



*NASA EDUCATION STRATEGIC
COORDINATION FRAMEWORK*



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*PRESENTATION TO THE
NATIONAL COUNCIL OF
SPACE GRANT DIRECTORS
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Response to Direction from the Administrator - post-PA&E Study

Bring a detailed plan to the Strategic Management Council to include:

1. Align with Agency Strategic Plan

- Education Outcomes → FY06 Agency Strategic Plan
- Strategic Framework → Portfolio mapping and realignment
→ Informed FY06 & FY07 budget realignments

2. Clearly defined roles and responsibilities to promote coordination

- Portfolio Coordination Framework
- Roles and Responsibilities Defined
- Education Coordinating Committee (ECC)



3. Clearly defined and coordinated portfolio approach

- Top-level portfolio mapped to Strategic Framework
- Detailed portfolio map
- Portfolio realignment → '08 budget submission

4. Well-defined evaluation component

- Strategy and principles
- Issue definition
- Detailed Agency-wide guidance

**ECC
working
groups**

- Portfolio
- Database
- Evaluation
- Outreach/
Partners
- Program
Mgmt.
- Earmarks

Outcomes for the 2006 NASA Strategic Plan

Task: Align with the three Education Priorities:

- Workforce Development
- Strengthening the Pipeline
- Public Benefit

The NASA Education portfolio is guided by three desired outcomes:

Outcome 1: Contribute to the development of the STEM workforce in disciplines needed to achieve NASA's strategic goals, through a portfolio of investments.

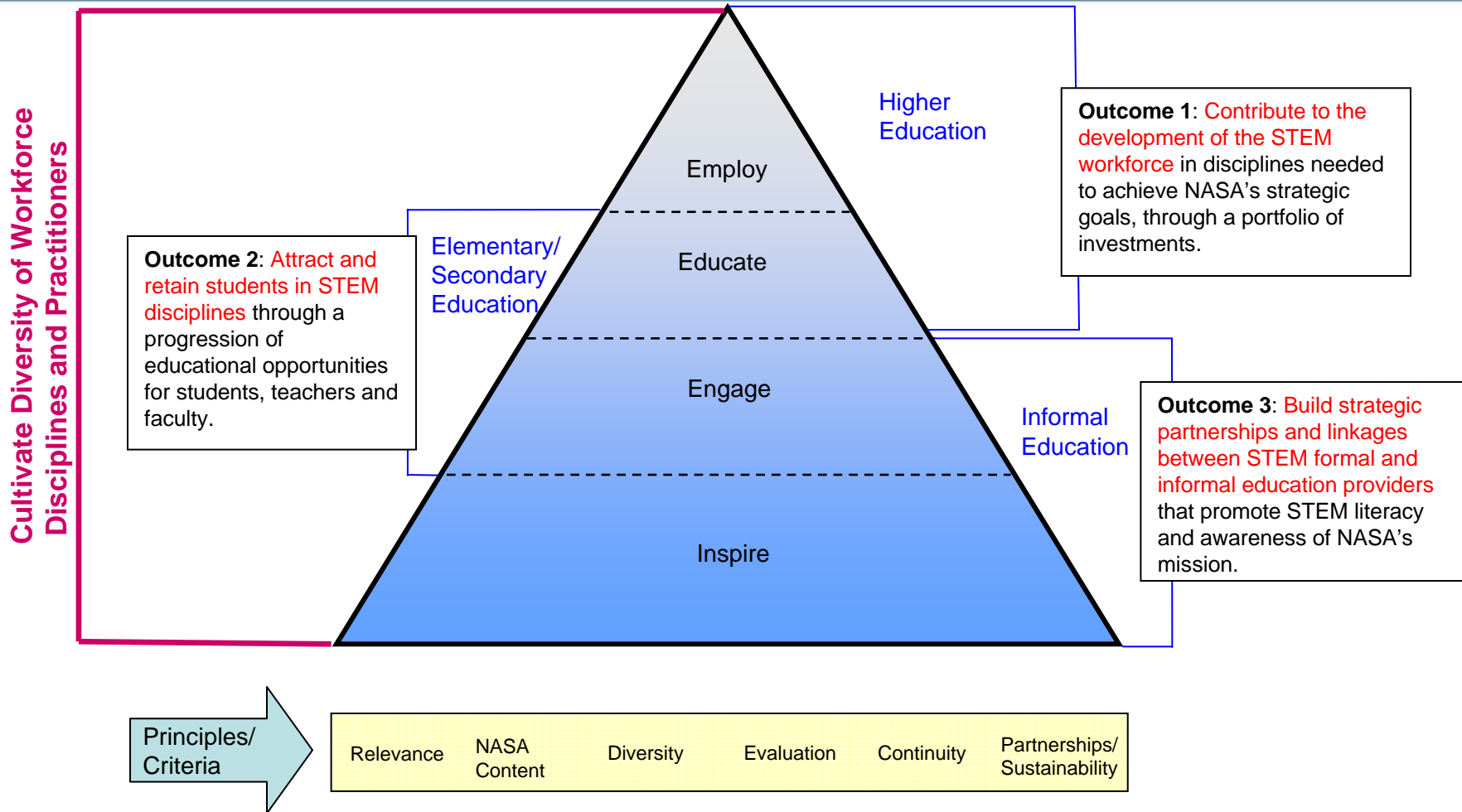
Outcome 2: Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers and faculty.

