



The Role of Education and Public Outreach in the Explorer Program

**Presented at the SMEX Pre-proposal
Conference**

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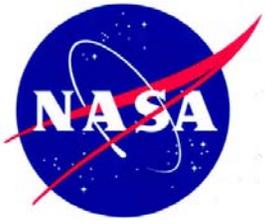


NASA Education Goals

- Strengthening NASA and the Nation's future workforce
- Attracting and retaining students in STEM disciplines
- Engaging Americans in NASA's mission



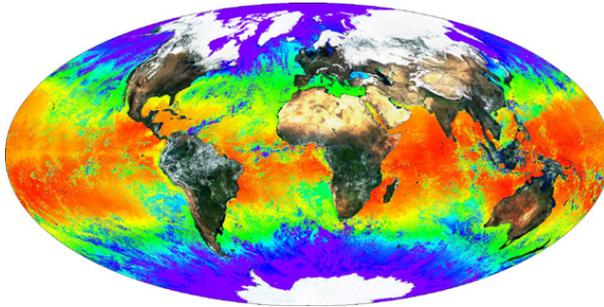
SMD E/PO addresses these goals through a portfolio of activities involving many types of partners and carried out in many types of communities across the country.



Why does SMD invest in E/PO?



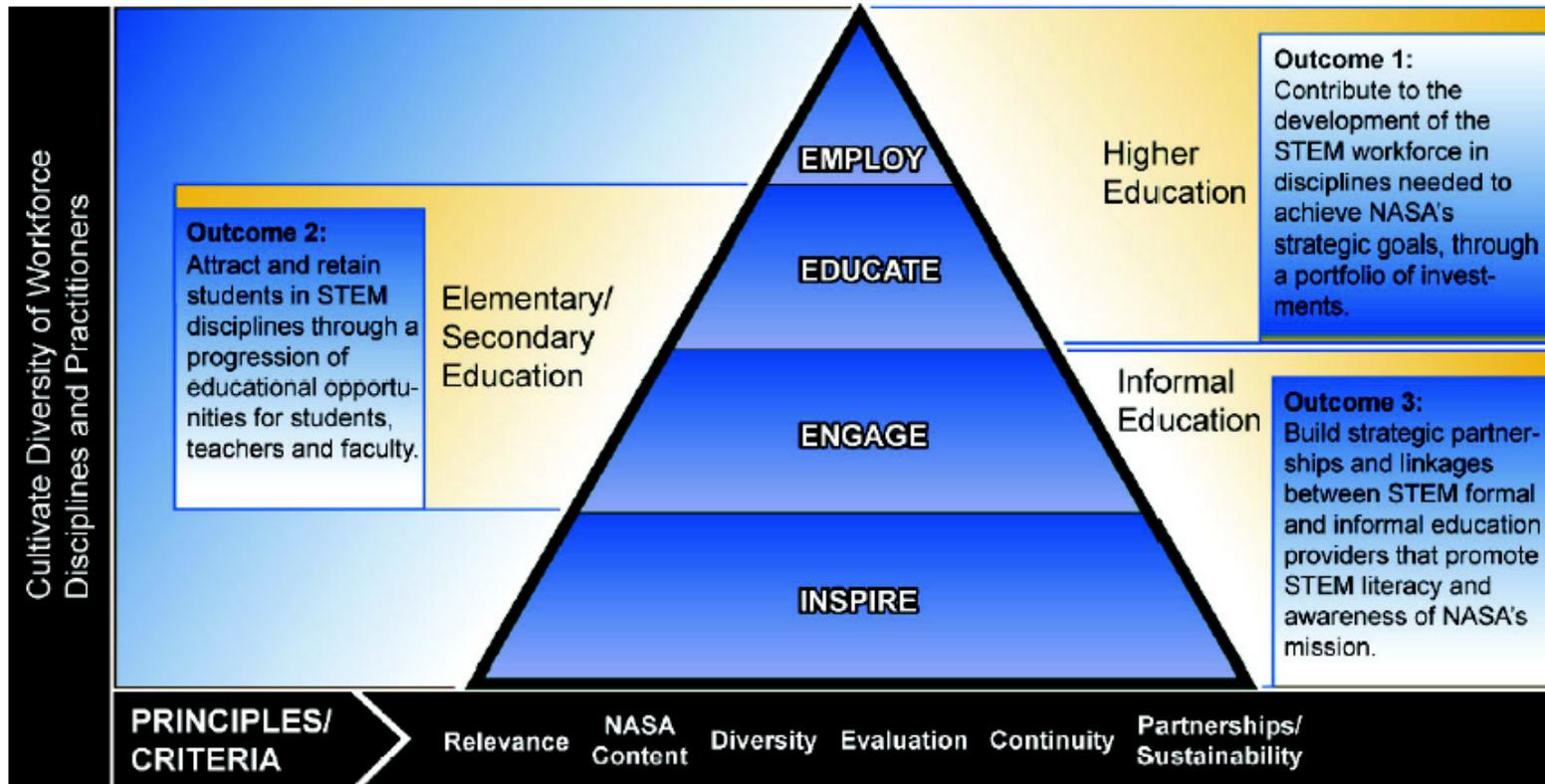
To proactively tell the stories of NASA science missions and research to make our work accessible to teachers, students, and the public.



