

## **Middle School Achievement and Interest In Mathematics and Science (MS-AIMS)**

**Sponsored by the National Aeronautics and Space Administration (NASA)**

The University System of Georgia, through funding from the National Aeronautics and Space Administration (NASA), has developed a new initiative, the Middle School Achievement and Interest in Mathematics and Science (MS-AIMS), for the purpose of improving student achievement and fostering greater interest in mathematics and science. As the name indicates, this initiative focuses on students in the middle school years.

There is little debate that a strong knowledge base in science and math will be necessary to compete in tomorrow's workforce. Yet, a notable number of students in Georgia are not meeting the basic standards in science and mathematics needed for future success in high school, college and the workforce. Of particular note, 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), indicate that the percent of students meeting or exceeding standards declines from elementary to middle school and continues to decline through the end of the middle school years. Considerable achievement gaps among racial/ethnic groups are also evident in the assessment data.

The MS-AIMS initiative is intended to help address these issues and to help increase student interest in pursuing careers in science, technology, engineering and mathematics (STEM), by providing educators, students and their families the tools and information needed to

1. Improve student achievement and reduce achievement gaps
2. Give students interested in STEM careers additional resources to better plan and prepare for their continued success in school and in the workplace

### ***MS-AIMS Resources***

MS-AIMS is a collaborative effort among the University System of Georgia P-16 Department, participating middle schools and their local communities. Leveraging the efforts of the Partnership for Reform in Science and Mathematics (PRISM), MS-AIMS will integrate the implementation and evaluation of a career-related standardized assessment system for middle school students in participating schools. MS-AIMS will use the ACT's Educational Planning and Assessment System (EPAS) to provide:

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

## *What are the benefits of MS-AIMS?*

The MS-AIMS initiative offers a comprehensive package of materials and trainings to support the efforts of educators, and to teach and motivate participating students. MS-AIMS will provide:

- **Schools:** Free ACT EPAS training and materials, access to and training for ACT's Web-based Career Planning Survey and DISCOVER applications, free education kits from NASA and a visit from NASA staff.
- **Teachers:** ACT EPAS training and materials to closely examine specific skill areas where students are weak and develop and monitor strategies to strengthen those areas. Teachers will also receive NASA's web-based instructional materials that complement classroom science and math curriculum.
- **Counselors:** ACT EPAS training and material to assist in offering students the optimum course schedule to achieve their career goals. Counselors may use these materials and students' feedback from the career surveys as planning tools for career day events and activities.
- **Students:** Valuable career planning and guidance that can be modified as they change and learn while completing middle and high school. Students will also receive information on many careers choices in the fields of science and mathematics. Additionally, each student will receive a personalized letter from NASA acknowledging and encouraging success in science and mathematics and a possible opportunity to meet a NASA representative.
- **Parents:** Information on science and mathematics careers and feedback from their child's comprehensive career planning assessment to encourage support and participation in their child's schoolwork, course selection and career preparation.