



*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.

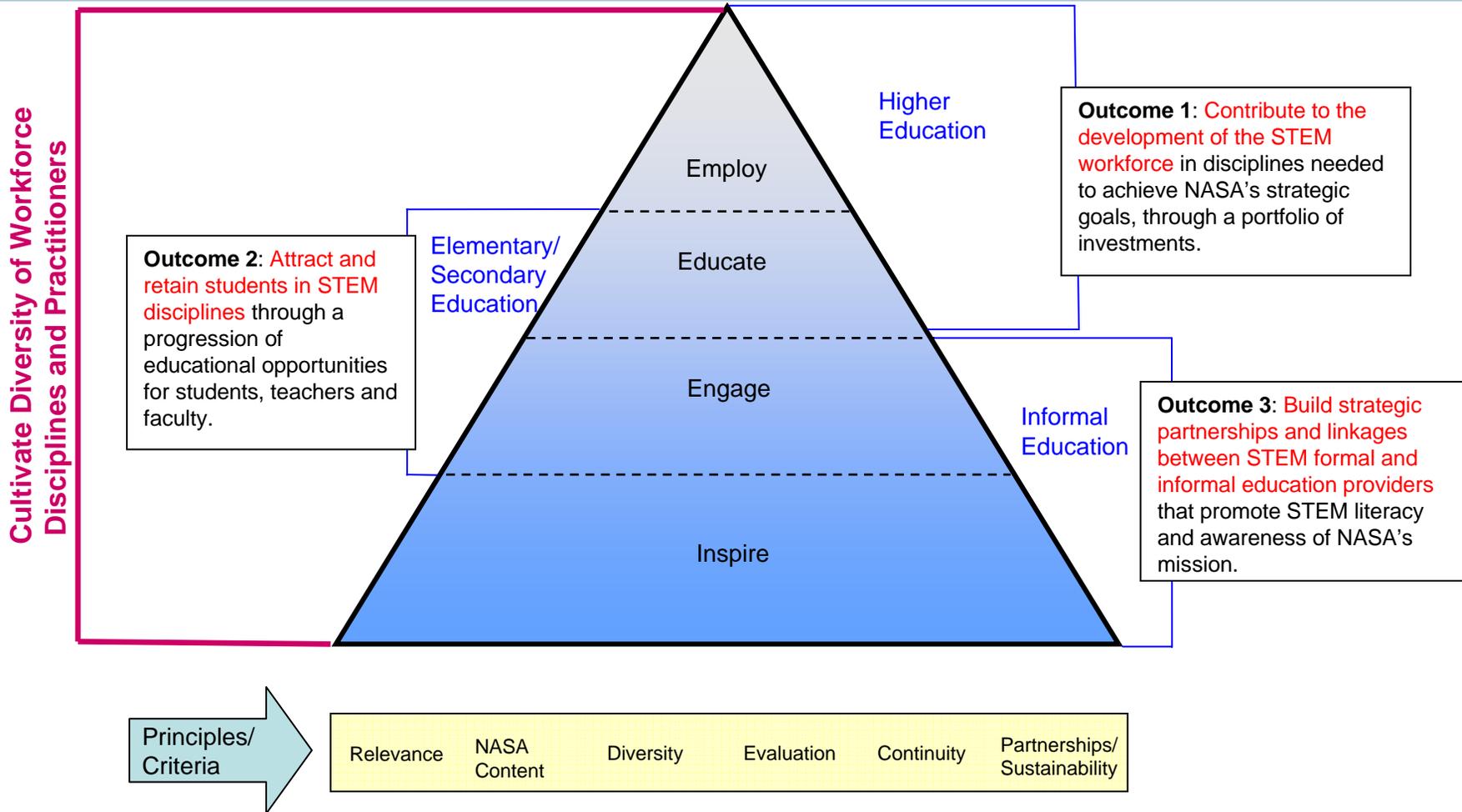
**Outcome 2:** Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers and faculty.

