO’S 50TH & NASA’S SPACE STEM FORUM

50th Anniversary of First Human Lunar Landing July 2019

Space STEM Forum enables collaboration to leverage STEM engagement efforts with industry/professional organizations.

https://spacestem.nasa.gov/
EVENTS & EXHIBITS: INTERACTIVE MAP

- Interactive map, searchable by terms or zip codes
- Details can be listed or can switch to Calendar view
- Zooms in map capability
- Events and exhibits
- Apollo and Moon to Mars
Search for events and share them with a friend
July 19 & 20: Nationwide celebration and broadcast of events at museums commemorating 50th anniversary of Apollo 11

Over 30 organizations have been planning celebrations – expect over a hundred museums to host events throughout the country

Foundation for Museum Events:
• Anchor/host museums
• Curated resources for events
• Connect museum activities together
• Best practices compilation
GUINNESS RECORD ROCKET LAUNCH: US SPACE & ROCKET CENTER

Attempt Date: July 16, 2019

Goals:
• Most model rockets launched simultaneously (>5000)
• Most rockets of any kind launched in 24 hours
A collaboration to celebrate Apollo’s 50th and deep space learning activities

Celebrating Apollo 10 mission and the lunar module, “Snoopy” and command module, “Charlie Brown”.

- 1968: Silver Snoopy Program to honor NASA employees and contractors

- Began multi-year partnership celebrating 50th lunar landing anniversary and introduce new content and educational engagement focusing on America’s next flight test for deep space exploration.
FREE STEM curriculum activities for grade levels K-2, 3-5 designed to instill enthusiasm for space exploration and interest in accomplishments of past space missions, developed under input from NASA educators

• **Activity 1:** Students are introduced to the Apollo 10 mission and learn the fundamentals of the engineering design process.

• **Activity 2:** Students learn that NASA is developing a new spacecraft, Orion, that lands with parachutes.

• **Activity 3:** Students will learn about NASA’s plans to send astronauts to Mars, and what life on Mars will be like for them.

Visit: www.ymiclassroom.com/peanuts
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Target Date: April 2019
Audience: College Students
Time: 60 – 90 Minutes

Partners: American Institute for Aeronautics and Astronautics (AIAA), Space Grant, Students for the Exploration and Development of Space (SEDS)

Objectives:
1. NASA’s approach of going Forward to the Moon
2. Hear from leadership and young professionals and get look at what it is like to work at NASA
3. Generally inspire and engage students to pursue STEM careers

Outcomes:
1. Learn from NASA leadership and early career folks who tell them, “This is what I do” and eventually pursue a STEM career
2. Learn more about how to engage in NASA’s mission and Go Forward to the Moon
Provides users direct access to the search tool. The collection of educational resources will include opportunities (timely events).

New keyword autocomplete functionality (suggested results).

Drop down menu introduces a broad range of topics or categories based on audience.

Slider to highlight key events and/or activities. Can be self-guided or auto-rotate.

Slider/scroll (arrows) to highlight major content areas/groupings. Will need to determine maximum number to show for each (4+).
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SIGN UP FOR NASA EXPRESS: NASA.GOV/EDUCATION/EXPRESS

THANK YOU!