

NASA's Education Program Office of Human Resources and Education

Presentation by

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NASA & Space Grant: What's Different?

- > New Administrator, Sean O'Keefe
- President's Management Agenda
 - Performance Outcome Evaluation
- Emphasis on evaluation and accountability GPRA
- ➤ NASA Education Program Evaluation Review Panel (NEPER)



NEPER Panel Report

- **≻Ordered by OMB**
- > Responded to Five Questions
- **► Made 31 Recommendations**
- >Action Plan



- ➤ Is there an appropriate role in education for NASA that is unique from other federal agencies, such as the Department of Education and the National Science Foundation?
- These special scientific and technological resources [mission, facilities, people] provide NASA with a unique niche in the national science and education community. Therefore, this committee strongly supports NASA's Education Program.



- > What is the appropriate role in education for NASA?
- > Three characteristics of educational transfer appear important: 1) the contributions should support national, state, and local agendas, not create new agendas; 2) the content delivery should cover the vision and scope of mathematics, science, technology, and engineering; and 3) the endeavors should capture the excitement and spirit of NASA exploration and new discovery.



- Has NASA established appropriate goals and objectives for its Education Program?
- > ... concluded that the appropriate set of goals and objectives guides NASA's national SMET educational enterprise.
- The NASA Education Program makes a broad impact with a relatively small amount of dollars.
 - Sound planning
 - Integrating active scientists
 - Building alliances, partnerships, and coalitions with key national SMET organizations



- **▶** Is the NASA Implementation Plan an effective document to guide the Education Program to the achievement of the identified goals and objectives?
- > ...the panel concluded that NASA's Implementation Plan includes appropriate goals and objectives that guide its Education Program and keep it aligned with NASA's mission.



- > Is NASA's Education Program effective at achieving its established goals and objectives with the appropriate balance of recipients?
- > ...impressed with the number of projects undertaken, the number and diversity of persons affected, and the effectiveness based on dollars spent per person reached. ...concluded that the NASA Education Program is effective at reaching its goals within NASA's appropriate role.
- > ... recommended further longitudinal studies to document actual outcomes.



NEPER Report – Major Recommendations

- Outcome Evaluation
 - Longitudinal studies
 - > Return on Investment
- Coordination
- > Stipends
- **Diversity**
- Workforce
- > Other
 - Space Grant should expand its national network



NEPER – Action Plan

- Establish a standing review panel
- > Review EDCATS
 - > Ensure data are reliable
 - Ensure data are valid & outcome-based
 - Incorporate longitudinal data & cost-effectiveness data
- Conduct training in evaluation
- Evaluate major national education programs



Space Grant Challenges

- Outcome Evaluation
 - What's the "Value Proposition"; the "So What?"
- Collect & use longitudinal data (esp. student)
- **► Integrate CMIS with EDCATS**
- ➤ Make use of & coordinate with NASA Education Resources
 - Linking Leaders/NASSMC
 - Aerospace Education Services Program Specialists
 - Educator Resource Centers
 - Curriculum Support Products
 - ➤ GLOBE, NOVA...