NASA Advisory Council STEM Engagement Committee

NextGen STEM Update

Dec. 4, 2018
**NextGen STEM Changes Initiated in FY2018**

- Revamped approach for Informal Solicitation
  - Focus on two **Agency themes**
  - Required involvement of affiliate networks of partners to expand reach

- Initiated proof-of-concept pilot activities
  - Focus on two themes above plus an additional **Agency theme**
  - Aligned to evidence-based education strategies
  - Work assigned based on Center skills and capabilities

- Sunsetting SEAP activities no longer in alignment with new approach to STEM Engagement
  - Insuring systematic process to capture performance, key accomplishments, and findings

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**THEMES**

- Small Steps to Giant Leaps: Looking to the Future of NASA Aeronautics Innovation
- Moon to Mars: Human Exploration Beyond Low Earth Orbit
- Development of Commercial Crew Program Capabilities
Suite of evidence-based pilot activities to engage middle school students in mission content
- Sustained Engagement experiences with Authentic Content (Citizen Science, Design Challenges)
- Hand’s on Inquiry Based Experiences
- Interaction with Digital Resources and Social Media
- Educator Support Materials
- Partner Driven Collaborations for Implementation
- Leverage existing Agency STEM Engagement resources

NextGen STEM Pilot Activities

Design Approach

Identify Agency Content Priorities → Components Development Based on Research → Work closely with subject-matter-experts → Audience Beta Testing → Review Results and Refine Approach
Small Steps to Giant Leaps: A focus on the Future of NASA Aeronautics Innovation
Quiet Supersonic Flight – X-59 QueSST

Lead Center: Armstrong
Teaming Centers: Glenn, Langley
Developing Commercial Crew Program Capabilities

A Focus on Human Spaceflight to Space Station with our Commercial Partners

Lead Center: Kennedy
Teaming Centers: Johnson, Langley
Moon to Mars:
A Focus on Transportation Systems for Moon to Mars Missions

Lead Center: Johnson
Teaming Centers: Marshall, Stennis, Langley