



Barbara Morgan, educator-astronaut, in the classroom.

## Education Programs

### MAJOR EVENTS IN FY 2005

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- ☒ The NASA Explorer Schools program enters its third phase, selecting 50 new schools for a total of 150 participating schools.
- ☒ The first class of students will be selected for the Science and Technology Scholarship program.
- ☒ NASA will capitalize on the ongoing training of the new class of Educator Astronauts by developing learning modules for K-12 students and teachers.
- ☒ The Explorer Institute program will move into its first full year of implementation, building relationships with, and professional development opportunities for, museums, science centers, planetaria, and other informal education institutions across the country.

## Theme: Education Programs

### OVERVIEW

NASA's mission--to understand, to explore, and to inspire--depends upon educated, motivated people with the ingenuity to invent new tools, the passion to solve problems, and the courage to ask the difficult questions. It is not enough to depend on the excitement generated by our images. NASA must use its discoveries and achievements to engage the education community. To do so, we provide meaningful, educational, and content-rich programs that inspire and motivate students at all levels to pursue careers in science, technology, engineering, and mathematics (STEM). We partner with academia, professional associations, industry, and other agencies to provide teachers and faculty with experiences that capitalize on the excitement of NASA's missions to spark student interest and involvement. We provide opportunities for involvement in NASA's research efforts to encourage students to pursue higher education in STEM areas. Finally, we engage the public in shaping and sharing the experience of exploration and discovery. With the FY05 budget request, NASA will fully implement the initiatives piloted in FY03 (Educator Astronaut and NASA Explorer Schools programs); continue the pilot initiatives implemented in FY04 (NASA Explorer Institutes and NASA Science and Technology Scholarship program); and fully integrate all NASA Education programs and activities into a seamless pipeline of exemplary programs that inspire the next generation of explorers and expands the pool of human capital available to meet NASA's needs.

Missions	Goals supported by this Theme	Objectives supporting these Goals
To Inspire the Next Generation of Explorers	6. Inspire and motivate students to pursue careers in science, technology, engineering, and mathematics.	6.1 Increase the number of elementary and secondary students and teachers who are involved in NASA-related education opportunities.
		6.2 Support higher education research capability and opportunities that attract and prepare increasing numbers of students and faculty for NASA-related careers.
		6.3 Increase the number and diversity of students, teachers, faculty and researchers from underrepresented and underserved communities in NASA related Science, Technology, Engineering and Mathematics (STEM) fields.
		6.4 Increase student, teacher, and public access to NASA education resources via the establishment of e-Education as a principal learning support system
	7. Engage the public in shaping and sharing the experience of exploration and discovery.	7.1 Improve public understanding and appreciation of science and technology, including NASA aerospace technology, research, and exploration missions.

### RELEVANCE

A lack of public understanding of scientific inquiry, a retiring aerospace workforce, a shrinking pipeline of students with science and engineering skills, and job recruitment competition put future advancements in science, aeronautics and space at risk. Research shows a shortage of students pursuing degrees in disciplines of critical importance to NASA--science, mathematics, and engineering. Several recent National Science Foundation (NSF) reports document the shrinking of the science and engineering (S&E) pipeline over the past decade. This trend begins at the elementary and secondary level and extends through the ranks of the doctoral graduates. This shrinking pipeline has great significance to NASA as nearly 60% of the total NASA workforce is in the S&E fields, and half of these employees have Master's or Doctorate degrees. Nationally, employment opportunities in the S&E fields are projected to increase about three times faster than the rate for all occupations between 2000 and 2010. The number of retirees in these fields is projected to increase dramatically over the next 20 years. NASA faces the challenge of building a workforce that captures the untapped capacity reflected by the Nation's diversity, while the competition for these talented individuals is keen. These trends provide immediate warning signals that NASA must take significant measures to address workforce imperatives that ultimately impact NASA's mission capability. To address these challenges, NASA's Education Enterprise will inspire students from all walks of life to understand the need for and power of scientific discovery and to motivate students to ultimately pursue STEM careers. NASA's Education Enterprise has already begun to address these issues.