Outcome 3: Build strategic partnerships and linkages between STEM formal and informal education providers that promote STEM literacy and awareness of NASA's mission.

NASA Education



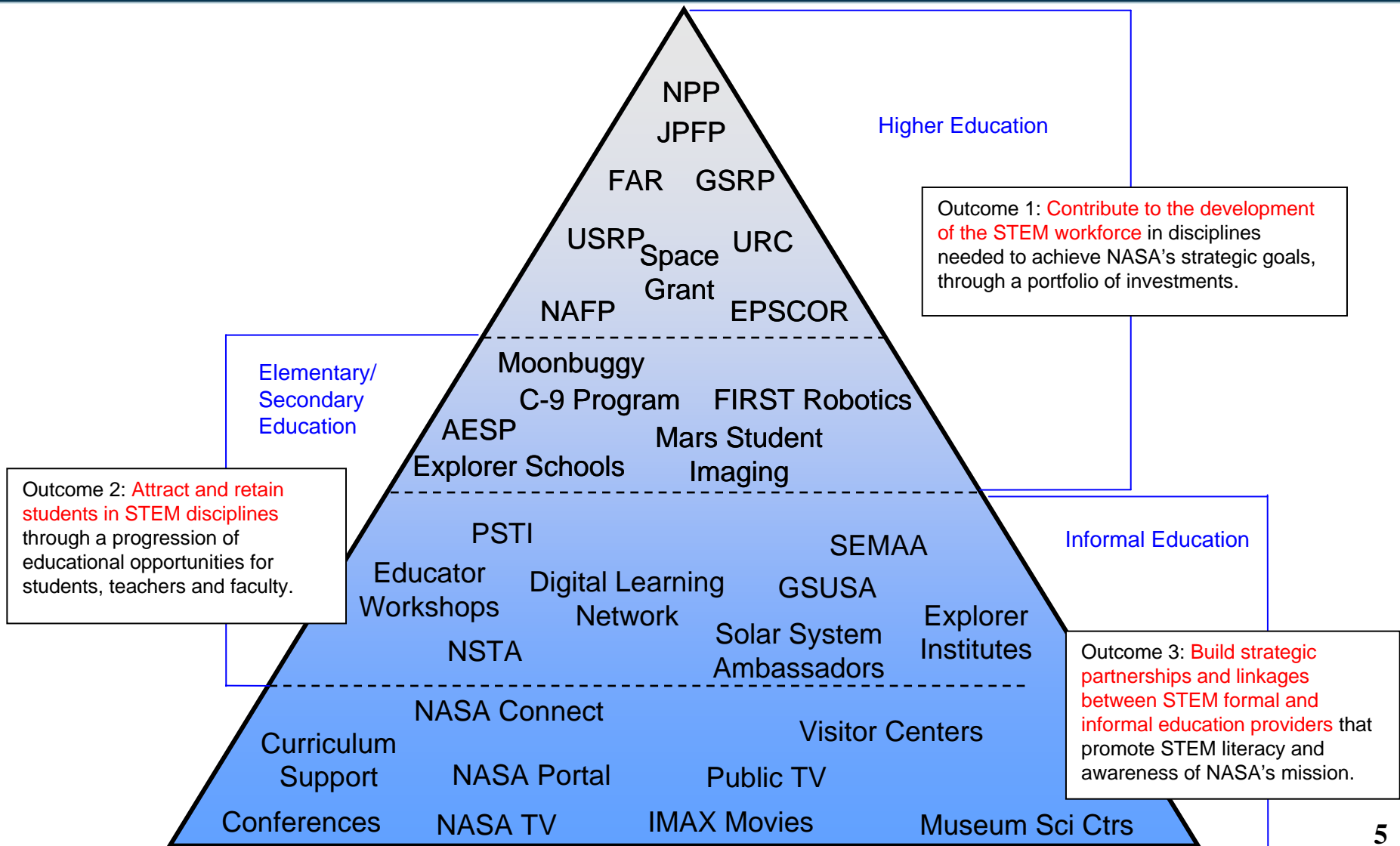
The Education Portfolio Strategic Framework



