

# INSPIRE - ENGAGE - EDUCATE - EMPLOY

## The Next Generation of Explorers



## NASA's OFFICE OF STEM ENGAGEMENT UPDATE

## NASA ADVISORY COUNCIL STEM ENGAGEMENT COMMITTEE

Dec. 4, 2018

MIKE KINCAID  
ASSOCIATE ADMINISTRATOR FOR STEM ENGAGEMENT

# NASA's OFFICE OF STEM ENGAGEMENT

---

## STEM Engagement Updates

**Transformation**

**Meeting Agency and CoSTEM Strategies**

**Members Questions, Feedback, Input**



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

# NASA ADVISORY COUNCIL

## STEM ENGAGEMENT COMMITTEE INAUGURAL MEETING

### Current Team:



Aimee Kennedy  
Vice President, Education STEM Learning & Philanthropy  
Battelle Memorial Institute



Michael Lach  
Director, STEM Policy & Strategic Initiatives  
University of Chicago



Ray Mellado  
Founder & Chairman  
Great Minds in STEM



Carl Person  
Undergraduate Research Preceptor  
Fayetteville State University

### New Members:



Cristin Dorgelo  
President & CEO  
Association of Science-Technology Centers



Daniel Dumbacher  
Executive Director  
American Institute of Aeronautics & Astronautics

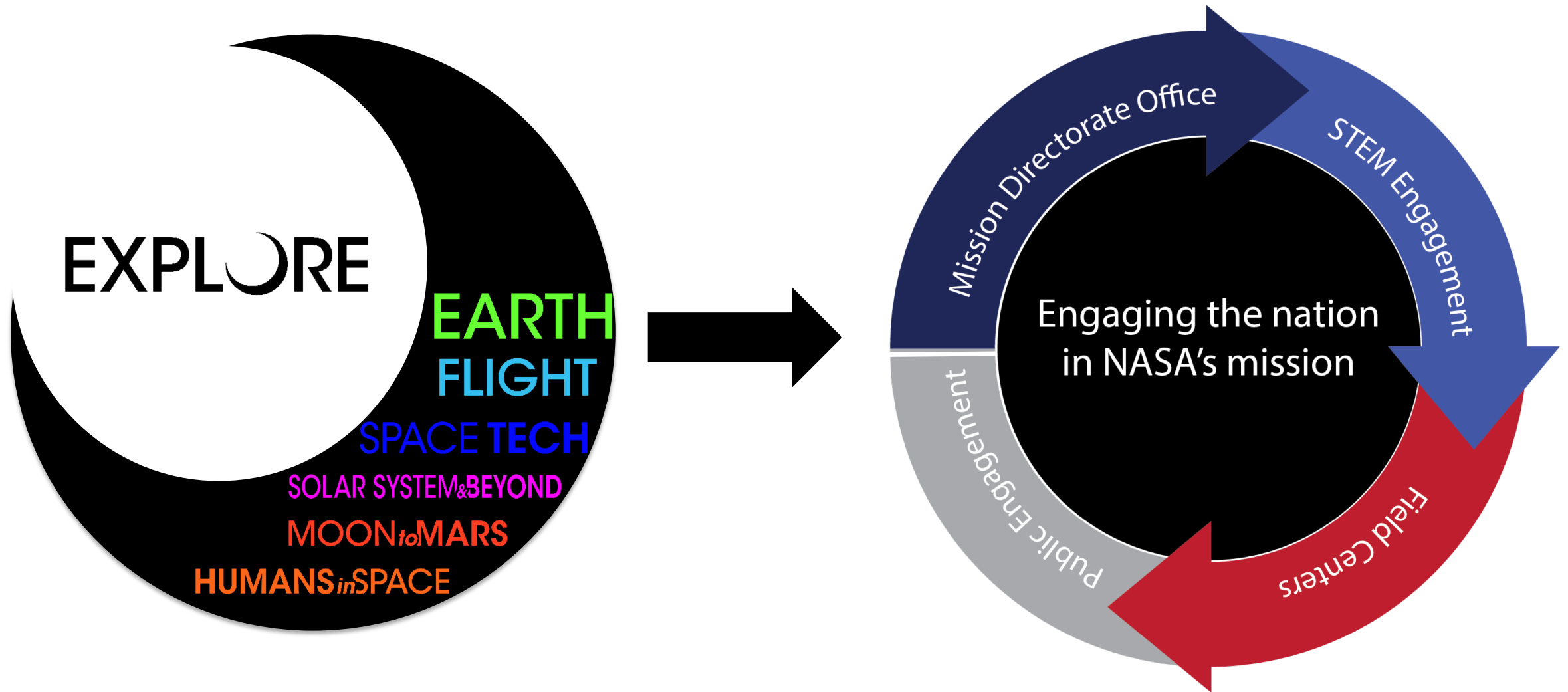


Norman Fortenberry  
Executive Director  
American Society for Engineering Education



