

FOR IMMEDIATE RELEASE

Date: October 5, 2004

New Pathways to the National Science Digital Library

Contacts:

- **Kaye Howe, Director, National Science Digital Library**
University Corporation for Atmospheric Research, Boulder, CO
303 497-2940; kaye@ucar.edu
- **Rachael Bower, Principal Investigator, AMSER**
University of Wisconsin, Madison, WI
608 262-6587; bower@scout.wisc.edu
- **Deb Burns, Marketing Director, Teachers' Domain**
WGBH, Boston, MA
617 300-3625; deb_burns@wgbh.org
- **Don Albers, Director of Publications, The Mathematical Association of America**
MAA, Washington, D.C.
202 319-8481; dalbers@maa.org
- **Bob Panoff, President and Executive Director, Shodor**
Shodor Education Foundation, Inc., Durham, NC
919 286-1911; rpanoff@shodor.org
- **Len Simutis, Executive Director, Eisenhower National Clearinghouse**
Ohio State University, Columbus, OH
614 292-1373; simutis@enc.org

New Pathways to the National Science Digital Library

Introducing NSDL Pathways: Internet Scout Project, WGBH Teachers' Domain, The Mathematical Association of America, Shodor Education Foundation, and Eisenhower National Clearinghouse

NSF-NSDL Pathways add user-tailored access to the National Science Digital Library

Philadelphia kindergarden teacher Varnelle Moore pioneers teaching new concepts using resources and hands-on support from The Math Forum @ Drexel. Moore's students learn to understand spatial experiences, story content, and talk out ideas with their very young kindergarden colleagues. The National Science Foundation has funded Pathways Projects to add user-tailored access to the National Science Digital Library (NSDL) making it simple for Moore and other teachers to take full advantage of the new bridge between math, science, and education in a context that makes sense for them.

Four NSDL Pathways Projects were funded by the National Science Foundation: Internet Scout Project; WGBH Teachers' Domain; The Mathematical Association of America; and The Shodor Education Foundation. In addition NSDL has funded the Eisenhower National Clearinghouse (ENC) to develop the NSDL Middle School Portal. The NSF awarded 19 additional NSDL NSF-NSDL grants to develop services ranging from an "Online Psychology Laboratory" from the American Psychological Association (<http://www.apa.org/>), to a project that will give students and teachers the ability to create personal collections from Case Western Reserve's New Media Studio (<http://www.case.edu/its/itac/nms/>).

National Science Digital Library Director Kaye Howe emphasizes, "We have pledged public education to each other in this country and know that education has always gone out from the great libraries." NSDL partnerships with Pathways digital library projects continue to leverage NSDL's impact on public education by extending the reach of this key piece of STEM educational infrastructure.

MEET NSDL PATHWAYS

• **Internet Scout Project**
Results. Solutions. Knowledge.
<http://scout.wisc.edu/>

About the Scout Project

Since 1994, the Internet Scout Project has focused on developing better tools and services for finding, filtering, and presenting online information and metadata by creating practical Web-based information and software solutions for educators, librarians and researchers. Scout's web based reports reach over 350,000 readers a week helping guide educators and others to high quality online resources. Open

source software packages created by the Scout Project are used by hundreds of organizations around the world to help them organize and showcase their materials in the online environment.

AMSER Pathway to NSDL Community and Technical College Resources

Scout's newest project is the Applied Mathematics and Science Education Repository (AMSER), a collaborative NSDL Pathways project designed to help meet the resource and service needs of community and technical colleges and forge a link between these communities and the NSDL. AMSER will consist of a repository which houses information about national applied math and science resources and a variety of integrated services designed specifically to enhance the learning experience of the community and technical college students and the teaching capabilities of instructors at those institutions. AMSER will create an ideal environment for success: a network of collaborating community college partners, an advisory board with members from all key sectors, a strong existing relationship with the NSDL CI and NSDL community, along with the Internet Scout Project's own expertise in resource discovery and online service development.

•WGBH Teachers' Domain

Multimedia Resources for the Classroom and Professional Development

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

The screenshot shows the Teachers' Domain website interface. At the top, the logo "teachers'domain" is displayed with the tagline "Multimedia Resources for the Classroom and Professional Development". Below the logo is a navigation bar with "TD Home" and "Science 9-12" leading to "Life Science". A search bar is present, and the user is identified as "Pat Smith of Ames High School". The main content area is titled "Life Science 9-12" and features several resource categories:

- The Cell (5 Lesson Plans)**: Includes links for [Differentiation \(7 resources\)](#), [Division \(4\)](#), [DNA \(10\)](#), [Photosynthesis \(5\)](#), and [Structure and Function \(14\)](#).
- Ecology (3 Lesson Plans)**: Includes links for [Cycles and Processes \(14 resources\)](#), [Ecosystems \(2\)](#), and [Human Influence on Ecology \(17\)](#).
- Evolution (10 Lesson Plans)**: Includes links for [Classification \(6 resources\)](#), [Deep Time/History of Life \(26\)](#), [Evidence for Evolution \(20\)](#), [History of Evolution \(13\)](#), [Human Evolution \(18\)](#), and [Processes of Evolution \(46\)](#).
- Genetics (8 Lesson Plans)**: (Link partially visible)

On the right side, there are two "Resource Highlight" boxes:

- Human Genome Project**: Media Type: QuickTime Video. Description: "This video segment from NOVA: 'Cracking the Code of Life' looks at the meaning and significance of the effort to decode the human genome."
- Field Biology**: Media Type: QuickTime Video. Description: "This video segment from the teacher video..."