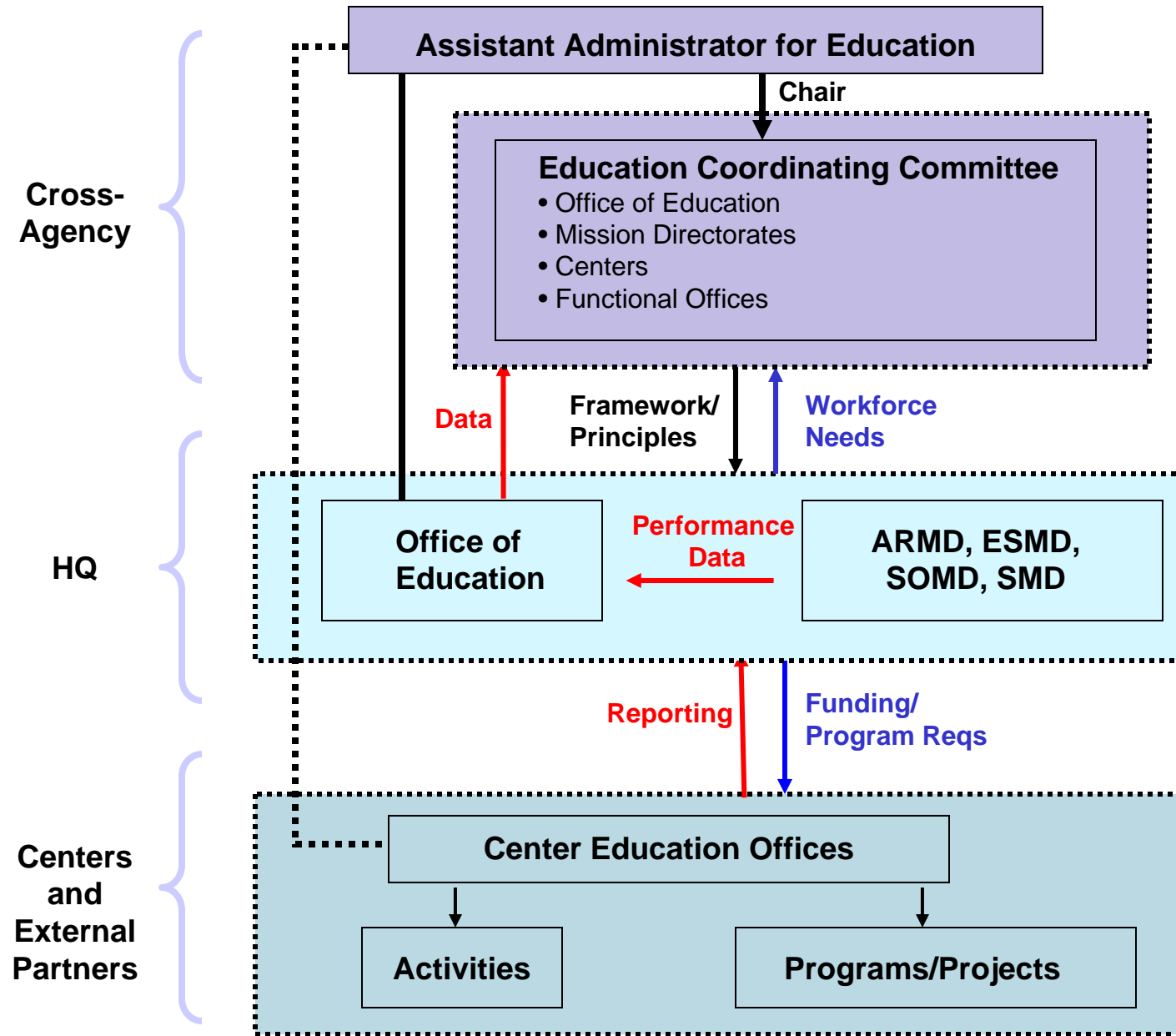
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Examples of FY06 Projects Mapped to Strategic Framework