Darryl Williams  
Senior Vice President of Science and Education  
The Franklin Institute

# MISSION-DRIVEN STRATEGIC ENGAGEMENT

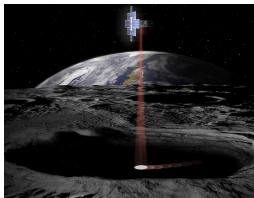


**INSPIRE - ENGAGE - EDUCATE - EMPLOY**  
The Next Generation of Explorers



# Mission-Driven Programs Enabling STEM Engagement

## NASA'S THEMATIC AREAS



### SPACE GRANT

- National network of 52 Consortia with 850 Affiliate members
- Stimulates cooperative programs among universities, industry, federal/state/local governments
- Encourages interdisciplinary education and research programs
- Incorporates State priorities, needs, and goals

### MUREP

- Limited to Minority-Serving Institutions
- Increases retention of underserved and underrepresented groups in STEM
- Enhances infrastructure at MSI institutions
- Portfolio with 7 funded elements

### EPSCoR

- 27 eligible jurisdictions (States and Territories)
- Contributes to development of research infrastructure and capabilities
- Fosters partnerships between NASA research entities, industry, and academic institutions
- Incorporates state priorities, needs, and goals

### Next Gen STEM

- Informal education and K-12 STEM engagement initiatives aligned to mission priorities
- Richer, more comprehensive STEM engagement opportunities
- NASA's museum alliance

