



S T E M INSPIRE - ENGAGE - EDUCATE - EMPLOY
    **The Next Generation of Explorers**

STEM Education Advisory Panel, Federal 5-Year Strategic Plan and Space STEM Forum

Beverly Girtten, Ph.D.
August, 2018

NAC STEM Education Task Force Members



Current Members

Aimee Kennedy*

Ray Mellado *

Michael Lach

Carl Person

New Members

Darryl Williams

Norman Fortenberry

Dan Dumbacher

Cristen Dorgelo

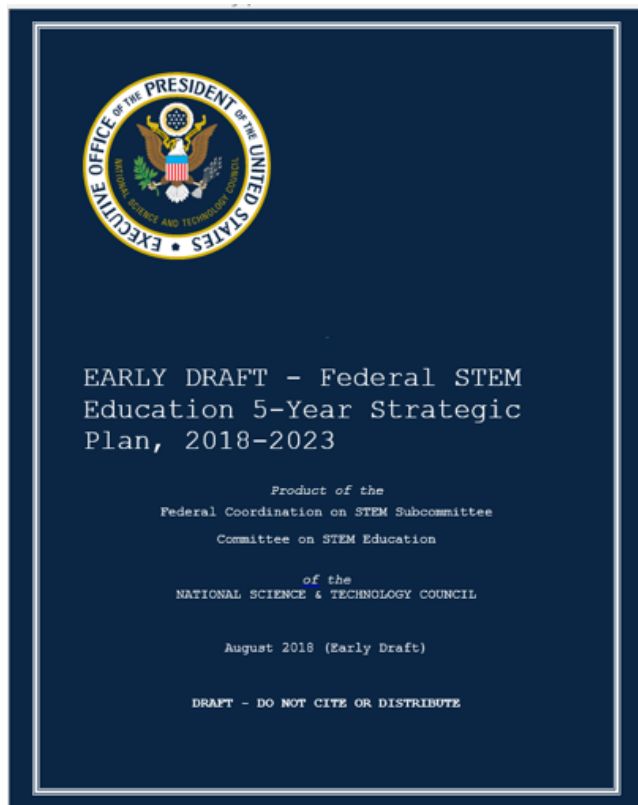
* Members of STEM Education Advisory Panel



STEM Education Advisory Panel

- multi-agency federal advisory panel
- NSF, NASA, NOAA, Dept. of Ed.
- 18 members recently selected
- first meeting this month
- two NAC Task Force members are on panel
 - Aimee Kennedy
 - Ray Mellado
- a primary role is to advise on 5-year strategic plan

Federal Education 5-Year Strategic Plan



Purpose and Timeline

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 Meeting- August 23
- FC-STEM Agency/OMB Review- September 5-14
- FC-STEM Final Review- October 2018
- Final Co-STEM Approval- November 2018



Federal Education 5-Year Strategic Plan

- **Four Administrative Priorities**

- Strategic Partnerships
- Convergence
- Computation and Communications
- Transparency and Accountability

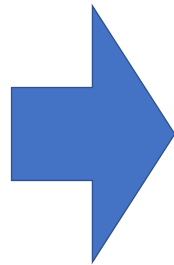
- **Four NASA individuals on writing team**

Bev Girtten, Rob LaSalvia, Rick Gilmore, Susan Poland (detailed from NSF)

Overview

Goals

- **Build strong foundations in STEM and a STEM-literate citizenry**
- **Prepare the future STEM workforce**
- **Promote diversity and inclusion in STEM; and**
- **Provide transparency and accountability through data, evaluation, and communication**



Administration Priorities

- **Strategic Partnerships:** More effectively leverage the resources and opportunities provided by the broader community by fostering more inclusive communities and building partnerships and collaboration that cross sectors and stakeholders in order to serve STEM goals.
- **Convergence:** Approach STEM education in the context of broad questions that integrate disciplines in way that supports solving real world challenges.
- **Computational and Communications Technology:** Leverage the use and study of information technology to further STEM goals, particularly through the development of computational thinking skills and digital literacy, and through the use of digital platforms to further education programming.
- **Transparency and Accountability:** Measure clearly the outcomes and impacts of STEM efforts and goals and make these measurements available – scaling effective programs to enable broader implementation.

NASA Space STEM Forum

- **Space STEM Forum:** at NASA HQ on Sept. 19, 2018, 9:00 am-4:30 pm
- **Forum Theme:** *Small Steps to Giant Leaps, Looking Forward to the Future of Space Exploration*
- **Purpose:** Identify opportunities to collaborate and leverage our individual STEM engagement activities and efforts with industry and professional organizations
- **Abstracts:** Approximately 22 abstracts will be selected, with about 16 involving national efforts/projects and about 6 on resources and capabilities
- **Website:** Collaborative work website and public website will be created to facilitate implementation of outcomes



Small Steps to Giant Leaps, Looking Forward to the Future of Space Exploration



Some NASA STEM Proposed Events for 50th

- **Forward to the Moon:** national student challenge for middle school choirs and high schools creating music videos on Forward to the Moon theme. Kick off with NASA Center student intern music video competition.
- **National Moon Day And Moon Night At A Museum:** July 20, 2019, celebration held at museums and science centers across the country. NASA would develop student material and activities for these events.
- **National Space STEM Mentoring Program:** establish an overarching national Space STEM Mentoring Program that is very specific to the aerospace aspects of STEM that will initially target middle school students.
- **National Space STEM Challenge:** overarching, unifying, national challenge and awards program that will encourage and reward middle school students for engaging in a variety of STEM activities and encourages new STEM experiences.



For more information about the Space STEM Forum see:

<https://www.fbo.gov/notices/3074c52c312b6de4e621a889bae576ab>

Thank you!