



# New York State Education Department

## NY ECLIPSE

New York Enhancing Collaborative Leadership for  
Improved Performance in Science Education

Leadership Conference: Building Awareness with Key  
Leaders and Stakeholders

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# Elementary, Middle, Secondary and Continuing Education EMSC

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# International, National, and State Context

“Science and mathematics exert the most visible influence on the economy through their most rapidly changing offspring – new technologies.”

- A Report to the Nation from the National Commission on Mathematics and Science Teaching for the 21<sup>st</sup> Century (2000)

# New York State Science Initiative

<http://www.emsc.nysed.gov/ciai/mst/sciin.htm>

## Mission:

Create a statewide learning community to support student achievement of the learning standards in science, leading to a scientifically literate population.

## Vision:

Ensure the learning of science for all PreK-12 students by providing equitable access to exemplary teachers, inquiry-centered curriculum and instruction, standards-based assessments, and a wealth of resources and community support.

# Statewide Strategic Plan for Science

<http://www.emsc.nysed.gov/ciai/mst/sciplan.html>

## Key Components

- Curriculum
- Professional Development
- Assessment
- Materials Support
- Administrative and Community Support

# Current Research

Four major recommendations and actions for improving K-12 science education focus on recruiting, retaining, and strengthening teachers, and enticing students into the sciences.

“10,000 teachers, 10 million minds, and K-12 science and mathematics education”

- National Academies of Sciences

Executive Summary: *Rising Above the Gathering Storm* (2006)

# Current Research

In order for America to improve and expand its mathematical and science expertise, “...more people must know more mathematics and science.”

- Business-Higher Educational Forum Report

*A Commitment to America's Future: Responding to the Crisis in Mathematics and Science Education (2005)*

# Science in NY State

## 2005 Student Achievement Data (Public)

Regents Science Examination	Approximate # of Students Tested	Approximate # of Students Meeting the Standards 65-100%	Approximate # of Students Exceeding the Standards 85-100%
Living Environ	206,000	150,000	50,000
PS/Earth Science	160,000	115,000	44,000
PS/Chemistry	103,000	75,000	17,000
PS/Physics	40,000	33,000	14,000

# NY ECLIPSE

- Partnership with NSRC
- Target Large Urban Centers
- Four Major Events

# NY ECLIPSE

## Leadership Teams

- Teams consist of a combination of stakeholders in science education including representation of :  
*Administration, Teachers, Higher Education, Community & Business and Industry Leaders*
- Support a “renewal” of science education
- Leadership teams build capacity within New York State school districts and regions through partnerships

# NY ECLIPSE Major Events

**Leadership Conference: Building Awareness with Key Leaders and Stakeholders** is the first of four coordinated events that leadership teams will attend. These events will guide the leadership teams through a research-based approach to learning and teaching science. All events will be held at the Crowne Plaza in Albany, New York.

- March 21, 2007**      **New York ECLIPSE Science Education Curriculum Showcase**  
*Learn about exemplary, research-based science curricula developed with support from the National Science Foundation.*
- June 25–29, 2007**      **New York ECLIPSE Science Education Strategic Planning Institute**  
*Develop a tailored strategic plan for initiating, implementing, and sustaining effective PreK–12 science education for the leadership team’s district.*
- October 24–25, 2007**      **New York ECLIPSE Science Education Leadership Conference: Building Capacity with Key Leaders and Stakeholders**  
*Revisit the leadership team’s strategic plan. Learn more about how to sustain a renewed PreK–12 science education system.*

# NY ECLIPSE

## Professional Resources

### ➤ Science Education Curriculum Toolkit

Assist in assessing current curriculum programming and alignment to learning standards

Resources to review and select exemplary curricula and instructional materials

### ➤ Ongoing Technical Assistance

Establish and sustain national, state and regional networks