Graduate



Middle School K-Elementary School



High School



Undergraduate



Graduate

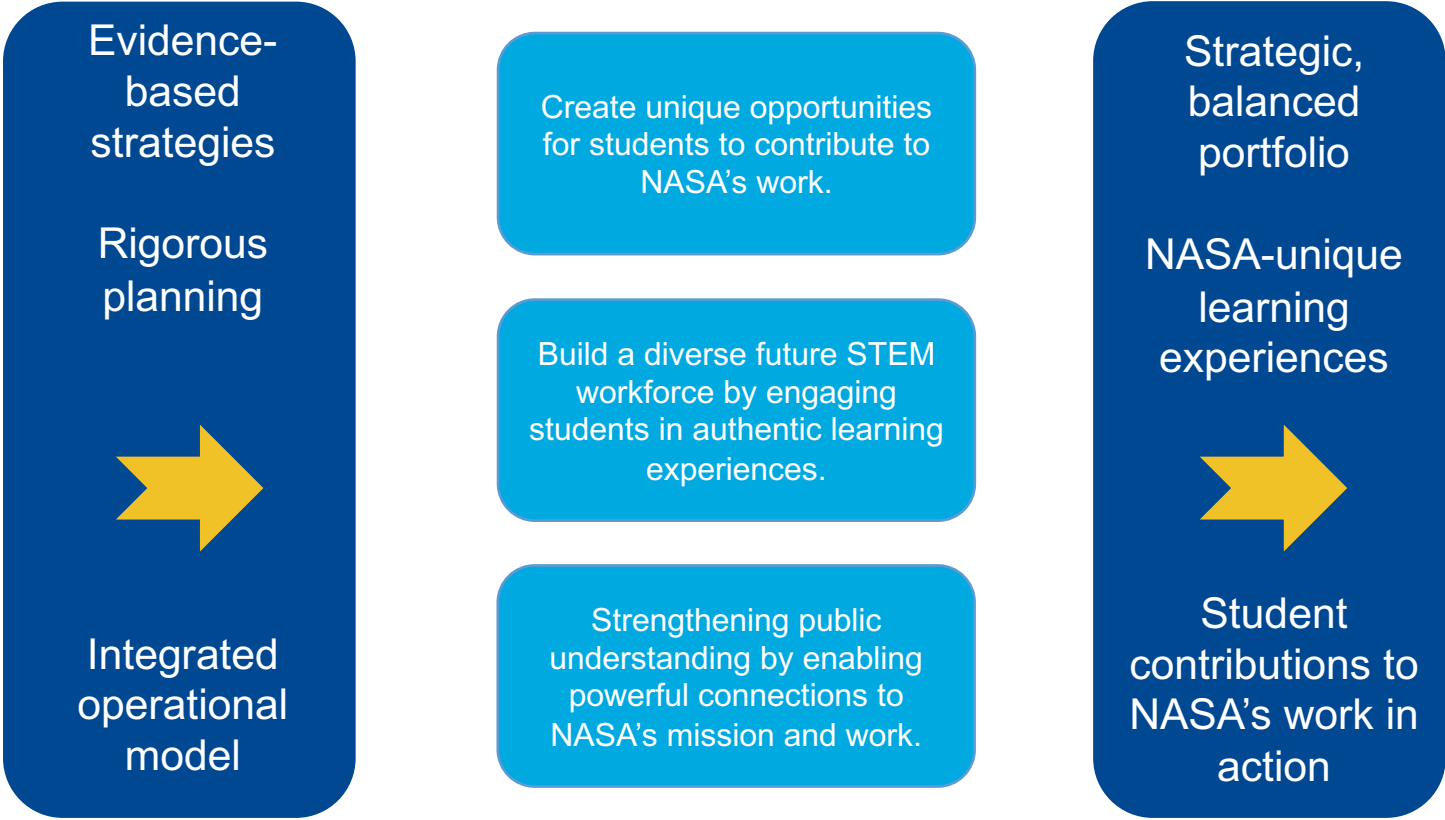


## STEM ENGAGEMENT BENEFICIARIES

# NEW ARCHITECTURE ENABLING STUDENT OPPORTUNITIES & CONTRIBUTIONS



FOCUS AREAS



SCALABILITY TO MAGNIFY NASA'S REACH AND IMPACT



# FEDERAL STEM EDUCATION 5-YEAR STRATEGIC PLAN



## CHARTING A COURSE FOR SUCCESS: A FEDERAL STRATEGY FOR STEM EDUCATION

A Report by the  
COMMITTEE ON STEM EDUCATION  
of the  
NATIONAL SCIENCE & TECHNOLOGY COUNCIL

December 2018

### Purpose:

Coordinate federal STEM education strategy and investment, and serve as a 'North Star' to guide state and local STEM education initiatives

### Opportunity for Agency Input:

- FC-STEM Agency Meetings: August, September and October
- Co-STEM Meeting: Thursday, November 15<sup>th</sup>
- FC-STEM Meeting: Friday, November 16<sup>th</sup>
- Agencies/OMB Review: November 2018
- Roll-out of Strategic Plan: December 4

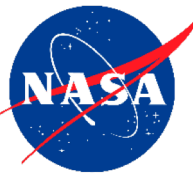
# STEM ENGAGEMENT TRANSFORMATION

## FY18 ACCOMPLISHMENTS

Systemic	Programmatic
<ul style="list-style-type: none"><li>✓ Chartered and established STEM Engagement Council. (03/30/18) Convened inaugural session of the Council. (04/12/18)</li><li>✓ Completed development of new STEM Engagement NASA Policy Directive. (02/21/18) Will undergo formal agency process. (Sep-Oct 2018)</li><li>✓ Established new Office of STEM Engagement. (effective 08/29/18)</li><li>✓ Completed definition of new performance measurement and assessment approach. (07/15/18)</li><li>✓ Conducted analysis of existing infrastructure, tools &amp; systems. (03/15/18)</li><li>✓ Developed NASA Strategy for STEM Engagement. (Council approval 08/22/18)</li><li>✓ Streamlined and improved agency websites, platforms and social media tools.</li><li>✓ Developed and deployed a new NASA Internships and Fellowships website for students.</li></ul>	<ul style="list-style-type: none"><li>✓ Put in place an integrated program management approach for EPSCoR, MUREP and Space Grant, with corresponding staff changes.</li><li>✓ Overhauled SEAP, incorporating significant changes to approach for awards to informal education institutions (TEAM II) and innovative new mission-driven pilot initiatives.</li><li>✓ Achieved improvements in interfaces and relationships with Space Grant Consortia and their key stakeholders.</li><li>✓ Streamlined MUREP with more focused, strategic award initiatives.</li><li>✓ Incorporated more rigorous, systematic program and fiscal management practices.</li></ul>







# INSPIRE - ENGAGE - EDUCATE - EMPLOY

## The Next Generation of Explorers



# THANK YOU!