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*NASA Education*

**STEM Collaborative Action Plan  
(STEMCAP)  
Forum/Working Group Session**

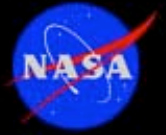
Angela Phillips Diaz

Director,

Strategic Communication and  
Development

NASA Ames Research Center

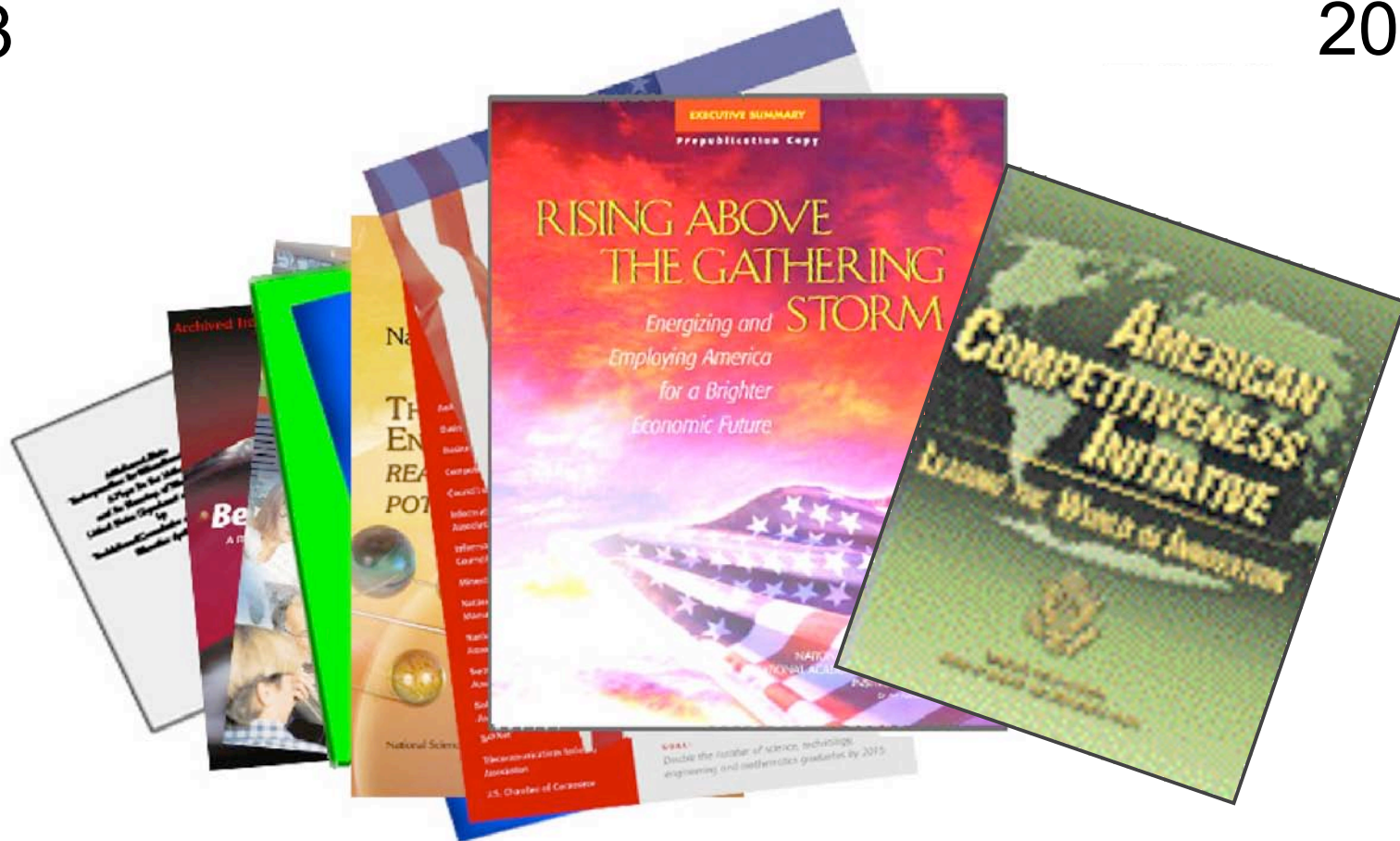
NASA Education



More Than 20 Years of STEM Education Reports

1983

2006



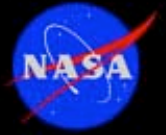


NASA Retirement Statistics

- NASA’s Office of Human Capital reports:
  - In 2004, NASA had 18,325 civil service employees
  - 32% of science & engineering workforce is over 50
  - 40% of the Professional Administrative staff is over 50
  - 2,675 people will retire between 2004-2009
  - An average retirement rate of 12-14% per year

Age	S& E	Prof'l Admin	Clerical	Technician
Under 30	442	171	109	7
30 to 39	2,688	854	267	259
40 to 49	4,101	1,636	351	690
50 to 59	2,267	1,607	390	622
60 and Older	1,153	286	114	136

Age	HQ	ARC	GRC	LARC	DFRC	GSFC	MSFC	SSC	JSC	KSC
Average Age	48	47.9	47.1	46.2	45.9	46.1	45.3	44.3	45.2	45.1



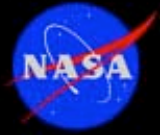
**Science Technology Engineering and Mathematics are Critical**

**WHAT WE KNOW**

- Science, Technology, Engineering and Mathematics Education (STEM) are critical to the United States' competitiveness.
- Foundation of America's competitiveness is a well-educated work force.
- The fields of physical science and engineering are especially important.
- Students must be engaged at an early age and supported through advanced studies.
- Partnerships and collaborations are an important part of NASA strategy to reach students.



# NASA Education



**Rising Above the Gathering Storm**  
October 2005

**Debt Reduction Act Establishes Academic Competitiveness Council**  
February 2006

**National Competitiveness Investment Act**  
September 2006



**Protecting American Competitiveness (PACE) Acts**  
January 2006

**American Competitiveness Initiative**  
January 2006

**Early Career Research Act, Research for Competitiveness Act; Science and Mathematics Education for Competitiveness Act; American Competitiveness Amendment to the College Access & Opportunity Act**  
May 2006

- Feb 2006 Debt Reduction Act signed into law including the establishment of the “Academic Competitiveness Council” plus additional funding for students enrolled in STEM careers
  - Council Chair is the Secretary of Education
  - Members include Cabinet Secretaries & Representatives of 13 Fed agencies who have education programs including NASA
  - Council’s mission: to evaluate the effectiveness of each program, identifying areas of overlap and recommending ways to efficiently integrate and coordinate in the future.
  - Council’s Report due Feb 2007

# NASA Education



## NASA's Education Portfolio Strategic Framework

Cultivate Diversity of Workforce  
Disciplines and Practitioners

