

Archived Information

NASA, Office of Space Science

- Goals of the activity:**
- Increasing public understanding
 - Improving teacher quality

Summary/Purpose: The Office of Space Science (OSS) Education and Public Outreach (E/PO) program has three basic goals. The first goal is to share the excitement of space science discoveries with the public, which is accomplished through partnerships with informal education organizations such as planetariums, museums, and science centers; through mass media outlets such as the public broadcasting system and the Internet; and through direct public outreach events in a wide variety of settings. The second goal is to enhance the quality of science, mathematics and technology education, particularly at the pre-college level, which is accomplished through partnerships with curriculum developers and systemic reform efforts; through teacher enhancement programs; through the development and distribution of curriculum enhancement materials; and through programs that directly involve teachers and students in research. The third goal is to help create our 21st century scientific and technical workforce, which is accomplished through outreach activities designed to get students—particularly those from groups not traditionally involved in space science—excited about the people, technologies, and discoveries that are the hallmark of NASA space science. These goals are realized through embedding E/PO in every OSS flight mission and research program. Significant funding is provided as an integral part of each mission/research program's budget, and substantial E/PO efforts are developed and conducted by personnel associated with each mission/program in close collaboration with educators across the country. A particular area of focus—unique to the OSS E/PO Program-- has been the direct involvement of members of the space science research community in education and public outreach and, at present, more than 10% of that community is participating in OSS E/PO efforts.

Accomplishments/Results: In FY 2002, 131 separate OSS space science missions and research programs participated in the OSS E/PO Program. Seventy major products were developed and 330 major activities were carried out--many of these taking place at multiple venues across the country. More than 1000 members of the space science community directly participated in education and outreach programs, and more than 3600 separate events took place. More than 500 educational institutions across the country were partners and collaborators in these efforts and more than 1500 additional institutions participated. Audiences reached included more than 350,000 students, teachers, and members of the public who were directly involved in research, attended workshops, went to lectures, etc. An additional 1.7 million people were involved through museum programs and exhibitions, planetarium shows, and special events. More than 7 million people participated through the Internet and web-based activities. An additional 200 million people had access to NASA space science education events through such avenues as newspapers, public television, public radio, and events of various types where specific counts of attendance were not made. Products developed under the program found use in an increasing number of school systems and school districts.

Plans for the Next Twelve Months: The program will continue to grow and expand into new areas in concert with the planned growth in the OSS scientific and technical program and its expansion into new areas such as in-space propulsion, optical communications, and gravitational-wave astronomy. In addition, there will be a focus on improving the quality of programs and products, evaluating the impact and effectiveness of the OSS E/PO Program on the education system, on making education products more accessible and useful, and on expanding efforts directed towards attracting more minorities into scientific and technical fields.