SMD involves scientists to insure accurate and up-to-date content.



NASA Education Strategic Framework





Science E/PO Program Portfolio

- Mission-embedded E/PO
- E/PO projects (independent, mid-sized awards)
- E/PO supplements to ROSES research awards
- Infrastructure for program management and coordination

(Graduate and early-career or postdoctoral fellowships included in R&A)



SMEX Program Proposal Preparation



SMD Education and Public Outreach

What Are We Looking For In Proposals?

- A statement that the PI understands the requirements of the SMD E/PO program and is committed to carrying out a program that meets the SMD E/PO goals.
- Identification of any unique characteristics of the mission that would be utilized in the E/PO program.
- An overview of the planned “core” E/PO activities:
 - Identification of target audiences and areas of emphasis/activities in formal, informal and public outreach.
 - Understanding of the role that program evaluation plays in E/PO.
 - A commitment to adequately fund the proposed “core” E/PO program--

[SMEX Program Guideline: .25-1.0% of the total mission cost through all phases excluding launch vehicles.]



SMD Education and Public Outreach

- Detailed plans for implementing the “core” E/PO activities, including identification of and formal commitment from E/PO partner institutions, will be part of the Phase A Concept Study and will be evaluated as part of the confirmation process.



Student Collaborations

- Principal Investigators are encouraged to propose innovative ways to directly involve students in their prospective missions.
 - Proposers may define a Student Collaboration (SC) that may involve development of an instrument, investigation of scientific questions, data analysis or modeling, development of supporting hardware or software, and/or other aspects of the mission. The activities may involve flight or ground systems.
- The SC will be evaluated for overall merit. Overall merit of an SC is a combination of -
 - 1) the science/engineering merit of the proposed SC investigation;
 - 2) implementation merit of the SC based on technical, management, and cost feasibility of the SC, including cost risk, as expressed in terms of specific major and minor strengths and weaknesses; and
 - 3) educational merit of the SC.



Student Collaborations

- The proposer must -
 - clearly identify proposed SC as an E/PO element
 - clearly identify the development schedule of the SC. Review and decision points for determining the SC readiness for flight must be identified.
 - describe how the SC can be incorporated into the mission on a non-impact basis. [The SC may not increase the mission development risk or impact the development or performance of the baseline science investigation in any way that would cause the baseline mission to be compromised in the event that the SC component is not funded, encounters technical, schedule, or cost problems, or fails in flight. The SC must be shown to be clearly separable from the rest of the proposed effort.]
- Although the cost of the SC must be included under the NASA cost cap, the cost of the SC must be identified separately from the proposed investigation. If NASA selects the proposed mission, NASA may or may not fund the SC.



Student Collaboration Definition Team

- Community workshops at AGU and AAS Meetings on Student Collaboration opportunities
 - AGU: Sunday, December 9th, 2007, 1:00-6:00 p.m., Marriott Hotel, San Francisco, CA.
 - AAS: Monday, January 7th, 2008 1:00-6:00 p.m., Hilton Hotel, Austin, TX.
- These workshops offer the opportunity for community members and educators to learn about SMD Student Collaborations and provide further input to the SCDT. The specific emphasis during these workshops is to discuss the outcome and draft white paper of the SCDT (due out in mid-November).
- Format of the Workshop:
 - 1:00-2:30: Outline and Discussion of the Science Definition Team Progress and White Paper (Dr. Emily CoBabe-Ammann, University of Colorado and Dr. David Klumpar, Montana State University, chairs)
 - 2:30-3:30: Short community-member presentations that highlight the wide variety of Student Collaborations.
 - 3:30-6:00: Open discussion.
- Anyone interested in presenting a 5-10 minute overview on a specific Student Collaboration should contact Emily (ecobabe@lasp.colorado.edu) or David (klump@physics.montana.edu).



SMD Education and Public Outreach Information Sources for Proposal Preparation

- Explanatory Guide for the Education/Public Outreach Evaluation Criteria (**Version 2.0 December 2006**)
 - Describes in great detail what the Evaluation Criteria mean
 - Contains answers to “Frequently Asked Questions”
 - Was developed to ensure that E/PO efforts are prepared and evaluated on a consistent basis.
- Education and Public Outreach Annual Reports
- E/PO Newsletters
- Support Network (Education Forums)



SMD Education and Public Outreach

Sources of Assistance

- Contact a Space Science Education Forum
 - The Support Network is there to help, but is not responsible for preparing the EPO portion of your Investigation
- In accord with the operating principles developed by the Support Network, discussions with individual teams developing proposals will be treated as proprietary
- Contact information is available through the SMD E/PO Homepage [<http://science.hq.nasa.gov/research/epo.htm>]
- Questions, concerns, or requests for information or clarification regarding this AO shall be directed only to NASA's formal point of contact, Dr. Hashima Hasan.



Backup Charts



SMD Education and Public Outreach: Some Important Definitions

