

Celebrating and Sustaining Science, Mathematics, and Technology Learning Communities: A Generation of Support

AGENDA

The purpose of the PI/PD Leadership Institute is to:

- ❖ Review and discuss lessons learned, major accomplishments and milestones over the past decade of SMT reforms.
- ❖ Review and discuss strategies for scaling up, sustaining, and institutionalizing SMT reform efforts with a special focus on data and evaluation, leadership development, and technology.
- ❖ Discuss and share tools and techniques that have been developed by individual sites and technical assistance providers to support local SMT reform efforts.
- ❖ Explore future technical assistance options for sustaining and supporting virtual communities of learners.

Thursday, November 3, 2005

1:00 – 7:00 PM Registration Pennsylvania

Pre-Institute Sessions / Meetings

3:30 – 5:30 PM **PI/PD and NSF Discussion Session (required)** **New Jersey**

This session will provide opportunities for Project Directors and Principal Investigators (or their designees) to meet with NSF program officers to review and discuss formal project reporting, budgeting, and other related issues. The project director from each site should plan to attend this session.

Facilitators: **Celestine Pea**
Program Director
National Science Foundation

Joseph Reed
Program Director
National Science Foundation

1:30 – 5:30 PM **Networking and Tool Sharing Session** **Rhode Island**

This is an open-door session where participants are invited to informally discuss their successes and challenges with colleagues from other sites. During this session, participants will be asked to share and discuss tools and techniques they have developed locally or adapted from other sources to help promote and sustain their local SMT reform efforts. Participants are encouraged to bring samples of tools and techniques for distribution. Technical assistance providers and consultants will also be available to participate in these discussions. Light refreshments will be provided.

5:00 – 6:00 PM **Informal Reception** **Chinese Room**

6:00 – 8:00 PM **Opening Dinner** **State Room**

“Celebrating a Decade of Science, Mathematics and Technology Systemic Reform”

Speakers and invited guests will discuss the major accomplishments and lessons learned from the past decade of systemic reform efforts and their implications for future reform efforts.

Facilitator: **Celestine Pea**
Program Director
National Science Foundation

Speaker: **Floretta Dukes McKenzie**
Founder and President, The McKenzie Group
Senior Advisor, American Institutes for Research

Friday, November 4, 2005

7:00 AM – 12:00 PM Registration East Room Foyer

7:15 – 8:00 AM Continental Breakfast East Room

8:00 – 8:15 AM Opening Remarks / Charge for the Day East Room

Facilitators: **Celestine Pea**
Program Director
National Science Foundation

Joseph Harris
Technical Assistance Project Director
AIR/McKenzie

8:15 – 8:30 AM Break / Changeover

8:30 – 9:30 AM Plenary Session I

“Setting the Stage for Data Collection and Evaluation”

During this session, the presenter and site reactors will share and discuss examples of data collection tools and processes that have been developed to support the Systemic Initiatives and other related SMT reform efforts and how these data collection tools can be adapted for use by other sites.

Presenter: **Iris Weiss**
President
Horizon Research, Inc.

Reactors: **Kris Aquarelli**
Mathematics Supervisor
San Diego Unified School District

Kim Bess
Science Supervisor
San Diego Unified School District

9:30 – 9:45 AM Break / Changeover

9:45 – 10:45 AM Data and Evaluation Breakout Sessions I

During these sessions, presenters will provide an overview of their data/evaluation work related to Systemic Initiatives that can be used to support and sustain local SMT reform efforts. These one-hour discussion sessions will be repeated after a short break. Site participants are encouraged to make arrangements for at least one team member to attend each of the sessions.

Breakout 1: “Presenting Data Effectively” Massachusetts

Learn how to make mundane data presentations more attractive and easier to comprehend.

Presenters: **Jason Kim**
Linda Crasco
Systemic Research, Inc.

(Friday continued)

Breakout 2: “Longitudinal Data Analyses”

New Jersey

Review and discuss the challenges and benefits of longitudinal data analyses.

Presenters: **Gary Silverstein**
Joseph McInerney
Westat

Lea Mesner
Dan Rod
Quantum Research Corporation

Breakout 3: “Measuring School and Classroom Levels of Implementation”

Pennsylvania

Learn about evaluation tools that measure classroom levels of implementation of SMT reforms.

Presenter: **Diane Briars**
Pittsburgh Public Schools

Breakout 4: “Understanding NAEP and Current Implications for Math and Science Education”

Rhode Island

Find out how to use NAEP data more effectively to drive local SMT reform efforts.

Presenter: **Sharif Shakrani**
National Assessment Governing Board

10:45 – 11:00 AM *Break / Changeover*

11:00 AM – 12:00 PM Data and Evaluation Breakout Sessions II

These sessions are a replication of the previous breakout sessions to enable participants to attend another presentation and discussion.

