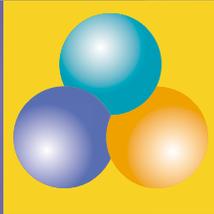


PROFESSIONAL DEVELOPMENT CENTER



Innovative, research-based services and products supporting
the improvement of science teaching

National Science Resources Center

THE NATIONAL ACADEMIES  Smithsonian
Institution

Professional Development Center



PROFESSIONAL DEVELOPMENT — THE CATALYST FOR CHANGE

High-quality professional development is an essential component of an effective science education program. To address this challenge, the NSRC Professional Development Center offers programs that prepare teachers to implement research-based curriculum. Programs are offered for teachers at all levels of the professional science educator continuum — from novice to expert.

COURSES DESIGNED SPECIFICALLY FOR THE STC/MS™ CURRICULUM

The NSRC Professional Development Center is focusing initially on offering professional development products and services tailored to its exemplary curriculum for middle schools. The NSRC curriculum developers for the STC/MS project direct this effort.

INFORMED BY RESEARCH AND BEST PRACTICES

Through the work of the NSRC Professional Development Center, teachers gain a conceptual understanding of the science content and pedagogy needed to implement inquiry science effectively. Teachers and teacher educators engage in the process of scientific inquiry and apply their experience to facilitate science inquiry in the classrooms.

The products and services offered by the NSRC Professional Development Center are based on research about learning and teaching and informed by the wisdom of practice.

CREATING A COMMUNITY OF LEARNERS

Through its programs, the NSRC Professional Development Center facilitates the development of learning communities by creating a network through which teachers and teacher educators can share their knowledge and experience.

THE NSRC PROFESSIONAL DEVELOPMENT CENTER'S PROGRAMS

- Engage participants in instructional processes using best practices based on current research
- Strengthen teachers' conceptual understanding of science content in the life, earth, and physical sciences
- Encourage and build expertise in learning communities
- Promote continuous improvement
- Provide the highest quality products and services
- Enhance pedagogical expertise



NSRC CENTERS OF EXCELLENCE FOR SYSTEMIC REFORM

The NSRC provides services and products for improving the learning and teaching of science in the nation's school districts. Informed by research, these services are delivered through three integrated centers: the Leadership and Assistance for Science Education Reform (LASER) Center, the Professional Development Center, and the Curriculum Development Center.



BUILDING SKILLS FROM NOVICE TO EXPERT

The NSRC Professional Development Center works with teachers as they build on their knowledge and skills and progress through various stages of expertise.

- **STC/MS Overview and Awareness Sessions**

These sessions for administrators and teachers consist of an overview of the philosophy and goals of the STC/MS program, a series of hands-on investigations used in STC/MS, and a description of the content contained in the eight individual STC/MS courses.

- **STC/MS Introductory Curriculum Courses**

Through the use of inquiry strategies that will be used with students, these courses familiarize teachers with individual STC/MS modules.

- **STC/MS Content Courses**

The NSRC works in partnership with academic institutions to offer content courses contextualized to the eight STC/MS modules. These courses provide teachers with hands-on, inquiry-centered experiences to help them gain a deeper understanding of the concepts in the modules.

- **STC/MS Short Courses for Enhancing the Curriculum**

This series of short courses will focus on specific aspects of inquiry science education such as:

- Understanding inquiry science
- Identifying the conceptual strands in the STC and STC/MS programs
- Integrating assessment strategies
- Incorporating Probeware and computer use in STC/MS
- Managing STC/MS materials in the classroom
- Using science to improve language skills

SCIENCE AND TECHNOLOGY CONCEPTS FOR MIDDLE SCHOOLS (STC/MS) CURRICULUM

Grade Level	Life and Earth Sciences		Physical Sciences and Technology	
	STC/MS 6–8	Human Body Systems	Catastrophic Events	Properties of Matter
	Organisms — From Macro to Micro	Earth in Space	Light	Electrical Energy and Circuit Design

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Note: All STC/MS units can be used at one grade level above or below the level indicated on the chart.

ABOUT THE NSRC

The Leader in Science Education Reform

The National Science Resources Center is committed to establishing effective science programs for all students. The NSRC employs strategies that are informed by research, based on best practices, and leverage change through the development of strategic partnerships.

An Organization of the Smithsonian Institution and the National Academies

Established in 1985, the NSRC is an organization of the Smithsonian Institution and the National Academies. Both the Academies and the Smithsonian provide the NSRC with direct access to the highest quality research and scientific and engineering expertise to inform its services and products.

STC/MS™ Publisher

Carolina Biological Supply Company (CBSC) is the exclusive publisher and marketer for the National Science Resources Center's curricula: Science and Technology for Children® (STC) and Science and Technology Concepts for Middle Schools™ (STC/MS). In addition, CBSC provides support to all 3 NSRC Centers of Excellence.

For information about STC or STC/MS, call 800-227-1150 or visit www.carolina.com.

The NSRC Professional Development Center offers programs throughout the year and in various locations. Please call 202-287-7307, e-mail us at nsrpdcenter@si.edu, or visit us at www.nsrconline.org for the complete course offering.



THE NSRC IS AN ORGANIZATION OF:

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