Education Portfolio Coordination Framework



Accountability

Policy

- Strategic Goals/ Objectives/ Outcomes
- Consultation
- Coordination
- Cognizance
- **Assessment**

Content

- Performance Goals
- Direction
- Funding
- **Evaluation**
- **Reporting**


Implementation

- Program/Project Management and Execution
- **Performance Data**
- **Evaluation**
- **Reporting**



Direction from Administrator

National Aeronautics and
Space Administration
Office of the Administrator
Washington, DC 20546-0001



October 21, 2005

TO: Officials-in-Charge of Headquarters Offices
Directors, NASA Centers

FROM: Administrator

SUBJECT: NASA Education Activities

I met recently with Joe Davis, Chief of Strategic Communications, and other senior Agency leaders to review the Agency's Education activities. Our discussion followed the Program Analysis and Evaluation Office's assessment of NASA Education activities.

Based on that discussion, I have asked Joe and his team to bring a detailed implementation plan for NASA's Education investments to the Strategic Management Council. This plan will include:

- A clear education implementation plan mapped to the Agency Strategic Plan that supports the Vision for Space Exploration and our ongoing science and aeronautics activities.
- A clearly defined and coordinated portfolio approach to NASA Education (including all of the education and educational outreach activities and investments at NASA Centers and within the Mission Directorates).
- A clearly defined description of the relationships and responsibilities pertaining to education for the Office of Education, all Mission Directorates, and all NASA Centers to promote coordination and collaboration among these entities.
- A well defined evaluation component of the implementation plan to ensure that NASA's education activities are measured for effectiveness against the Agency's strategic goals.

This plan will serve as the framework for NASA's education activities in the coming years. I view NASA's Education activities to be an integral element in achieving the Agency's strategic goals, and I look to you and your staff to support Joe and his team in contributing to the development of this critical plan.