#### Education and Public Benefits

By supporting excellence in mathematics and science education and by coordinating with the Department of Education in the Math/Science Partnership, the NASA Education program helps broaden the reach of science and technology literacy programs to the education community and the general public. The NASA Education program is fully responsive to its stakeholders--taxpayers--by actively engaging with other Federal agencies and non-governmental professional education organizations.

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### IMPLEMENTATION

To achieve the stated Education Enterprise objectives, an Education Enterprise strategy has been developed that delineates the roles of the Enterprise; implements evaluation and research as a core element of each Enterprise program; and further defines the education strategic initiatives.

During our storied 46-year history, NASA has had a strong connection with education in this country, as a beneficiary receiving top talent, and as a catalyst for inspiring interest in science and technology. Building on this foundation, and under the leadership of the new Education Enterprise, NASA is poised to launch a bold new future. Today, our Minority University Research and Education Program (MUREP) continues to broaden the participation of underrepresented minorities and minority institutions in NASA's research and development programs through a variety of program offerings, including programs for Principal Investigators, mathematics and science programs, partnerships, and institutional awards. The National Space Grant College and Fellowship Program provides NASA with a presence in 50 states, the District of Columbia, and the Commonwealth of Puerto Rico, supporting NASA research, the training of undergraduate and graduate students, and public service programs. The Space Science, Earth Science, and Biological and Physical Research Enterprises engage their scientific communities to bring the excitement of knowledge from discoveries to the classroom and campuses throughout the nation. The Aeronautics, Space Flight, and Exploration Systems Enterprises share their unique facilities, both on ground and in orbit, with students, teachers and faculty. The ten NASA field centers implement national programs for elementary school, high school, undergraduate, and graduate students, teachers, and faculty while also providing Center-unique education programs supporting their communities and states.

Establishing "to inspire the next generation of explorers" as a core mission of NASA is a bold decision, and bold action is required to ensure mission success. Building on what has previously been done, NASA has identified four initiatives that will strengthen the existing portfolio: the NASA Educator Astronaut program, NASA Explorer Schools, NASA Explorer Institutes, and the NASA Science and Technology Scholarship program. These pathfinder initiatives are designed to stimulate student, educator, and public interest in science, technology, engineering, and mathematics by providing NASA-sponsored educational opportunities that inspire and motivate the next generation of explorers. Although each of these initiatives is in the early stage of implementation, each is designed to trigger significant progress toward achieving NASA's strategic education objectives.

### IMPLEMENTATION SCHEDULE

Theme Element	Schedule by Fiscal Year												Purpose		
	95	96	97	98	99	00	01	02	03	04	05	06		07	08
NASA Science and Technology Scholarship															Provides pipeline development in critical discipline areas for NASA through scholarships with a service obligation.
NASA Explorer Institutes															Improve opportunities for science centers, museums, planetariums, and community-based organizations to translate and deliver engaging NASA content through partnerships and engaging/educating the general public.
Educator Astronaut Program															To develop new ways to connect exploration with the classroom, motivate students and educators, enhance status of teaching profession; and enable leading educators to move from local to national impact.
NASA Explorer Schools															Provides student opportunities to explore NASA science, technology, engineering, mathematics in a variety of engaging ways; sustained professional development for educators with unique teaching tools/NASA content; family involvement with NASA in support of student learning/career exploration
Minority University Base Program															Comprehensive program of opportunities for students and faculty in minority-serving institutions. Program was reviewed in 2003 for alignment with new Education priorities. New program direction will be developed in 2004 according to the outcomes
Education Base Program															Comprehensive, national program of opportunities for students, faculty, and state based institutions. Program was reviewed in 2003 for alignment with new Education priorities. New program direction will be developed in 2004 according to the outcomes

Tech & Adv Concept   
 Development   
 Operations   
 Research

No exceptions to NPG 7120.5B have been taken.

### STATUS

Education was established as a core mission of NASA in FY 2002 and a new Enterprise was established in FY 2003 that organizes, focuses, and unifies all NASA-sponsored education activities, providing a single office for policy, accountability, program standards, and evaluation. During FY 2003, the new Education Enterprise:

- Developed and launched the Educator Astronaut program, designed to select teachers who, as Mission Specialists, will create revolutionary teaching tools and ways to share the training and spaceflight experience with students and other

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educators. More than 1,600 applications were considered for astronaut candidate selection, and more than 58,200 Earth Crew team members have signed up to participate with NASA on a variety of spaceflight related activities.