**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



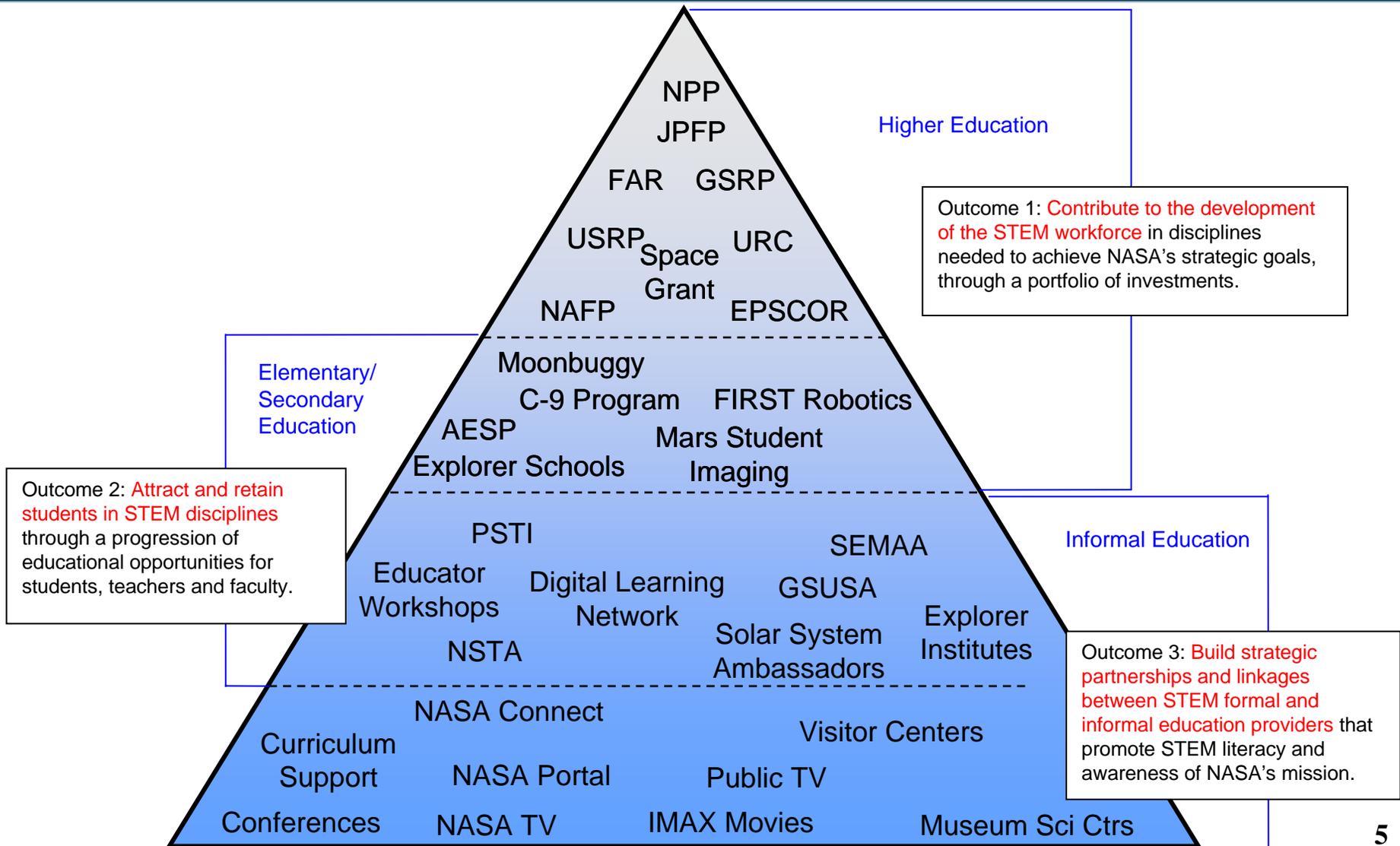
## The Education Portfolio Strategic Framework