About WGBH

WGBH is a leading producer of PBS prime-time programs and online content, a major producer for public radio, a pioneer in educational multimedia (including the Web, broadband, and interactive television) and in technologies and services that make media accessible for people with disabilities. WGBH is also recognized as one of the

nation,s leading producers of media-based resources to support teacher training and student learning. Focusing on both content and methodology at all grade levels, these products represent effective standards-based teaching in classrooms across the country, and address a wide variety of subject areas and educational challenges.

Teachers' Domain Pathway to NSDL Multimedia for K-12 Teachers and Students

Teachers' Domain is a digital library of multimedia resources for K-12 classroom use and independent study that offers teachers media-rich tools to present science concepts to students in hi-impact, interactive, and engaging ways. Classroom-ready resources, including video clips, interactive activities, and images, come from educational public television shows such as *NOVA*, *ZOOM*, *Building Big*, and *A Science Odyssey*. These media rich resources support teachers in their quest for materials and new media applications that go beyond static textbook presentations to engage and inspire students. Teachers' Domain Professional Development, building upon Teachers' Domain classroom resources, provides K-12 educators with science content knowledge, and methodologies and strategies to excite students about science. As an NSDL Pathway Teachers' Domain will make these rich resources and services available through NSDL.

Teachers' Domain has been named a finalist for the Teacher's Choice Award of 2004. This award celebrates products that teachers recommend to other teachers for use in the classroom.

• **The Mathematical Association of America (MAA)**

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

MAA Online
The Online Home of the Mathematical Association of America

Search MAA Online: GO

- CML
- Employment Opps
- Support the MAA
- Privacy Policy
- Advertise
- Contact Us
- Search Bookstore

About MAA
Join MAA
Special Groups
Sections
Programs
Students
Bookstore
Publications
E Services
Meetings

Nominations for the National Science Foundation Director's Awards for Distinguished Teaching Scholars are solicited.

Register now for the Joint Mathematics Meetings, Atlanta, January 5-8, 2005.

Childcare to be offered at Joint Mathematics Meetings, Atlanta, January 5-8, 2005.

MathDL has a completely new look and is now hosted at MAA. Check out the new home for [Convergence](#), [JOMA](#), and [DCR](#).

Melanie Wood to speak on **"The Creative Process in Mathematics"** at American University on October 26.

NEW! Information on the forthcoming **MAA Mathematical Tour of the Ancient Maya**

New Book Reviews (updated September 20)

In Memoriam
[MORE HEADLINES...](#)

Features
Calculus First-semester calculus has become a high school topic for most of our strongest students. We should restructure out single-variable calculus courses accordingly, says David Bressoud. [MORE...](#)

New Textbook Catalog

Columns:
Ivars Peterson's MathTrek
Proof by Computer
Devlin's Angle by Keith Devlin
A game of numbers
Cut The Knot! by Alex Bogomolny
According to the Rules
Math Games by Ed Pegg, Jr.
Evil Numbers
How Euler Did It by Ed Sandifer
Derangements
Math News from Science News
A Better Distorted View
Ivars Peterson's Math Muse for Kids
Tricky Crossings

©2004 The Mathematical Association of America

About The Mathematical Association of America

The Mathematical Association of America is the largest professional society

that focuses on undergraduate mathematics education. The MAA numbers among its 27,000 members university, college, and high school teachers; graduate students; pure and applied mathematicians; computer scientists; statisticians; and many others in academe, government, business, and industry. The MAA supports learning in the mathematical sciences by encouraging effective curriculum, teaching, and assessment at all levels. Extensive programs of professional development and a publications Program that includes three journals, a magazine for students, a news magazine, nine book series, and two online journals fostered by the work of 115 committees.

The *Math Gateway* Pathway to NSDL Undergraduate Mathematics Resources

The MAA's *Math Gateway* will be a portal to NSDL projects with significant mathematics materials and services as well to other appropriate online collections and services. The Math Gateway will build on the experience gained from The Mathematical Sciences Digital Library (MathDL, <http://www.mathdl.org/>), MAA's NSDL collection, and the work of the Mathematical Sciences Conference Group on Digital Educational Resources.

