



Facts about the Alabama Math, Science, and Technology Initiative (AMSTI)

- AMSTI is the largest, most comprehensive, and successful math and science initiative in the nation.¹
- On every test given by the State Department of Education, AMSTI Schools outperform matched NonAMSTI Schools, often dramatically.²
- From the latest Summary of AMSTI External Evaluation:
 - “Compared to the control group, the AMSTI elementary schools had consistently higher mean percentile ranks on the 2009 (SAT), across grades and subjects.”
 - “Compared with the control group, the AMSTI elementary schools and middle schools showed consistently higher percentages of students who passed the 2007 ARMT at Level 4 (highest level).”
 - “AMSTI appears to have benefitted the low-performing students, helping them to meet the basic requirements for passing the Alabama High School Graduation Exam.”
- Over 335,000 students in Grades Pre-K through 12 receive instruction by AMSTI certified teachers every school day, twice a day: once in math, once in science.
- Approximately half of all public schools in Alabama are official AMSTI Schools.
- Math and science often move from least-liked subjects to the most-liked among students in AMSTI Schools.
- Teachers and administrators in AMSTI Schools receive 120 hours of subject and grade specific training at two summer institutes over two years. AMSTI teachers are provided all of the equipment and materials needed for daily hands-on, inquiry-based instruction, free of charge. And, teachers receive mentoring and in-classroom support from AMSTI specialists to help them become proficient in implementing this new way of teaching.
- Equipment and materials provided to each AMSTI teacher are valued in the thousands of dollars. At the high school level it includes high-tech equipment like spectrophotometers, gel electrophoresis apparatus, DNA replicators, SPARK Science Learning Systems, graphing calculators, etc.

¹ As defined by approximately half of all schools in Alabama being served by the initiative with 14,000 teachers receiving 132 hours of subject and grade specific professional development, serving over 335,000 students on a daily basis, two times a day: once in science and once in math with positive evaluation results from four external evaluations (see www.amsti.org).

² As confirmed by four years of external evaluations (see www.amsti.org)

- Eleven university partners provide AMSTI sites on their campuses. The initiative has strong partnerships with 16 institutes of higher education.
- AMSTI ranks as the ***number one priority*** of parents and school district board members and is the ***number one instructional priority*** for teachers.³
- AMSTI is now being included in preservice training at many universities. In such preservice classes, future teachers receive instruction similar to that provided at AMSTI Summer Institutes.
- Many school and district leaders value AMSTI training to the extent that it is often the deciding factor in the hiring of new teachers.
- AMSTI has a staff of approximately 300 that provides support and services for teachers across the state.
- Evaluations show that AMSTI deepens teacher content knowledge in math and science.
- AMSTI serves as a model for many states. Florida's SUMS initiative was modeled directly from work with AMSTI.
- Once trained by AMSTI, schools continue to receive all of the initiative's services: professional development, equipment and materials, and on-site support.
- AMSTI Sites assist schools with implementing Professional Learning Teams, data meetings, mentoring programs, and School Implementation Teams.
- AMSTI has over 700 certified trainers that deliver instruction to teachers at Summer Institutes.
- Seventeen major organizations partner with AMSTI as official "AMSTI Affiliates" and offer additional services to AMSTI Schools.
- AMSTI Pre-Kindergarten is being piloted in 35 schools in collaboration with the Office of School Readiness, the McWane Center and Carolina Biological.
- AMSTI has been recognized by many leading groups and organizations as a effective model for reform as indicated below:
 - Hugh Downs: National Education Report- "*On the Edge*" – Leading Networks during Prime Time and on 355 PBS Stations
 - *Fortune 500* CEO's chose AMSTI as one of only 35 official "Programs that Work" from across the nation
 - American Museum of Natural History Summit/Goldman Sachs –*Science Generation: A National Imperative* – State model used to highlight how science reform can be addressed successfully
 - National Governors Association – Effective model program
 - The Smithsonian/National Academies of Science/National Science Resource Center – Model state initiative
 - National Conference of State Legislatures – Leading model for reforming math and science education
 - *Education Week* – Four articles highlighting the comprehensiveness and effectiveness of the initiative
 - Great Britain – Highlighted in the *Teacher Training Resource Bank* "Ambitious and exciting initiative...substantial empirical data"

³ Alabama Department of Education statewide survey results in *Alabama Education News*, February 2002