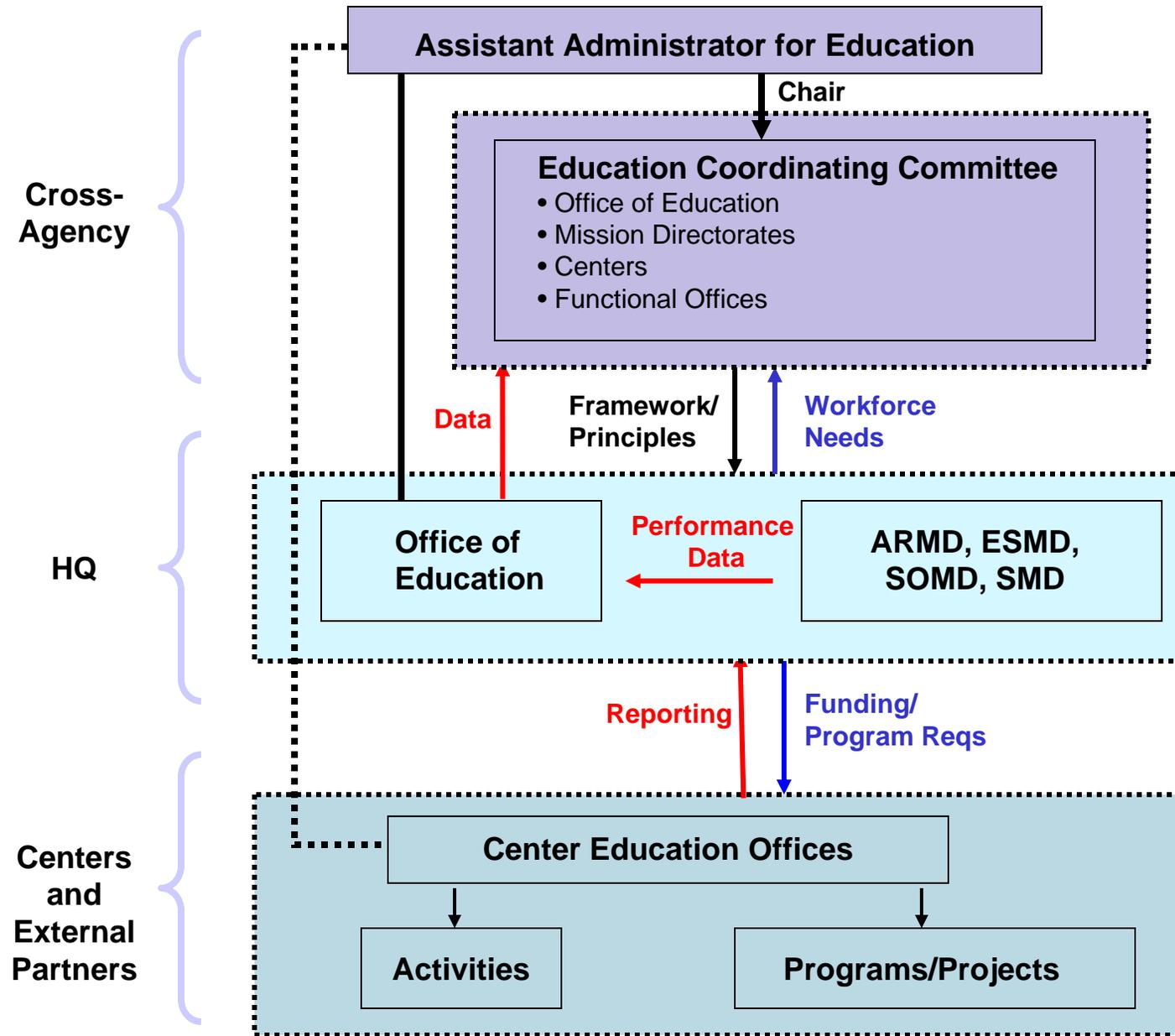
# NASA Education



## 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**

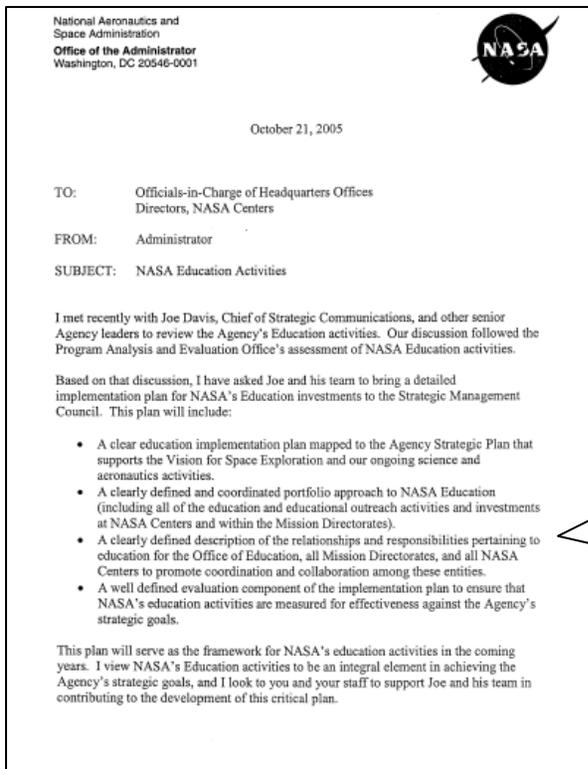
### Implementation

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

# NASA Education



## Direction from Administrator



**Map to the Agency Strategic Plan**



**Clearly defined and coordinated portfolio