- Developed and launched the NASA Explorers Schools program, a unique partnership between NASA and 50 school teams from underserved populations around the country. The program provides linkages with NASA centers and on-going educator professional development and student opportunities.
- Recently redesigned NASA Portal and web resources to support efforts to inspire the next generation of explorers and to support the goals of the President's Management Agenda for e-government.
- Funded 20 scholars in Master's and Doctoral programs at universities around the country through the Harriet Jenkins Predoctoral Fellowship, and selected new Curriculum Improvement Partnership Awards (CIPA) at two- and four-year minority-serving institutions.

### PERFORMANCE MEASURES

Outcomes/Annual Performance Goals (APGs)	
<i>Outcome 6.1.1</i>	<i>By 2008, increase by 20%, student participation in NASA instructional and enrichment activities.</i>
5ED1	Increase NASA student participation by 5% above baseline
<i>Outcome 6.1.2</i>	<i>By 2008, increase by 20%, the number of elementary and secondary educators effectively utilizing NASA content-based STEM materials and programs in the classroom.</i>
5ED2	Increase NASA teacher participation by 5% above baseline.
<i>Outcome 6.1.3</i>	<i>By 2008, increase by 20%, family involvement in NASA-sponsored elementary and secondary education programs.</i>
5ED3	Increase existing NASA-sponsored family involvement activities and existing and potential partners by 5% over baseline
<i>Outcome 6.1.4</i>	<i>By 2008, 90% of NASA elementary and secondary programs are aligned with state or local STEM educational objectives.</i>
5ED4	25% of NASA elementary and secondary programs are aligned with state or local STEM educational objectives.
<i>Outcome 6.2.1</i>	<i>By 2008, attain a statistically significant increase in the number and diversity of NASA-supported students graduating in NASA-related fields.</i>
5ED5	Establish a NASA-wide baseline of the diversity of NASA-supported students.
<i>Outcome 6.2.2</i>	<i>By 2008, attain a statistically significant increase in the number of faculty in higher education institutions who are first-time proposers in NASA research and development opportunities.</i>
5ED6	Use existing higher education programs to assist and encourage first time faculty proposers for NASA research and development opportunities.
<i>Outcome 6.2.3</i>	<i>By 2008, increase by 20% the number of higher education institutions that align their NASA research and development activities with STEM teacher preparation departments to improve STEM teacher quality.</i>
5ED7	Establish a baseline of institutions receiving NASA research and development grants and contracts that link their research and development to the institution's school of education.
<i>Outcome 6.2.4</i>	<i>By 2008, increase by 10% the number and diversity of students conducting NASA-relevant research.</i>
5ED8	Establish a baseline of the number and diversity of students conducting NASA-relevant research.
<i>Outcome 6.3.1</i>	<i>By 2008, increase by 20%, underrepresented/underserved NASA-sponsored students who pursue academic degrees in NASA-related STEM disciplines.</i>
5ED9	Increase NASA underrepresented/underserved student participation by 5% over baseline.
<i>Outcome 6.3.2</i>	<i>By 2008, increase by 20%, the number and diversity of teachers and faculty from underrepresented/underserved communities and institutions who participate in NASA-related STEM programs.</i>
5ED10	Increase NASA underrepresented/underserved teacher/faculty participation in NASA STEM-related learning environments by 5% over baseline.
<i>Outcome 6.3.3</i>	<i>By 2008, increase by 20% the number of underrepresented/underserved researchers and minority serving institutions that compete for NASA research and development opportunities.</i>
5ED11	Increase the numbers of underserved/underrepresented researchers and minority serving institutions competing for NASA research announcements by 5% above baseline.
<i>Outcome 6.3.4</i>	<i>By 2008, increase family involvement in underrepresented/underserved NASA-sponsored student programs.</i>
5ED12	Establish a baseline of family involvement in underrepresented/underserved NASA-sponsored student programs.
<i>Outcome 6.4.1</i>	<i>By 2008, identify and implement 4 new advanced technology applications that will positively impact learning.</i>
5ED13	Prototype 1 new advanced technology application.
<i>Outcome 6.4.2</i>	<i>By 2008, demonstrate the effectiveness of NASA digital content materials in targeted learning environments.</i>

