

# Facilitating Mathematics/Science Partnerships

National Academy of Sciences

National Science Resources Center



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For advice on issues of science, technology, and medicine that frequently underlie public policy decisions, the nation's leaders often turn to the institution created for this purpose more than a century ago: the National Academy of Sciences. The Academy, together with its sister societies, the National Academy of Engineering and the Institute of Medicine, as well as the National Research Council, (NRC) constitute the National Academies.

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# National Science Resources Center

The National Science Resources Center (NSRC) was established in 1985 by the Smithsonian Institution and the National Academies to improve the learning and teaching of science in the nation's school districts. The NSRC collects and disseminates information about exemplary science teaching resources, develops innovative science curriculum materials, and sponsors outreach activities to help school districts develop and sustain hands-on science programs.

<http://www.nsrconline.org/>

# **Math/Science Partnerships Workshops**

**The National Research Council and the National Science Resources Center are presenting a series of workshops geared specifically to the needs of MSP awardees. These workshops are being developed to enhance grantees' understanding of research related to their missions and goals.**

**The workshops will actively engage participants so that they:**

- 3) acquire a deeper understanding of the concepts in NRC education reports; and,**
- 4) examine emerging “best practices” that represent effective, evidence-based applications of these concepts.**

# **Math/Science Partnerships Workshops**

- Selected NRC education reports will serve as the basis for the workshops.**
- Prominent researchers, staff, and committee members who produced these reports will serve as facilitators and speakers.**
- Representatives from school districts and academic institutions with model STEM education programs will be invited to participate as well.**
- All workshop participants receive a free CD-ROM containing a select compendium of NRC reports tailored specifically to the workshop's content.**

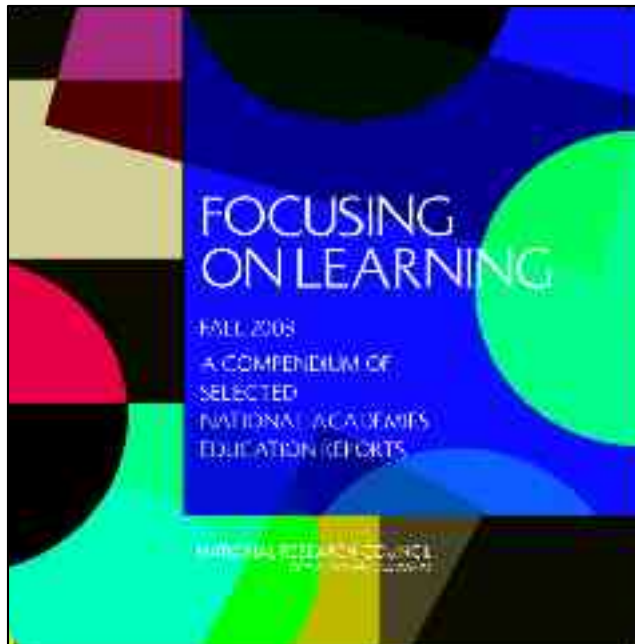
# 2004 Schedule of Workshops

- **The 2004 Schedule of Workshops below incorporates several “themes” per year (see next slide for schedule).**
- **A recurring theme focuses on human cognition and an NRC report entitled, “How People Learn: Brain, Mind, Experience, and School”.**
- **Two other themes in 2004 revolve around “Assessment of Student Learning” and “Enhancing the Quality of Mathematics and Science Teaching and the Careers of Teachers.”**
- **Teams of no more than five people are recommended for each workshop. MSP projects are encouraged to “target” their resources by sending the most appropriate personnel to each workshop.**
- **All workshop participants receive a free CD-ROM containing a select compendium of NRC reports tailored specifically to the workshop’s content.**

