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NASA Explorer Schools Program

Goal Area 2: Improving Teacher Quality

Summary: The NASA Explorer Schools Program (NES) will provide a unique three-year relationship between schools and the NASA to "inspire the next generation of explorers." The program is designed to provide customized, extended professional development for educators and authentic mathematics and science experiences for students and their families. Selected educator/administrator teams will work with NASA specialists to integrate agency science and mathematics content into their curriculum with an emphasis on problem-solving, active investigations, and design challenges. The NES teams will develop and implement action plans to address a specific local need in science, mathematics, or technology education

Students will have opportunities to apply science, mathematics and technology to real-world issues and problems and to learn about the vast array of career options at NASA. Students and their families will be the focus of interactive local and on-line learning experiences.

Program Purpose: The purpose of NES is to deliver rich learning environments for students and educators designed to increase student mathematics and science. It will provide educators with sustained professional development, unique STEM-based teaching and collaborative tools, digital content resources and compelling NASA contextual-based teaching applications that align with national standards for targeted content areas in science, mathematics, and technology.

The program will target schools and populations that are at a greater risk of low educational achievement because of limited English proficiency, race, poverty, ethnicity, geographic location or physical disability. These populations often lack a significant presence of high quality teaching and learning experiences in mathematics and science.

Objectives:

- Increase student ability to apply science, mathematics, technology concepts
- Increase student knowledge about careers in science, mathematics, technology
- Increase student interest in and participation in science, mathematics, technology
- Increase the active participation and professional growth of educators in science,
- Increase family involvement in student learning
- Increase the academic assistance for and technology use by educators in schools with high populations of underserved students.

Accomplishments:

The design of the professional development and student interaction opportunities is the result of collected research and summary reports from ED, NSF, ERC, NCREL, the Board of Labor Statistics, and Congressional Committees.

The Next 12 Months: Fifty NES teams will be chosen from around the country in spring of 2003. One-week initial workshops will be held in July at 10 NASA Space Centers. Continuing professional development will occur via long distance networks and on-site with NASA personnel and professional organization assets at the state level. http://explorerschools.nasa.gov