Map to the Agency Strategic Plan



Clearly defined and coordinated portfolio approach



Clearly defined roles and responsibilities to promote coordination



Well-defined evaluation plan

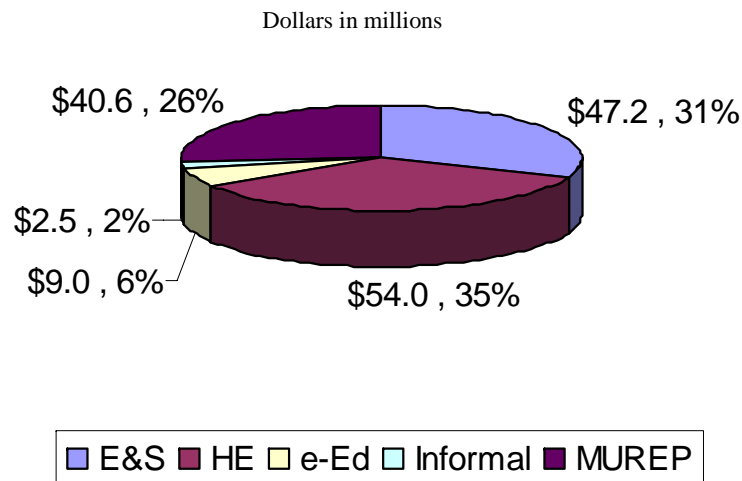


FY 2007 Budget Request - Overview

HIGHLIGHTS

- **Total requested new budget authority is \$153.3 million.**
- \$47.2 million for the Elementary & Secondary Education program to make available NASA-unique strategies, tools content, and resources supporting the K-12 education community's effort to increase student interest and academic achievement in STEM disciplines.
- \$54.0 million for the Higher Education program to attract and prepare students for NASA-related careers, and enhance the research competitiveness of the Nation's colleges and universities by providing opportunities for faculty and university-based research.
- \$9.0 million for the e-Education program to develop and deploy technology applications, products, services and infrastructure to enhance the educational process for formal and informal education.
- \$2.5 million for the Informal Education program to establish the forum for informal education community efforts to inspire the next generation of explorers and innovators and make available NASA-unique strategies, tools, content, and resources to enhance their capacity to engage in STEM education.
- \$40.6 million for the Minority University Research and Education program to attract and prepare underrepresented and underserved students for NASA-related careers and enhance competitiveness of minority-serving institutions by providing opportunities for faculty and university- and college-based research.

Office of Education Funding by Program



FY07 Budget Request - Performance Measurement

Outcome 1: Contribute to the development of the STEM workforce in disciplines needed to achieve NASA's strategic goals, through a portfolio of investments.

- Collect, analyze, and report longitudinal data on student participants to determine the degree to which participants enter the NASA workforce or other NASA-related career fields. (Higher Education)
- Award 1,200 competitive internships, fellowships, and research opportunities for higher education students and faculty in STEM disciplines. (Higher Education)
- Award 500 competitive scholarships, internships, fellowships, and research opportunities for underrepresented and underserved students, teachers and faculty in STEM disciplines. (MUREP)
- Provide 100 grants to enhance the capability of approximately 50 underrepresented and underserved colleges and universities to compete for and conduct basic or applied NASA-related research. (MUREP)

Outcome 2: Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers and faculty.

- Conduct 10 Educator Astronaut workshops, involving approximately 200 educators. (Elementary & Secondary)
- Select and support 50 additional schools to participate in the NASA Explorer Schools program, maintaining the total number at 100 or more. (Elementary & Secondary)
- Select approximately 100 student experiments, involving approximately 1000 students, to participate in the Flight Projects program. (Elementary & Secondary)

Outcome 3: Build strategic partnerships and linkages between STEM formal and informal education providers that promote STEM literacy and awareness of NASA's mission.

- Digitize and meta-tag up to 10 percent of NASA's approved learning materials to be delivered using technology-enabled learning systems. (e-Education)
- Award competitive grants to NASA Centers and informal education partners to conduct up to 10 Explorer Institutes projects. (Informal Education)

Outcomes 1, 2 & 3:

- Complete a retrospective longitudinal study of student participants to determine the degree to which participants maintain affiliation with NASA through the pipeline. (All)
- Collect, analyze, and report that 100% of grantees that annually report on their accomplishments. (All)
- Peer review and competitively award at least 85 percent, by budget, of research projects. (All)