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Outcomes/Annual Performance Goals (APGs)	
5ED14	Evaluate the 50 pilot NASA Explorer Schools, utilizing a design experiment approach.
<i>Outcome 6.4.3</i>	<i>By 2008, establish a technology infrastructure that meets citizen demand for NASA learning services.</i>
5ED15	Develop a plan for establishing a technology infrastructure.
<i>Outcome 7.1.1</i>	<i>By 2008, establish a national program to engage the informal education community with NASA Science and Technology.</i>
5ED16	Implement Phase 1 of a plan to increase appreciation of the relevance and role of NASA science and technology.
<i>Outcome 7.1.2</i>	<i>By 2008 provide instructional materials derived from NASA research and scientific activities that meet the needs of NASA's informal education partners.</i>
5ED17	Develop a plan to assess and prioritize high-leverage and critical informal education programs and educational involvement activities.
<i>Outcome 7.1.3</i>	<i>By 2008 provide professional development for NASA's informal education partners.</i>
5ED18	Develop a plan to assess current NASA professional development programs for relevance to the targeted informal learning environments.
Uniform Measures	
5ED19	At least 80%, by budget, of research projects will be peer-reviewed and competitively awarded.

### INDEPENDENT REVIEWS

Review Types	Performer	Last Review Date	Next Review Date	Purpose
Program Review	External panel		9/04	Review/evaluate programs according to new direction.

### BUDGET

Budget Authority (\$ millions)	FY 2003	FY 2004	Change	FY 2005	Comments
<b>Education Programs</b>	<b>198.6</b>	<b>226.3</b>	<b>-57.8</b>	<b>168.5</b>	
<u>Education</u>	<u>198.6</u>	<u>226.3</u>	<u>-57.8</u>	<u>168.5</u>	
EDUCATION	114.6	137.1	-59.4	77.7	
Minority University Research & Education Program	84.1	89.2	+1.6	90.8	

- Indicates changes since the previous year's President's Budget Submit.
- Indicates budget numbers in full cost.

## Theme: Education Programs

### Education: Minority University Research and Education Program

#### PURPOSE

Objectives	Performance Measures
6.2, 6.3	5ED5-12, 19

NASA's outreach to minority institutions through its Minority University Research and Education Program (MUREP) will expand the Agency's research base through continued investment in minority institutions' research and academic infrastructure; contribute to the development of the science, technology, engineering, and mathematics pipeline; and inspire the next generation of explorers.

#### OVERVIEW

The NASA MUREP achieves its objectives by employing a comprehensive and complementary array of strategies, which include (1) developing new research and education collaborations and partnerships with the NASA Strategic Enterprises, other government agencies, and interested parties; (2) providing and encouraging opportunities for faculty to conduct NASA research early in their careers; (3) providing incentives for students to enter and remain in mathematics, science, and technology disciplines; (4) establishing measurable program goals and objectives; and (5) developing and implementing evaluations to assess the effectiveness and outcomes of the programs and financial performance, thereby improving program delivery and results. Participants in the program include more than 150 Historically Black Colleges and Universities (HBCU), Hispanic Serving Institutions (HSI), Tribal Colleges and Universities (TCU), and Other Minority Universities (OMU). MUREP K-12 awards focus on building and supporting successful pathways for students to progress to the next level of mathematics and science through a college preparatory curriculum and enrollment in college. Higher education awards seek to improve the rate at which underrepresented minorities are awarded degrees in STEM disciplines through increased research training and exposure to cutting-edge technologies that better prepare them to enter STEM graduate programs, the NASA workforce pipeline, or employment in NASA-related industries. Examples of accomplishments in FY 2003 included the funding of 20 scholars in Master's and Doctoral programs at universities around the country through the Harriet Jenkins Predoctoral Fellowship, and the selection of new Curriculum Improvement Partnership Awards (CIPA) at two- and four-year minority-serving institutions. For more information, go to: <http://www.education.nasa.gov/>.