Breakout 1: “Presenting Data Effectively”

Massachusetts

Breakout 2: “Longitudinal Data Analyses”

New Jersey

Breakout 3: “Measuring School and Classroom Levels of Implementation”

Pennsylvania

Breakout 4: “Understanding NAEP and Current Implications for Math and Science Education”

Rhode Island

12:00 – 1:00 PM **Buffet Luncheon`**

East Room

(Friday continued)

1:00 – 2:00 PM

Plenary Session II

East Room

**“The Role of Leadership Development in Addressing
SMT Scale-Up and Sustainability”**

Two former Systemic Initiative project leaders will reflect on their “lessons learned” and current roles and challenges in scaling up and sustaining SMT reforms followed by comments from the moderator and participants.

Panelists: **Joseph Burke**
Superintendent
Springfield Public Schools

Maria Santos
Senior Instructional Manager and Superintendent
Office of English Language Learners
New York City Department of Education

Moderator: **Stan Hill**
USP Project Director
K-12 Science Program Manager
Winston Salem / Forsyth County Public Schools

2:00 – 2:15 PM

Break / Changeover

2:15 – 3:15 PM

Leadership Development Breakout Sessions I

During these sessions, presenters will provide an overview of their leadership development work related to Systemic Initiatives that can be used to support and sustain local SMT reform efforts by developing leadership capacity. These one-hour sessions will be repeated after a short break. Site participants are encouraged to make arrangements for at least one team member to attend each of the sessions.

Breakout 1: “The Role of Teacher Leaders: Major Strategies and Lessons Learned” **Massachusetts**

Learn about the “nuts and bolts” of two effective teacher leader programs.

Presenters: **Anne Meyn**
Houston Independent School District

Marilyn Decker
Boston Public Schools

Breakout 2: “Teacher Beliefs and Change: What Leaders Should Know” **New Jersey**

Discuss the challenges and successes of a district initiative that targets teacher belief systems.

Presenters: **Susan Koba**
Carol Mitchell
Omaha Public Schools

(Friday continued)

Breakout 3: “Leadership and Change: How to Know When Reform Is Really Working” **Pennsylvania**

See how large and small school districts monitor and sustain their SMT reform efforts.

Presenters: **Barbara Fulmer**
Hamilton County Public Schools

Todd Ullah
Los Angeles Unified School District

Breakout 4: “Cultivating School-based SMT Leaders through Customized Leadership Training Modules” **Rhode Island**

Review and provide feedback on principal leadership TA training modules that are available to districts.

Presenters: **Phyllis Cohen**
Marieta Harris
AIR/McKenzie

3:15 – 3:30 PM Break / Changeover

3:30 – 4:30 PM Leadership Development Breakout Sessions II

These sessions are a replication of the previous breakout sessions to enable participants to attend another presentation and discussion.

Breakout 1: “The Role of Teacher Leaders: Major Strategies and Lessons Learned” **Massachusetts**

Breakout 2: “Teacher Beliefs and Change: What Leaders Should Know” **New Jersey**

Breakout 3: “Leadership and Change: How to Know When Reform Is Really Working” **Pennsylvania**

Breakout 4: “Cultivating School-based SMT Leaders Through Customized Leadership Training Modules” **Rhode Island**

Dinner on your own (see list of recommendations)

Saturday, November 5, 2005

7:30 – 8:15 AM	Continental Breakfast	East Room
8:15 – 8:30 AM	Opening Remarks / Charge for the Day	East Room
8:30 – 9:30 AM	Plenary Session III	East Room

“Designing and Implementing Technology-Driven Solutions for Sustaining SMT Reforms: A Partnership Story”

The presenter will share examples and lessons learned on how inquiry-based curriculum materials, supported by the use of learning technology, can be used to promote and sustain SMT reform efforts. He will also describe a model of professional development that supported teachers in their classroom implementation of these materials through the unique collaboration between Detroit Public Schools and the University of Michigan. The Detroit/UM partnership resulted in improved student achievement, and a reduction in the gender and minority achievement gaps on state assessments. Follow-up comments on his presentation will be provided by a leading expert on technology-based professional development and learning.

Presenter: Joseph Krajcik
Professor of Science Education
University of Michigan

Reactor: Robert Tinker
President
Concord Consortium

9:30 – 9:45 AM Break / Changeover

9:45 – 10:45 AM Technology Breakout Sessions I

During these sessions, presenters will provide an overview of their technology work related to Systemic Initiatives that can be used to support and sustain local SMT reform efforts. These one-hour sessions will be repeated after a short break. Site participants are encouraged to make arrangements for at least one team member to attend each of the sessions

Breakout 1: “Investigating and Questioning our World through Science and Technology” Massachusetts

Learn about a new science materials development program and how to become involved.

Presenter: Joseph Krajcik
University of Michigan

Breakout 2: “Web-Based Student Performance Indicators” New Jersey

See a demonstration of a student data analysis program being used by classroom teachers.

Presenter: Yuwadee Wongbundhit
Miami-Dade County Public Schools

Breakout 3: “Web-Based SMT Instructional and Professional Development Resources” Pennsylvania

Review free web-based instructional and PD materials and give feedback on dissemination strategies.

Presenter: Robert Tinker
Concord Consortium

(Saturday continued)

Breakout 4: “A Guide to Technology-Focused Technical Assistance Centers”
Rhode Island

Learn about several web-based TA resources and services for regular and special student populations.

