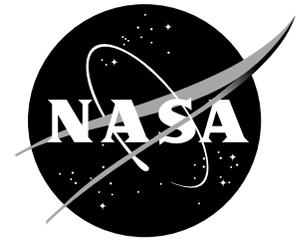


NASA Facts

National Aeronautics and
Space Administration

NASA Headquarters
Public Affairs Office
Code P
300 E Street SW
Washington DC 20546



FS-1995-08-011-HQ

Education

Preparing Today's Students and Educators for a High-Tech Tomorrow

NASA is committed to using its inspiring missions, unique facilities and specialized workforce in support of the National Education Goals, helping to make our nation first in science, mathematics and technology from kindergarten through graduate school and adulthood. NASA's vision is to promote excellence in America's education system through the enhancement and expansion of science and technology literacy.

Major Programs

- **Teacher/Faculty Preparation and Enhancement** — NASA uses its missions, facilities and resources to enhance teacher/faculty knowledge and skills, which translate into positive student achievements.
- **Curriculum Support** — NASA develops, utilizes and disseminates science, mathematics and technology instructional products, based on the Agency's unique missions and scientific experiments. It also supports the development and augmentation of higher education curriculum.
- **Systemic Change** — NASA seeks ways to enhance capabilities of the educational community by supporting individual/collaborative efforts with a range of partners.
- **Student Support** — NASA provides students with exposure to its missions; research experiences at its facilities and related sites; and financial support for training in science, mathematics, engineering and technology.
- **Education Technology** — NASA provides products and services that facilitate the application of technology to the educational process for formal education and life-long instruction.

Program Achievements

- In 1995, NASA reached over 1 million elementary, secondary, and college students, teachers, and faculty through education programs and educational technology resources.
- Over 200,000 teachers participated in NASA education programs; 19,000 teachers worked with education specialists and NASA scientists in laboratories at nine NASA Field Centers.
- 99% of the students from the Summer High School Apprentice Research Program graduated from high school and were accepted in colleges.
- Over 30,000 regular users access NASA Spacelink, an electronic information system for educators and students containing NASA information and educational materials. The service includes current NASA news, data about America's aerospace program, classroom materials, software, NASA images and other information useful to teachers and students. Special features available to registered educators include news groups, electronic mail, online conferences, and access to other Internet resources.
- NASA's National Space Grant College and Fellowship Program provided nearly 1,600 fellowships and scholarship awards, 223 new higher education programs, 444 K-12 programs, and 193 general public service programs in fiscal year 1993. The total disbursement of NASA space grant funds in 1993 was \$13.4 million. The consortia matched this amount through non-federal dollars (\$18.7 million) and other federal sources (\$13.2 million) with \$31.9 million. The total NASA and consortia funds were \$45.3 million.
- Each NASA educational videoconference reached over 2,000 schools and 20,000 students and teachers across the nation, with NASA scientists and education

specialists discussing such topics as the Comet Shoemaker-Levy impact with Jupiter. These videoconferences are produced in conjunction with the major providers of satellite-fed education programs.

Current Activities

NASA's education programs are designed to:

- capture student interest in science, mathematics and technology at an early age
- channel students into science, engineering and technology career paths
- enhance the knowledge skills and experience of pre-college teachers, college and university faculty

Examples of two such NASA education programs include:

- NASA's National Space Grant College and Fellowship Program, which encompasses organizations in all states with over 552 affiliated universities, colleges, industries, nonprofit organizations and state/local governments.
- NASA's Aerospace Education Services Program, nicknamed "Spacemobile," one of NASA's oldest and most effective educational outreach programs, has reached over 900,000 elementary and secondary students and 18,000 elementary and secondary teachers in over 2,000 schools.

Future Activities

Two future initiatives will:

- encourage underrepresented minority high school students to participate in intensive research apprenticeships with industry and university scientists and engineers
- strengthen the ability of states to develop long-term nationally competitive academic research enterprises in aeronautics and space science research

Budget

The budget for NASA's education programs for fiscal year 1995 is \$56.3 million, with 34% of funds supporting elementary and secondary education programs and 66% funding higher education programs.

The fiscal year 1996 budget request for NASA's education program is \$56.3 million. NASA's funding provides an integrated portfolio of programs from the pre-college through the post-doctoral level. Specifically, funding is provided for student support, faculty/teacher enhancement activities, curriculum support, systemic support, and education technology research and development. NASA's education programs actively support the efforts and direction of the National Science and Technology Council/Committee on Education and Training (NSTC/CET) to help meet the goal of ensuring U.S. world leadership in education and technology by building a highly trained workforce.

Partnerships

- Chief executive officers of the nation's 28 largest aerospace companies have teamed with NASA and the U.S. Department of Education in an ambitious plan to achieve the nation's mathematics, science and technology education goals. This NASA/Industry Education Initiative contributes to the vision that the students of today will be the engineers, scientists and inventors who will keep American business at the top of the ladder tomorrow.
- The Tri-State Education Initiative is achieving systemic education reform through a consortium of 30 school districts by creating an interconnected, high-technology learning environment in Alabama, Tennessee and Mississippi. NASA leads an effort with 19 other federal agencies and 35 national and international corporations reaching 5,600 teachers, 102,000 students and thousands of community members. The Systemic Cooperative Model, developed by this initiative, is now being replicated in many areas throughout the nation.
- The Maryland Initiative, a partnership between NASA and the Maryland Department of Education, will redesign the Earth systems science curriculum for the state. The initiative uses technologies such as real-time satellite data, software analysis tools, high-speed computers and the Internet.
- NASA Education On-Line Services

NASA SpaceLink

World Wide Web: <http://spacelink.msfc.nasa.gov>
Anonymous FTP: spacelink.msfc.nasa.gov
Gopher: spacelink.msfc.nasa.gov

Telnet: spacelink.msfc.nasa.gov
*192.149.89.61
Direct Dial Modem: (205) 895-0028
(8-N-1 data format) (VT-100 terminal emulation)

NASA QUEST K-12 Internet Project

World Wide Web: <http://quest.arc.nasa.gov>
Anonymous FTP: quest.arc.nasa.gov
Gopher: quest.arc.nasa.gov