



Statewide Institute for Teaching Excellence (SITE)

The Statewide Institute for Teaching Excellence (SITE) is a series of science and mathematics professional development programs developed by the North Carolina Mathematics and Science Education Network (NC-MSEN). The initial SITE program began, fall 2005, as “Excellence in K-8 Science Teaching: An NC-MSEN Statewide Science Initiative,” to support improvement in student performance by strengthening the quality of science instruction. This statewide initiative, which focused initially on 3-5 Science, was designed to strengthen the quality of instruction by improving teachers’ abilities to: (1) implement the *NC Standard Course of Study in Science*, no matter what science curriculum and materials are used in a given school; (2) teach science with a better understanding of the content and appropriate hands-on pedagogical techniques; (3) increase literacy, student interest in science, and student motivation to enter scientific careers; and (4) integrate mathematics and English language arts.

Subsequent to the development and implementation of the statewide science initiative, the NC-MSEN embarked upon the development of several programs under the SITE umbrella, including those identified earlier under *Excellence in K-8 Science Teaching*. They are:

- ❖ SITE: K-2 Science
- ❖ SITE: 3-5 Science
- ❖ SITE: 6-8 Science
- ❖ SITE: Biology
- ❖ SITE: Advanced Functions and Modeling (AFM)^a
- ❖ SITE: Geometry
- ❖ SITE: Content Area Reading in Science and Mathematics (CARSAM).

All SITE programs focus on improving the content and pedagogical content knowledge of teachers through standards- / research-based opportunities, using appropriate and tested pedagogical and assessment strategies, which are aligned with the *North Carolina Standard Course of Study*, as well as national mathematics and science standards. They are responsive to the professional development needs identified by the North Carolina State Board of Education that include: (1) areas needing continued / on-going professional development; (2) areas needing specific support (based on increased graduation requirements); and (3) support for state initiatives. The SITE programs vary in length from five (5) to nine (9) days of direct instruction, with a follow-up activity in many instances.

The benefits of the individual Statewide Institute for Teaching Excellence programs include:

- ❖ A common curriculum developed by outstanding mathematicians and scientists and science and mathematics educators
- ❖ Excellent instruction by experienced educators
- ❖ Preparation to meet the requirements of *No Child Left Behind* and North Carolina’s accountability system
- ❖ Knowledge of how to integrate science, mathematics and English / language arts, where applicable
- ❖ North Carolina license renewal credits
- ❖ Participation in a statewide network of science and mathematics educators.

The North Carolina Mathematics and Science Education Network (NC-MSEN), a comprehensive statewide program, was established by the NC General Assembly in 1984 with the mission to strengthen the quality and increase the size of the teaching base in mathematics and science education. In 1986, the mission was expanded “to increase the pool of students who graduate from North Carolina high

schools prepared to pursue careers requiring mathematics and science,” thus the establishment of the NC-MSEN Pre-College Program.

The NC-MSEN consists of a Central Coordinating Unit at the UNC Center for School Leadership Development in Chapel Hill, a research and evaluation center at North Carolina State University, and 10 professional development centers located at Appalachian State University, East Carolina University, Fayetteville State University, North Carolina A&T State University and UNC Greensboro (a consortium), North Carolina School of Science and Mathematics, UNC Chapel Hill, UNC Charlotte, UNC Wilmington, Western Carolina University and Winston-Salem State University. These professional development centers

- ❖ are geographically located so that teachers statewide will not have to travel great distances to receive high quality mathematics and science professional development
- ❖ have direct access to university faculty and resources, which permit richer teacher professional development opportunities.

The NC Mathematics and Science Education Network was included in a 1997 plan for the establishment of the University of North Carolina Center for School Leadership Development (UNC CSLD). This plan also included the Executive Academy for Superintendents (EAS), Principals’ Executive Program (PEP), Principal Fellows Program (PFP), NC Center for the Advancement of Teaching (NCCAT), NC Center for the Prevention of School Violence (NCPSV), and NC Teacher Academy (NCTA). In subsequent years, the NC Model Teacher Education Consortium (NCMTEC), NC TEACH, and NC RISE / NC SIP were added under the umbrella of the UNC CSLD. The NC Center for the Prevention of School Violence was transferred from the Center to the Department of Juvenile Justice in 2000. On October 1, 2000, the NC-MSEN was transferred officially from the University of North Carolina at Chapel Hill to the Board of Governors of The University of North Carolina and its Center for School Leadership Development.

The UNC Center for School Leadership Development was restructured, effective July 1, 2007, to build a unified organization that provides educational services to public schools in two key areas: (1) educator recruitment / pre-service training and (2) leadership development / in-service training for administrators and teachers. In addition, the Center would continue to operate a premiere conference facility.

“The mission of the UNC Center for School Leadership Development, in alignment with the strategic priorities of the University of North Carolina and the Public Schools of North Carolina and in partnership with North Carolina’s educator preparation programs, is to...

- Provide professional development for licensed PreK-12 classroom teachers in the areas of mathematics, science, and special education.
- Provide professional development for licensed PreK-12 educators that builds leaders, both teachers and administrators, of schools that maximize student learning...”^b

Adapted from: *The UNC Center for School Leadership Development (UNC CSLD), North Carolina Mathematics and Science Education Network, and Excellence in K-8 Science Teaching: An NC-MSEN Statewide Science Initiative*, Spring 2006, by Vallie W. Guthrie, Ed.D.

^aThe Advanced Functions and Modeling professional development program began in 2003 in response to the fourth mathematics admission requirement of The University of North Carolina System.

^bSource: Mission and Goals Statement, The University of North Carolina Center for School Leadership Development, UNC CSLD, April 9, 2007.

