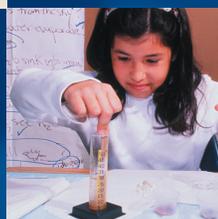
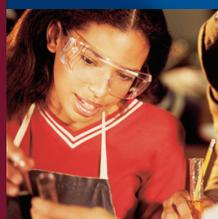


# NEW YORK ECLIPSE

ENHANCING COLLABORATIVE LEADERSHIP  
FOR IMPROVED PERFORMANCE IN  
SCIENCE EDUCATION

*Leadership Conference:  
Building Awareness  
with Key Leaders and  
Stakeholders*



OCTOBER 25, 2006—7:30–9 P.M.  
OCTOBER 26, 2006—8 A.M.–4 P.M.  
CROWNE PLAZA ALBANY  
STATE AND LODGE STREETS  
ALBANY, NEW YORK



University of the State of New York  
State Education Department

*National Science Resources Center*

THE NATIONAL ACADEMIES  Smithsonian Institution

# NEW YORK ECLIPSE

## *Leadership Conference: Building Awareness with Key Leaders and Stakeholders*

The New York State Education Department, in partnership with the National Science Resources Center (NSRC), is implementing a science education systemic change initiative that will build leadership within New York State school districts. This initiative will provide research-based products and services to assist New York State school districts in initiating, implementing, and sustaining effective inquiry-centered pre-kindergarten through grade twelve science programs for all students.

The New York Enhancing Collaborative Leadership for Improved Performance in Science Education (ECLIPSE) initiative targets “renewal” efforts specifically focused on the needs of the State’s largest urban centers. Leadership teams from New York City, Buffalo, Rochester, Syracuse, and Yonkers school districts and four leadership teams representing stakeholders in science education across selected BOCES are participating in this initiative. ECLIPSE is based upon the NSRC’s Leadership and Assistance for Science Education Reform (LASER) program, which is a nationally renowned professional development model that provides a comprehensive approach to district-wide systemic change in science education.

**The New York ECLIPSE Leadership Conference: Building Awareness with Key Leaders and Stakeholders** is the first session in a series of coordinated events designed to assist leaders from these learning communities in developing a vision for enhanced science learning and teaching, and to understand the necessary systemic and systematic approaches to support this vision. This conference will specifically focus on:

- **Developing a shared vision** for effective science learning and teaching through sequenced hands-on, inquiry-centered science lessons;
- **Learning about research-based instructional practices** that support the shared vision, including research on how students learn and case studies of effective partnerships between business and PreK–12 school districts; and
- **Exploring ways in which active leaders will champion** science education renewal for their respective communities.

## The Program

**The New York ECLIPSE Leadership Conference: Building Awareness with Key Leaders and Stakeholders** will address critical questions related to research and best practices in PreK–12 science education. Sessions will include focused discussions that emphasize strategic directions for working collegially among stakeholders to effectively improve PreK–12 science education for *all* students.

Focus Question	Sessions	Session Leaders
<i>What is the state of science education in New York State?</i>	Overview session highlighting the status of science education, identifying workforce pipeline concerns, discussing economic considerations, and exploring possible future scenarios.	Discussion leaders and facilitators at the conference will be drawn from a cadre of educators experienced in leading science education reform programs, as well as from the ranks of community leaders who have developed successful partnerships within the educational community.
<i>What are the characteristics of research-based science learning and teaching?</i>	Vision building, inquiry-centered science experiences.	
<i>What is required for a PreK–12 science education system to support effective science learning and teaching?</i>	Discussion of a theory of action that promotes sustainability.	
<i>How do New York State districts benchmark this vision with their current science education system?</i>	Evaluation of the leadership team’s current district science education system. Compare the leadership team’s current system to successful science education reform initiatives.	
<i>What can be learned from successful case studies?</i>	Case studies of models for science education reform and the data collected that support their work.	

## Time and Place

The New York ECLIPSE Leadership Conference: Building Awareness with Key Leaders and Stakeholders welcomes the Honorable Milton L. Cofield, New York State Board of Regents; Dr. Hubert Dyasi, Professor of Science Education, City College New York, City University of New York; Ainissa Ramirez, Assistant Professor, Mechanical Engineering, Yale University; the New York State Science Leadership Teams; and invited guests to a reception Wednesday evening, October 25, 7:30–9:00 p.m., at the Crowne Plaza Albany. Working sessions will take place Thursday, October 26, from 8:00 a.m. until 4:00 p.m.

## The Science Education Landscape in New York State

Recent State data, as included in the Annual Report to the Governor and Legislature on the Educational Status of the State's Schools, support the need to enhance science education, improve student achievement in science, and reduce the achievement gap among students in the largest urban centers across the state.

