NASA Advisory Council April 10, 2015



James L. Stofan Chair, Ad Hoc Task Force on STEM Education



Task Force Membership



- Dr. Margaret Honey, President and CEO, New York Hall of Science, Chair of NRC Committee Toward Integrated STEM Education: Developing a Research Agenda
- Ms. Aimee Kennedy, Vice President For Education, STEM Learning and Philanthropy, Battelle
- Dr. Anita Krishnamurthi, Vice President, STEM Policy, Afterschool Alliance, Former NASA
- Dr. Michael Lach, Director of STEM Education and Strategic Initiatives, University of Chicago, Former Dept. of Education STEM Advisor
- Mr. Ray Mellado, Founder and Chairman of the Board, Great Minds in STEM
- Dr. Carl Person, Undergraduate Research Preceptor, Fayetteville State University, Former U.S. Department of Education and NASA
- Mr. James Stofan, COO, Defenders of Wildlife, Former NASA

Terms of Reference



- Ad hoc task force of the NASA Advisory Council (NAC)
- Scope includes all NASA Education programs, projects, missions and activities.
- Meet approximately three times per year, in advance of NAC meetings.
- Report on progress to the NAC

Charge



- Iterative process over the two-year term of the committee.
- Initial Topics for Task Force Consideration:
 - Position of NASA Education as a leader in CoSTEM
 - Articulation of success using data and story
 - Structure of NASA Education efforts and ability to conduct rigorous program management reviews
 - Sustainability of education program over the next several years
 - Competitive allocation of funds to elicit the best projects
 - Advice on NASA Education Implementation Plan

Cross Agency STEM Goal Statement



Improve STEM education by implementing the *Federal STEM Education 5-Year Strategic Plan*, announced in May 2013, specifically:*

- Improve STEM instruction
- Increase and sustain youth and public engagement in STEM
- Enhance STEM experience of undergraduate students
- Better serve groups historically under-represented in STEM fields
- Design graduate education for tomorrow's STEM workforce
- Build new models for leveraging assets and expertise
- Build and use evidence-based approaches

NASA Strategic Goal 2 & Education Objective



Strategic Goal 2

Advance understanding of Earth and develop technologies to improve the quality of life on our home planet.

Objective 2.4

Advance the Nation's STEM education and workforce pipeline by working collaboratively with other agencies to engage students, teachers, and faculty in NASA's missions and unique assets. **NASA Education Vision & Mission**

NASA

NASA Education Vision

To advance high quality STEM education using NASA's unique capabilities.

NASA Education Mission

Align efforts to national priorities and NASA's mission and vision. Involve students, educators, and institutions in NASA's missions. Impact the public using NASA's unique content, people and facilities.

NASA Education Success Story



- Nicholson Elementary in Picayune, MS, designed an engineering solution to help the city with drainage with the help of NASA.
- Robotic Storm Drain Expedition movie at:

http://www.samsung.com/us/solvefortomorrow/project/ mississippi-robotic-storm-drain-expedition.html National Aeronautics and Space Administration



Thank you!





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