# 2004 Schedule of Workshops

<b>Feb. 1-3, 2004</b>	<b>Assessment of Student Learning</b>	<b>500 Fifth St. NW, Keck 100</b>
<b>March 7-9, 2004</b>	<b>How People Learn</b>	<b>NAS Lecture Room, 2100 C St. NW</b>
<b>May 16-18, 2004</b>	<b>Assessment of Student Learning</b>	<b>500 Fifth St. NW, Keck 100</b>
<b>June 27-29, 2004</b>	<b>How People Learn</b>	<b>500 Fifth St. NW, Keck 100</b>
<b>July 25-27, 2004</b>	<b>Teacher Education for Effective Teaching and Learning</b>	<b>500 Fifth St. NW, Keck 100</b>
<b>Dec. 5-7, 2004</b>	<b>Higher Education in MSP Partnerships: Learning, Assessment, and Teacher Education</b>	<b>500 Fifth St. NW, Keck 100</b>

# Compendium CD of NRC Reports on Student Learning



Enhancing Undergraduate Learning with  
Information Technology:  
A Workshop Summary  
Helping Children Learn Mathematics  
Learning and Understanding: Improving Advanced  
Study of Mathematics and Science in U.S. High  
Schools

Adding It Up: Helping Children Learn Mathematics  
Eager to Learn: Educating Our Preschoolers  
Knowing and Learning Mathematics for Teaching:  
Proceedings of a Workshop

Knowing What Students Know: The Science and  
Design of Educational Assessment

How People Learn: Brain, Mind, Experience, and  
School: Expanded Edition

Inquiry and the *National Science Education*

*Standards: A Guide for Teaching and Learning*

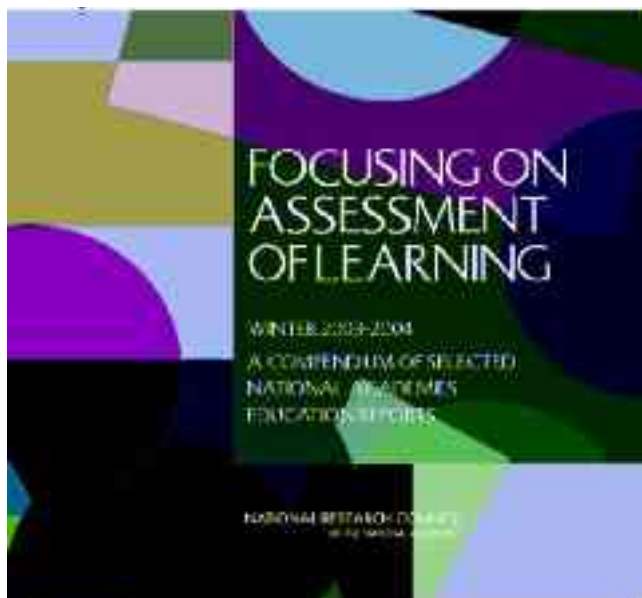
How People Learn: Bridging Research and Practice  
Starting Out Right: A Guide to Promoting Children's  
Reading Success

High School Mathematics at Work: Essays and  
Examples for the Education of All Students

National Science Education Standards



# Compendium CD of NRC Reports on Assessment of Student Learning



**Assessment in Support of Instruction and Learning:  
Bridging the Gap Between Large-Scale and Classroom  
Assessment - Workshop Report**

**Evaluating and Improving Undergraduate Teaching in  
Science, Technology, Engineering, and Mathematics  
Learning and Understanding: Improving Advanced Study  
of Mathematics and Science in U.S. High Schools  
Classroom Assessment and the *National Science  
Education Standards***

**Knowing What Students Know: The Science and Design of  
Educational Assessment**

**Understanding Dropouts: Statistics, Strategies, and High-  
Stakes Testing**

**How People Learn: Brain, Mind, Experience, and School:  
Expanded Edition**

**Testing English-Language Learners in U.S. Schools:  
Report and Workshop Summary**

**High Stakes: Testing for Tracking, Promotion, and  
Graduation**

**How People Learn: Bridging Research and Practice  
The Assessment of Science Meets the Science of  
Assessment: Summary of a Workshop**

**Testing, Teaching, and Learning: A Guide for States and  
School Districts**

**Myths and Tradeoffs: The Role of Tests in Undergraduate  
Admissions**

**National Science Education Standards**

# People & Activities at the July 2003 Workshop on Learning



**Participants conducted a hands-on science learning investigation**

**Representatives from 14 MSP projects attended the July 21-22 workshop**