- In fall of 2003, 3.32 million students were enrolled in New York State's public and non-public schools. Of these students, 2.84 million attended public schools and 0.48 million attended non-public schools.
- Students who are most in need are most at risk of not meeting the State learning standards.
- Schools with the highest percentages of minority and economically disadvantaged children are taught by the least experienced teachers, teachers teaching out of their initial certification area, and have the highest rates of teacher turnover.
- New York administers State science assessments that are aligned to core curricula derived from the New York State *Learning Standards for Mathematics, Science, and Technology* within the NCLB-designated grade-level bands. The core curricula are designed to facilitate the attainment of the learning standards as measured at grade 4, at grade 8, and at the commencement-level (grades 9–12).
- Students must earn three units of commencement-level credit in science and pass one Regents examination in science to meet the science requirement for a Regents high school diploma.



New York State Science Assessment	Approximate Number of Students Tested (2003–04 School Year)
Grade 4 Elementary-Level Science Test	235,000
Grade 8 Intermediate-Level Science Test	213,000
Regents Examination in Living Environment	209,000
Regents Examination in Physical Setting/Earth Science	164,000
Regents Examination in Physical Setting/Chemistry	114,000
Regents Examination in Physical Setting/Physics	39,000

Source: The University of the State of New York, The State Education Department. July 2005. Statistical Profiles of Public School Districts. New York: The State of Learning: A Report to the Governor and the Legislature on the Educational Status of the State's Schools, Albany, New York. <http://www.emsc.nysed.gov/irts/655report/2005/volume1/volume1.pdf> and [http://www.emsc.nysed.gov/irts/655report/2005/volume2/Vol2\\_655\\_July2005\\_wBkmrks.pdf](http://www.emsc.nysed.gov/irts/655report/2005/volume2/Vol2_655_July2005_wBkmrks.pdf).

## NEW YORK ECLIPSE

**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.*

**The New York State Education Department** provides leadership for a system that yields the best-educated people in the world by raising the knowledge, skill, and opportunity of all the people in New York. **The New York State Science Initiative**, <http://www.emsc.nysed.gov/ciai/mst/sciinit.doc>, seeks to create a statewide learning community to support student achievement of the learning standards in science, leading to a scientifically literate population. The vision of the State’s Science Initiative is to ensure learning in 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.

New York State Education Department—<http://www.nysed.gov>  
Office of Elementary, Middle, Secondary and Continuing Education—<http://www.emsc.nysed.gov>  
Office of Curriculum and Instructional Support—<http://www.emsc.nysed.gov/cis/>  
Curriculum, Instruction and Instructional Technology—<http://www.emsc.nysed.gov/ciai/>  
Science Curriculum Homepage—<http://www.emsc.nysed.gov/ciai/mst/sci.html>  
New York State Education Department Virtual Learning System—<http://www.nysvls.org>

Anne Schiano  
[aschiano@mail.nysed.gov](mailto:aschiano@mail.nysed.gov)  
Assistant Director  
Curriculum, Instruction and  
Instructional Technology

Ann Crotty  
[acrotty@mail.nysed.gov](mailto:acrotty@mail.nysed.gov)  
Associate in Science Education  
Curriculum, Instruction and  
Instructional Technology

Anthony “Will” Jaacks  
[ajaacks@mail.nysed.gov](mailto:ajaacks@mail.nysed.gov)  
Associate in Science Education  
Curriculum, Instruction and  
Instructional Technology

Michael Charlebois  
[mcharleb@mail.nysed.gov](mailto:mcharleb@mail.nysed.gov)  
Intern  
Curriculum, Instruction and  
Instructional Technology

**The National Science Resources Center** was established in 1985 by the **Smithsonian Institution** and the **National Academies** to improve the learning and teaching of science for all children in the United States and throughout the world. The prestige and credibility of these two world-renowned institutions provide the NSRC with access to research, scientific expertise, and resources to inform our work, as well as an opportunity to engage and catalyze educators, business people, and scientists in all aspects of science education reform.



The State Education Department does not discriminate on the basis of age, color, religion, creed, disability, marital status, veteran status, national origin, race, gender, genetic predisposition or carrier status, or sexual orientation in its educational programs, services and activities. Portions of any publication designed for distribution can be made available in a variety of formats, including braille, large print or audiotope, upon request. Inquiries regarding this policy of nondiscrimination should be directed to the Department’s Office for Diversity, Ethics, and Access, Room 530, Education Building, Albany, NY 12234. Requests for publications should be made to the Department’s Publications Sales Desk, Room 309, Education Building, Albany, NY 12234.