



Middle School Achievement and Interest in Mathematics and Science

Strategic Focus: The purpose of this initiative was to improve student achievement and foster greater interest in mathematics and science in the middle school years. This project provided middle school students interested in careers in science, technology, engineering, and mathematics with additional resource materials to better plan education paths that will lead them to their desired career goals.

History: Recent data have indicated that there are a notable number of students in Georgia who are not meeting the basic standards in science and mathematics needed for future success in high school, college and the workforce. Adding to this, Georgia's mathematics and science scores on the National Assessment of Educational Progress (NAEP) tests, as well as the state's Criterion Referenced Competency Tests (CRCT), showed that the percent of students meeting or exceeding standards in science and mathematics declined considerably from elementary to middle school, and continued to decline through the end of the middle school years. These tests also identified considerable achievement gaps among racial/ethnic groups.

Strategies: This project was a collaborative effort between the University System P-16 Department and participating middle schools. This project leveraged the efforts of the Partnership for Reform in Science and Mathematics (PRISM) and the P-16 Data Mart Project to implement a career-related standardized assessment system for middle school students in participating schools. This project used the ACT's Educational Planning and Assessment System (EPAS) to provide:

- A comprehensive evaluation of student knowledge base (using curriculum-based achievement assessment tests); and
- Career and course guidance based on the individual student's goals and abilities (using an integrated career and educational planning and evaluation tool).

Actions Completed:

- Ten middle schools participated
- Teachers received ACT EPAS training and materials to closely examine specific skill areas where students were weak, and developed and monitored strategies to strengthen those areas.
- Teachers received NASA's web-based instructional materials that complemented classroom science and math curriculum.
- Counselors received ACT EPAS training and material to assist them in their effort to offer students the optimum course schedule to achieve their career goals.
- Students utilized career planning software and participated in space exploration workshops.