The Math Gateway will launch with the cooperation of 14 collections and services and will provide an opportunity to expand the work of the Mathematical Sciences Conference Group which has agreed on a common taxonomy for interactive online learning materials in mathematics. *Math In the News*, a regular Math Gateway feature, will highlight mathematics in current news and events.

• ***The Shodor Education Foundation, Inc.***
A National Resource for Computational Science Education
<http://www.shodor.org/>



Search

1994 - Celebrating 10 years of service in education reform - 2004

⇒ Curriculum Materials	⇒ Faculty Development	⇒ Student Enrichment
Interactive activities and instructional materials for students, educators, and parents	Workshops, online courses, and educational resources geared towards educators	Internships and workshops that provide students with resources in computational science
		

Our Mission: To advance science and math education through the use of computational science, modeling and technology. [Find out more about Shodor.](#)



SHODOR

©1996-2004, The Shodor Education Foundation, Inc. [Privacy Policy](#) | [Employee Intranet](#)

[About](#) | [Site Map](#) | [Contact Us](#)

About Shodor

Since 1994 the Shodor Foundation has conducted research and educational outreach to advance science and mathematics education through numerical models, data visualization, and simulation. Through the National Computational Science Institute and the Mentor Center at Shodor, scientists and educators integrate materials development, faculty enhancement, and student enrichment to apply computational science tools and technologies to all learning levels. Shodor has developed a special focus and expertise on undergraduate education and teacher preparation. With numerous awards for its interactive and computational exploration environments, Shodor's web site serves several hundred thousand visitors per month.

Shodor Pathway to NSDL: Computational Science Education Resources

The Computational Science Education Reference Desk (CSERD) will identify, develop, and sustain effective educational materials for computational science, technology, engineering and mathematics (STEM). New partners will bring significant content, pedagogy, and digital library expertise to create and maintain an important body of work in computational science education (CSE). Two complementary approaches are supported: first, CSERD provides easy navigation tools to find and use numerical models to teach and explore concepts in science and mathematics; second, CSERD provides high-quality resources for teaching how to build and validate these

computational models. Flexibility in the design will allow for new collections and new partners to be identified as the project evolves.

Dr. Robert M. Panoff, president and executive director of Shodor, emphasized the role of CSERD in aligning research practice and education innovation. Panoff states, "With our partners CSERD will work to ensure that advances in computational science are made accessible to the math and science classroom."

Dr. David Joiner of Kean University in New Jersey is a key partner in the CSERD project. Through its newly established New Jersey Center for Science and Technology Education, Kean University seeks to transform teacher education in science and mathematics and fill a significant need within the State for skillful and talented scientists through innovative, scholarship-based, integrated 5-year BS/MS programs. "The Computational Science Education Reference Desk is both a product and service, that we will help build, and then use ourselves."

• **Eisenhower National Clearinghouse (ENC)**
A K-12 Math and Science Teacher Center
<http://www.enc.org/>

The screenshot shows the NSDL Middle School Portal website. The header includes the NSDL logo, the title "Middle School Portal", and "produced by ENC". A navigation bar contains links for Home, Math, Science, Technology, News, Partners, About, and Contact. A search box is located on the right. The main content area is divided into three columns:

- Math Online magazine:** Focus on MATH ANXIETY. Includes links for "Browse by standards", "Browse by subject", "Middle School Math News", and "My NSDL Math site".
- Science Online magazine:** Focus on Big Ideas in Science. Includes links for "Browse by standards", "Browse by subject", "Middle School Science News", and "My NSDL Science site".
- Technology Online magazine:** Focus on Video Study Groups. Includes links for "Browse by standards", "Browse by subject", "Middle School Technology News", and "My NSDL Technology site".

The footer features logos for NSF, enc, and encdl.

About the Eisenhower National Clearinghouse

ENC was established in 1992 to collect teaching materials for K-12 math and science educators and to identify and disseminate information about federally funded programs. Products and services have evolved to include a primary web site, *ENC Focus*, a free weekly web feature, a periodic print publication, as well as other publications and services. ENC's longstanding and respected expertise in serving

teachers led NSDL Core Integration to support development of the ENC Middle School Portal. This first top-to-bottom demonstration of a Pathway view is due to launch this fall.

ENC Pathway to NSDL Middle School Education Resources

ENC's approach to developing a Middle School view into NSDL for teachers is described by Director Len Simutis as being "selective." Teachers find the Middle School Portal site to be user friendly, well organized, and easily accessible noting that they are looking for information they can use in class and that is easy to find and understand. The new Middle School portal is organized like an online magazine. One teacher commented, "I like the uncomplicated browse lists. They are easy to see and use."

MORE INFORMATION

More information about NSDL Pathways Projects will be available in general and concurrent sessions at the NSDL Annual Meeting <<http://nsdl.comm.nsd.org/>> to be held November 14-17, 2004 in Chicago, IL.