

A close-up view of an astronaut's helmet and shoulder in a blue space suit. The helmet's visor reflects a blue-tinted view of a rocky, cratered planet. In the background, the orange horizon of another planet is visible, with a Mars rover on the surface. A NASA logo is on the suit's chest.

**NASA Advisory Council**  
***Task Force on STEM Education***  
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**#JOURNEYTOMARS**

# Taskforce on STEM Education



## Members:

- Margaret Honey
- Aimee Kennedy
- Anita Krishnamurthi \*chair
- Michael Lach
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- Jim Stofan
- Carl Person \* vice-chair

Meetings in 2016: March 2016, June 2016, July 2016



# Observations

The Business Services Assessment is currently conducting an assessment of NASA education.

1) We suggest that this effort should describe how NASA's education efforts are currently structured or should be structured to embody the following principles:

- Shared ownership and vision (does everyone at NASA see education as part of their mission and job?)
- Engenders trust (do individuals and teams have the relationships and collaboration opportunities to work together effectively as equal partners?)

# Observations (contd.)



- Transparency (Is it clear who's doing what, with what money , to what end and how decisions are made?)
- Authority and accountability— (which offices have authority in what projects)
- Resources— are the resources allocated appropriately for the desired outcome)

2) Does the Office of Education have the capacity required to be successful? This includes personnel, funding, political clout, access to people across the agency and externally, and relationships.

# Finding



- A narrower strategic focus for NASA's education discretionary/non-directed dollars will allow the agency's education efforts from being spread too thin.
  - For example, we encourage NASA to consider focusing on particular age bands, geographic areas, segments of the population, or content areas in each solicitation cycle.
  - To make this determination, NASA should collect and utilize additional impact data to inform solicitations and strategic directions for NASA's education programs.

# Finding



- NASA education grantees and the larger network of NASA educators and researchers would benefit from deeper connections with the broader STEM education community.
  - STEM education research is advancing rapidly and offers insights into design of effective programming. Encouraging increased collaborations with national STEM education focused organizations, including researchers in such organizations, will help individuals be more knowledgeable about the broader context of STEM education research and programming.
  - Engagement can be used to provide ongoing professional development of NASA’s education personnel.



# Recommendation

- NASA education will benefit from a high level external taskforce or committee to provide strategic guidance and content expertise on all of NASA's Education program investment priorities. The taskforce recommends that NASA should appoint a standing advisory taskforce or committee for education.
  - Such a group will be able to provide a “big picture” vision of the trajectory of STEM education and help NASA education leverage ongoing national initiatives.
  - An advisory group that includes members from the stakeholder community will be able to describe educational needs, opportunities or challenges in local communities. This information will help NASA determine its future strategy for education investments.