approach**



**Clearly defined roles and responsibilities to promote coordination**



**Well-defined evaluation plan**

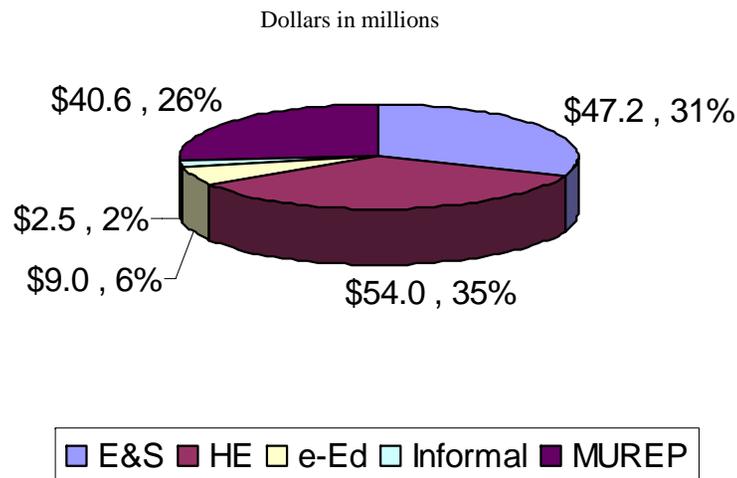


## FY 2007 Budget Request - Overview

### 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)

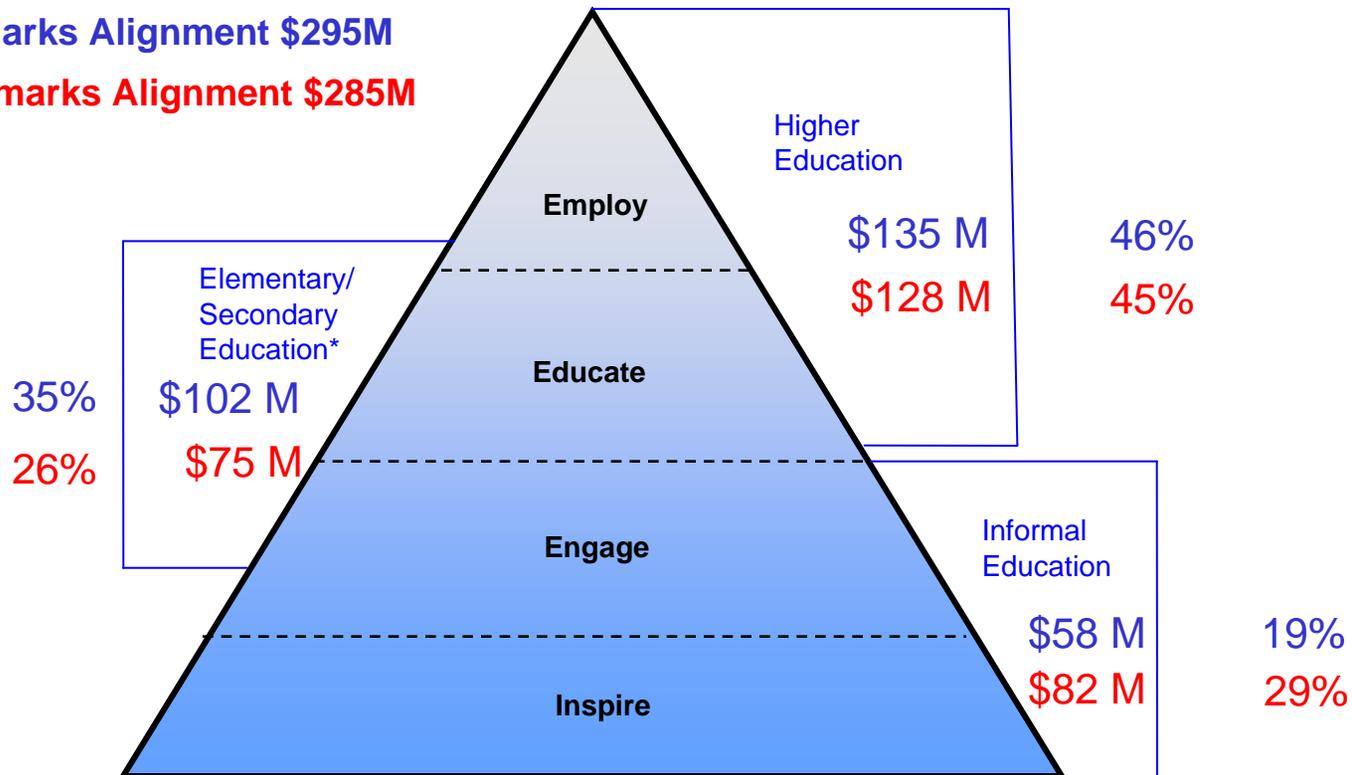
# NASA Education



## 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