



American Association for the Advancement of Science (AAAS)  
Annual Meeting 2011 - Washington, D.C.

Teaching and Learning in the Digital Age:  
Reliable Resources across the Disciplines

National Science Digital Library (NSDL) Pathways  
Partners

Moderator: Eileen McIlvain, NSDL Resource Center

*Discover the ChemEd DL: Digital Resources for the Chemistry Teacher and Student*  
John W. Moore, Univ of Wisconsin Madison

*ComPADRE: Physics and Astronomy Education for Middle School through Graduate School*  
Bruce Mason, Univ of Oklahoma

*Math Across the Curriculum at MathDL*  
Lang Moore, Mathematical Assoc of America (MAA)

*Biosciences EdNet (BEN): A Digital Tool for Teaching and Learning Biological Sciences*  
John Jungck, Beloit College, BEN partner

*Computational Thinking Across the Curriculum: Science at the Speed of Right*  
Robert M. Panoff, Shodor, CSERD

*MatDL: Multi-Institutional Collaborations for Materials Research & Learning*  
Laura Bartolo, Kent State University



**Funding Agency:** *National Science Foundation*

- Initiated by NSF in 2000 as R&D project; an extended network of educational partners

**Scope:** *Education at all levels (K12, Higher Ed, Lifelong Learning, Research)*

- Science, Technology, Engineering, and Mathematics

**Structure:** *Distributed holdings and services, provided and maintained by many organizations*

- Resource Center – University Corporation for Atmospheric Research (UCAR)
- Technical Network Services – UCAR, Univ. of Colorado, Cornell Univ
- Pathways Projects – 16 Pathways partnerships
- Services and Research projects – more than 200 awards

# NSDL



## Digital Learning Library

- Collections
- Contextualized Resources
- Educational Tools and Services



## Digital Learning Community

- Professional Networks
- Trends and Practices
- Dissemination
- Feedback Loops
- Partnership Brokering
- Capacity Building
- National Initiatives



## Digital Learning Platform

- Research
- Tool and App Development
- Platform Services

# NSDL Pathways

- Educational level and discipline-specific views of NSDL
- Built by leading organizations who are trusted by their target audiences
- Engage ~ 60 professional societies and organizations, and ~ 30 educational institutions and foundations
- Provide resources, tools, services, and professional development





Community College



Biological Sciences



Chemistry



Physics & Astronomy



Computational Sci



Geosciences



Computer Sciences



Engineering



Materials Science



Undergrad Math



Middle School



Social Science Data



Informal Science & Math



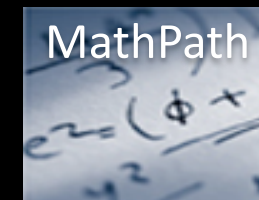
Multimedia



Standards-based instruction



Climate & Energy



K-6 Math



### Contribute



### Participate



### Utilize

- Recommend Resources/ Contribute Collections
- Collaborate with NSDL on workshops, web seminars, and other professional development
- Attend community meetings
- Join the NSDLnetwork ([nsdlnetwork.org](http://nsdlnetwork.org)) site - news, issues, working groups
- Apply for NSF funding through a variety of program solicitations and collaborate with NSDL for dissemination and diffusion of project outcomes
- Use NSDL tools for resource development, collection management, and dissemination