#### PROGRAM MANAGEMENT

Minority University Research and Education Program responsibility is maintained at NASA Headquarters (HQ), with local implementation at each NASA Center. The Enterprise official is Dr. Adena Loston, Associate Administrator for Education at HQ. This program is exempted from compliance with NPG7120.5B.

#### TECHNICAL COMMITMENT

The table below includes information on the types of programs conducted within MUREP, including specific information on selected programs.

Technical Specifications	FY 2005 President's Budget	Change from Baseline
Math and Science Education	This activity increases the participation and achievement of underrepresented students in the STEM fields at all levels of education.	--
	--The Science, Engineering, Mathematics, and Aerospace Academy (SEMAA) provides NASA-related curricula to historically underserved K-12 schools.	--
	--The Precollege Awards for Excellence (PACE) is a program to enhance the performance of students in college preparatory courses in science and mathematics.	--
	--Mathematics, Science & Technology Awards for Teacher Education increase the number and percentage of state-certified math, science or technology teachers on all levels of hard-to-staff schools.	--
Institutional Sciences, Engineering, Technology	--The University Research Center program (URC) increases the research capacity of minority institutions in NASA fields.	--
	--The Institutional Research Awards program (IRA) improves the academic, scientific, and research infrastructure at minority institutions.	--
Principal Investigators	This activity increases the participation of faculty/other professionals in conducting NASA research, research training, and/or administration.	--

**Theme: Education Programs**

**Education: Minority University Research and Education Program**

Technical Specifications	FY 2005 President's Budget	Change from Baseline
Principal Investigators (continued)	--The NASA Administrator's Fellowship program enhances the professional development of NASA employees and faculty from minority institutions.	--
	-The Faculty Award for Research (FAR) provides an opportunity for faculty from minority-serving institutions to participate in NASA-related research.	--
Partnerships	This activity enhances the academic infrastructure in NASA-related disciplines with a focus on interdisciplinary collaborations.	--
	--The Curriculum Improvement Partnership Award (CIPA) program focuses on curriculum improvement and enhanced teaching strategies.	--

Schedule	FY 2005 President's Budget	Change from Baseline
Precollege Awards for Excellence (PACE)	Will be awarded in FY 05	--
Minority University Mathematics, Science, and Tech Awards for Teacher Education	Will be awarded in FY 05	--
University Research Centers	Will be awarded in FY 05	--

**ACQUISITION STRATEGY AND PERFORMING ORGANIZATIONS**

MUREP activities are conducted with a wide range of minority educational institutions and minority-serving organizations through competitive research announcements, cooperative agreement notices, and other procurement vehicles. Changes since FY04 Pres. Budget: None.

Current Acquisition	Actual*	Selection Method	Actual*	Performer	Actual*
Cooperative Agreement	40%	Full & Open Competition	79%	Industry	0%
Cost Reimbursable	0%	Sole Source	21%	Government	0%
Fixed Price	0%		100%	NASA Intramural	0%
Grants	46%			University	75%
Other	14%	Sci Peer Review	100%	Non Profit	25%
* as of FY03 direct procurement	100%	* as of FY03 direct procurement		* as of FY03 direct procurement	100%

Future Acquisition	Selection	Goals
Faculty Awards for Research (FAR)	4th Qtr, FY04	100% Sci Peer Review, 100% Grants/Cooperative Agreements.

**AGREEMENTS**

Internal: The program is not dependent on other NASA activities outside of the control of the Associate Administrator for Education. External: Executive Order 13256: HBCU (Dated February 12, 2002); Executive Order 13320: Educational Excellence for Hispanic Americans (Dated October 12, 2001); and Executive Order 13270: Tribal College and Universities (Dated July 3, 2000). Changes since FY 2004 President's Budget: None.

**INDEPENDENT REVIEWS**



Review Types	Performer	Last Review Date	Next Review Date	Purpose
Site reviews at each award location	External Panel	9/02	9/04	Review/evaluate program progress.
Program review	External panel	9/02	9/04	Review/evaluate Programs according to new direction.