Presenter: Tracy Gray
American Institutes for Research

10:45 – 11:00 AM Break / Changeover

11:00 – 12:00 AM Technology Breakout Sessions II

These sessions are a replication of the previous breakout sessions to enable participants to see at least two of the presentations.

Breakout 1: “Investigating and Questioning our World through Science and Technology”
Massachusetts

Breakout 2: “Web-Based Student Performance Indicators”
New Jersey

Breakout 3: “Web-Based SMT Instructional and Professional Development Resources”
Pennsylvania

Breakout 4: “A Guide to Technology-Focused Technical Assistance Centers”
Rhode Island

12:00 – 1:00 PM Buffet Lunch East Room

1:00 – 2:30 PM Leadership Keynote East Room

**“Accelerating and Sustaining Education Reform:
Where Do We Go From Here?”**

Dr. Richard Elmore, a nationally renowned education reform advocate, will reflect on some of the major challenges and successes for accelerating and sustaining education reform over the next decade. His presentation will include lessons learned and major findings from his academic research and numerous publications that have focused on the major elements of systemic education reform, as well as from his current work exploring how schools of different types and in different policy contexts develop a sense of accountability and a capacity to deliver high quality instruction.

Introduction: Floretta Dukes McKenzie
Founder and President, The McKenzie Group
Senior Advisor, American Institutes for Research

Speaker: Richard Elmore
Gregory R. Anrig Professor of Educational Leadership
Director, Consortium for Policy Research in Education
Harvard University Graduate School of Education

2:30 – 2:45 PM Break

(Saturday continued)

2:45 – 4:15 PM

Plenary Session IV

East Room

“Promoting High School Reform: The Last Remaining SMT Frontier”

Presenters will discuss the challenges related to promoting high school reform and some recent approaches that are proving to be effective in meeting those challenges.

Panelists:

Libia Gil

*Senior Fellow, Education and Human Development
American Institutes for Research*

Dan Tosado

*Assistant Superintendent for Secondary Curriculum and Instruction
Miami-Dade County Public Schools*

Moderator:

Sid Smith

*Director, Curriculum and Instruction
Boston Public Schools*

4:15 – 5:00PM

Plenary Session V

East Room

“Reflections on the Day”

The presenter will provide a summary of the day’s activities along with reflections on his ongoing evaluation work and interviews with USP site representatives.

Presenter:

Mark St. John

*President
Inverness Research*

6:00 – 9:00 PM

Dinner

Participants are invited to a reception and dinner at the National Zoo’s Amazonian House. A shuttle bus will provide transportation to and from the National Zoo. Participants should meet in the hotel lobby outside the gift shop. The first bus will depart from the hotel at 5:45 PM.

Sunday, November 6, 2005

7:30 – 8:30 AM	Continental Breakfast	Grand Ballroom
8:30 – 8:45 AM	Opening Remarks / Charge for the Day	Grand Ballroom
8:45 – 9:00 AM	Plenary Session VI	Grand Ballroom

“Overview of the Presidential Awards for Excellence in Mathematics and Science Teaching Program”

The presenter will provide an overview of the Presidential Awards for Excellence in Mathematics and Science Teaching Program, sponsored by the White House and implemented by the National Science Foundation, along with some recommendations for increasing the pool of urban school teacher applicants.

Presenter: **Celeste Pea**
 Program Director
 National Science Foundation

9:00 – 9:45 AM	Plenary Session VII	Grand Ballroom
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“Closing the Minority Achievement Gap: What the Research Says”

The speaker will provide an overview of recent research findings related to closing the minority student achievement gap. Strategies and programs will be highlighted that show particular promise for success. Emphasis will be on not only what works but also the whys behind successful interventions.

Presenter: **Wade Boykin**
 Director, Capstone Institute
 Howard University

9:45 – 10:00 AM	Break	
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10:00 – 10:45 AM	Plenary Session VIII	Grand Ballroom
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“Reflections on Sustaining Systemic Reform”

The presenter, one of the original “founders” of the systemic reform movement, will reflect on the past decade of SMT systemic reforms and will discuss some of her thoughts regarding future directions, especially as they relate to sustaining systemic reform learning communities.

Presenter: **Jennifer O’Day**
 Managing Research Scientist
 American Institutes for Research

10:45 – 11:30 AM	Plenary Session IX	Grand Ballroom
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“Building Virtual Learning Communities”

This session will provide an overview and live demonstration of some new web-based tools for supporting virtual learning communities through webinars (web-based seminars) and other technology enhancements. As a follow-up to the presentation, participants will meet with team members to discuss how to build and develop local and national learning communities and to provide recommendations for future topics and types of sessions as well as other technical assistance support strategies to promote cross-district collaborations.

Presenter: **Joseph Harris**
 Technical Assistance Project Manager
 AIR/McKenzie

11:30 – 12:00 PM

Break / Hotel Checkout

12:00 – 1:15 PM

Lunch/Closing Remarks

Grand Ballroom

Presenter:

Bernice Anderson

Director for Evaluation

Office of the Assistance Director, Education and Human Resources

National Science Foundation