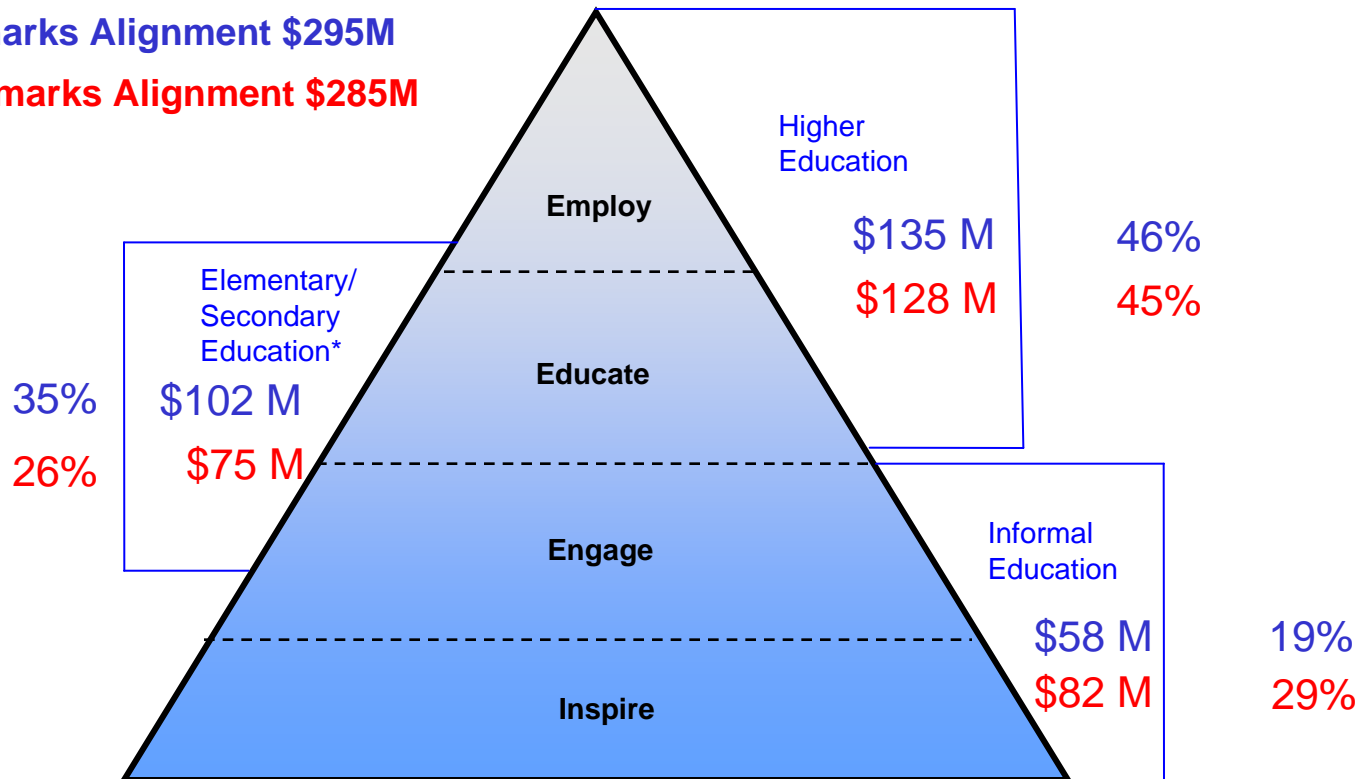
NASA Education



NASA Agency-wide Education Investments—FY06 President's Budget

Pre-Earmarks Alignment \$295M

Post-Earmarks Alignment \$285M



* Includes three projects previously aligned with MUREP

Includes earmarks assigned to Office of Education;
reallocation of resources by ARMD, SOMD and ESMD

In Closing

- Space Grant is a critical component of the NASA Education portfolio
- Important to build on past successes and best practices to ensure alignment with the Agency's priorities and new education framework
- Will convene an ECC-chartered team in March to look at Space Grant and EPSCoR within the environment of the new NASA education framework
 - Dialogue with you as we go forward is essential