**Theme:** Education Programs

**Education:** Minority University Research and Education Program

**BUDGET**

Budget Authority (\$ millions)	FY 2003	FY 2004	FY 2005	Comments
<u>FY2005 PRESBUD</u>	<u>84.1</u>	<u>89.2</u>	<u>90.8</u>	
Base Program	84.1	89.2	90.8	
<u>Changes since 2004 PRESBUD</u>	<u>+2.0</u>	<u>-2.4</u>		
Base Program	+7.0	+11.3		Full cost adjustments. Includes FY04 new initiatives.
New Initiative	-5.0	-13.7		FY04 new initiatives funding rolled into Base Program for FY05.
<u>FY2004 PRESBUD</u>	<u>82.1</u>	<u>91.6</u>		
Base Program	77.1	77.9		
New Initiative	5.0	13.7		

-  Indicates changes since the previous year's President's Budget Submit.
-  Indicates budget numbers in full cost.



## Theme: Education Programs

### Education

#### PURPOSE

Objectives	Performance Measures
6.1, 6.2, 6.4, 7.1	5ED1-8,13-19

To inspire the next generation of explorers, NASA will use an integrated, focused approach to improve student proficiency in science, technology, engineering, and mathematics disciplines, motivate more students to explore those areas, work to improve the way educators teach STEM-related subjects, improve the capacity of higher education to provide for NASA (and the Nation's) technological workforce needs, and improve the capacity of the informal education community.

#### OVERVIEW

The Education program brings students and educators (K-16+) into the NASA mission and research as participants and partners. NASA provides the opportunity for a diverse group of students and educators to directly interact with NASA's scientists and engineers, facilities, and research and development activities. The participants benefit from the opportunity to become involved in research and development (R&D) endeavors, gain an understanding of the breadth of NASA's activities, and return to the classroom with enhanced knowledge and skills--all to inspire the next generation into STEM-related careers. Education programs are categorized as elementary and secondary, higher education, informal education, and educational technology. These programs provide students and educators an opportunity to conduct NASA-related research on flight platforms such as the International Space Station, Shuttle, sounding rockets, scientific balloons, and scientific aircraft. In FY 2005, NASA will fully implement the two new initiatives piloted in FY 2003 (Educator Astronaut and NASA Explorer Schools) and will continue the pilot initiatives implemented in FY 2004 (NASA Explorer Institutes and the NASA Science and Technology Scholarship program). The program will continue the implementation of a comprehensive, national program of opportunities for students, faculty, and state-based institutions through a variety of programmatic offerings, such as summer research opportunities for high school and undergraduate students, graduate fellowships, faculty research, state-based activities such as Space Grant and the Experimental Program to Stimulate Competitive Research (EPSCoR), and an educational technology portfolio that includes the NASA Classroom of the Future. For more information go to: <http://www.education.nasa.gov/>.

#### PROGRAM MANAGEMENT

The Education program responsibility is maintained at NASA Headquarters, with local implementation at each NASA Center. The Enterprise official is Dr. Adena Loston, Associate Administrator for Education at HQ. This program is exempted from compliance with NPG7120.5B.

#### TECHNICAL COMMITMENT

The table below includes information on the types of programs conducted within the Education program, including specific information on selected programs.

Technical Specifications	FY 2005 President's Budget	Change from Baseline
Student Support	Programs enhance the student pipeline, creating a culture of achievement with opportunities based on NASA's unique missions, and improve STEM instruction with unique teaching tools and experiences.	--
	--The Educator Astronaut program will select teachers and transport them into space to inspire and motivate students.	--
	--The NASA Explorer Schools program will provide target middle schools with a customized and sustained learning environment to encourage greater interest in science and engineering careers.	--
	--The Summer High School Apprentice Researcher Program (SHARP) provides selected junior & senior high school students with opportunities to work with mentors at NASA Field Centers or universities.	--
Higher Education	Programs strengthen involvement with higher education institutions to ensure NASA can meet its workforce needs, and influence students to earn advanced degrees.	--
	--The Science and Technology Scholarship program will link scholarship with service at a NASA Center and help NASA better attract top students into its workforce.	New Program
	--Space Grant is authorized by legislation to support universities in all states, DC, and Puerto Rico by enabling research and outreach activities to improve capabilities in NASA-related work.	--

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### Education

Higher Education (continued)	--EPSCoR, the Experimental Program to Stimulate Competitive Research, supports competitively selected universities in designated states to build their research capability in areas important to NASA.	--
	--USRP, the Undergraduate Student Researchers Program, competitively selects students to engage in research projects working with mentors at NASA centers.	--
	--GSRP, the Graduate Student Researchers Program, provides fellowships to Master's and Doctoral graduate students who are studying disciplines aligned with NASA mission requirements.	--
Informal Education	Programs engage the public & education community through partnerships with informal education institutions (science centers, museums, planetaria, community organizations).	--
	--Explorer Institutes is a program to provide engaging NASA experiences and information to the informal education community, including science centers, museums, and planetariums.	--
Educational technology	Programs research and develop products and services facilitating the application of technology to enhance the educational process for formal and informal education.	--
	--The Classroom of the Future (CoTF) is NASA's primary research and development program for educational technologies that bridge the gap between educators, NASA explorers, and researchers.	--
	--Spacelink provides electronic access to all NASA educational materials and resources.	--
	--Educator Resource Centers (ERC) are located at universities or other educational organizations in each state and provide teachers with physical access to NASA materials.	--
Student Support	Programs enhance the student pipeline, creating a culture of achievement with opportunities based on NASA's unique missions, and improve STEM instruction with unique teaching tools and experiences.	--
	--The Educator Astronaut program will select teachers and transport them into space to inspire and motivate students.	--

Schedule	FY 2005 President's Budget	Change from Baseline
NASA Explorers Institute	Implement pilot program	--
Educator Astronaut	Core operations at Johnson Space Center	--
NASA Explorer Schools	Program fully implemented	--
NASA Science and Technology Scholarship	Implement pilot program	--

### ACQUISITION STRATEGY AND PERFORMING ORGANIZATIONS

Education Program activities are conducted with a wide range of educational institutions and non-profit organizations through competitive program announcements, cooperative agreement notices, and other procurement vehicles. Changes since FY 2004 President's Budget: None.

Current Acquisition	Actual*	Selection Method	Actual*	Performer	Actual*
Cooperative Agreement	23%	Full & Open Competition	62%	Industry	0%
Cost Reimbursable	0%	Sole Source	38%	Government	0%
Fixed Price	4%		100%	NASA Intramural	0%
Grants	68%			University	62%
Other	5%	Sci Peer Review	95%	Non Profit	38%
* as of FY03 direct procurement	100%	* as of FY03 direct procurement		* as of FY03 direct procurement	100%

Future Acquisition - Major	Selection	Goals
Science & Technology Scholarship Management Contract	Summer 2004	100% Full & Open Competition, Peer Review

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**Education**

**AGREEMENTS**

Internal: The program is not dependent on other NASA activities outside of the control of the Associate Administrator for Education. External: Memoranda of Understanding with the following organizations: National Aerospace Education Alliance, Experimental Aircraft Association Aviation Foundation. Changes since FY04 Pres. Budget: None.

**INDEPENDENT REVIEWS**

Review Types	Performer	Last Review Date	Next Review Date	Purpose
Program review	External Panel	9/03	9/04	Review/evaluate programs according to new direction.

**BUDGET**

Budget Authority (\$ millions)	FY 2003	FY 2004	FY 2005	Comments
<u>FY2005 PRESBUD</u>	114.6	137.1	77.7	
Base Program	114.6	137.1	77.7	
<u>Changes since 2004 PRESBUD</u>	+53.0	+58.8		
Base Program	+58.0	+72.5		Full cost adjustment. Includes FY04 new initiatives.
New Initiative	-5.0	-13.7		FY04 new initiatives funding rolled into Base Program for FY05.
<u>FY2004 PRESBUD</u>	61.6	78.3		
Base Program	56.6	64.6		
New Initiative	5.0	13.7		

- Indicates changes since the previous year's President's Budget Submit
- Indicates budget numbers in full cost.