National Science Digital Library

DESIGNING STRATEGIES FOR SUCCESS

2004

NSDL ANNUAL MEETING
NOVEMBER 14-17 | CHICAGO, ILLINOIS

WELCOME

Designing Strategies for Success

On behalf of the 2004 NSDL Annual Meeting Planning Committee, we welcome you and thank you for your participation in this all-community event. Our intention has been to make this a community-directed meeting at every step. From the daily agenda of sessions to the overall structure of the meeting, the Committee responded directly to feedback from last year's meeting and ongoing community input to create a schedule of opportunities for dialogue, problem solving, and networking.

We are looking forward to informative and productive conversations over the next several days that strengthen our shared sense of purpose and ensure NSDL's future success.

-Kimberly S. Lightle, Planning Committee Chair

-Susan Van Gundy, Core Integration Lead for the Planning Committee

Acknowledgements

2004 Planning Committee

Kimberly S. Lightle	(Chair), Content Standing Committee
Sarah Giersch	Educational Impact and Evaluation Standing Committee
Rachael Bower	Sustainability Standing Committee
Martin Halbert	Technology Standing Committee
Chris Walker	At-Large
Katherine Hanson	Policy Committee
Casey Jones	Core Integration
Donna Cummings	Core Integration
Alex Chaux	Core Integration
Sharon Clark	Core Integration
Susan Van Gundy	Core Integration

2004 Program Subcommittee

Alice Agogino	University of California, Berkeley
Lillian Cassel	Villanova University
Lindsay Greer	Eisenhower National Clearinghouse
Liz Liddy	Syracuse University
Marcia Mardis	University of Michigan
Flora McMartin	MERLOT
Judy Ridgway	Eisenhower National Clearinghouse
Ron Vetter	University of North Carolina, Wilmington
Marcia Zeng	Kent State University

SCHEDULE OVERVIEW

Sunday, November 14

TIME	ROOM	SESSION TITLE (MAY BE ABBREVIATED)
8:00 am – 5:00 pm	CC 10D	Content Reusability and Interoperability Workshop
1:00 pm – 7:00 pm	CC 11A-B	Meeting Registration Desk Open
3:00 pm – 6:30 pm	CC 11A-B	New Projects / New People Orientation

Monday, November 15

TIME	ROOM	SESSION TITLE (MAY BE ABBREVIATED)
8:30 am – 10:30 am	Regency A-B	Opening Keynote Address and Community Updates
10:30 am – 11:00 am	BREAK	
11:00 am – 12:00 pm	CC 22C	Issues of Copyright and Clearances
	CC 23A	Engaging Users in Research and Evaluation
	CC 23B	Understanding Accessibility
	CC 23C	Exploring Annual Venues for NSDL Interaction
	CC 24A	Metadata Stories
	CC 24B	Electronic News and Features Publishing
	CC 24C	A Conversation with Daniel Greenstein
12:00 pm – 1:30 pm	LUNCH ON YOUR OWN	
12:30 pm – 1:30 pm	CC 22C	Brown Bag – New Projects
	CC 24A	Brown Bag – Biological Sciences Education
	CC 24C	Brown Bag – Building a Community of Users
1:30 pm – 2:30 pm	Regency A-B	Assembly Meeting with the Policy Committee
2:30 pm – 3:00 pm	BREAK	
3:00 pm – 4:30 pm	CC 22C	Getting a Leg Up on the Open Archives Initiative
	CC 23A	Access to the Deep Web
	CC 23B	DLESE Teaching Boxes / Starting Point
	CC 23C	Sustainability Scenarios
	CC 24A	Reference Functions in NSDL
	CC 24B	Which Data to Capture and How?
	CC 24C	Organizing an Informal Science Learning Collection
4:30 pm – 5:00 pm	BREAK	
5:00 pm – 7:00 pm	CC 10 A-D	Poster Session and Reception

Tuesday, November 16

8:30 am – 10:00 am	CC 23A	Content Standing Committee Meeting
	CC 23C	Educational Impact and Evaluation Standing Committee Meeting
10:00 am – 10:30 am	BREAK	
10:30 am – 12:00 pm	CC 22C	The NSDL Strand Map Service
	CC 23A	Using, Choosing, and Creating Vocabularies
	CC 23B	Engaging Students in STEM Careers / ePub Review
	CC 24A	NSDL Pathways Projects: Priorities and Plans
	CC 24B	NSDL Membership Model
	CC 24C	Web Metrics: How Do We Utilize Log Data?
12:00 pm – 1:30 pm	LUNCH ON YOUR OWN	
12:30 pm – 1:30 pm	CC 22C	Brown Bag – Discussion with the Policy Committee
	CC 23B	Brown Bag – CWIS Users' Group
1:30 pm – 3:00 pm	CC 22C	Resource Discovery Using Web Services
	CC 23A	Collaborative Methods for Digital Library Design
	CC 23B	BioSciEdNet / MatDL Transport Archive
	CC 23C	Information Visualization of Complex Data
	CC 24A	Sinking or Swimming at the K-12 Level
	CC 24B	Sustainability Workshop
	CC 24C	Fedora: Content, Metadata, and Relationships
3:00 pm – 3:30 pm	BREAK	
3:30 pm – 5:30 pm	CC 10A-D	Poster Session and Reception

Wednesday, November 17

8:30 am – 10:00 am	CC 22C	Sustainability Standing Committee Meeting
	CC 23A	Technology Standing Committee Meeting
	CC 24B	Community Services Standing Committee Meeting
10:00 am – 10:30 am	BREAK	
10:30 am – 11:30 am	CC 22C	Interactivity and Collaboration
	CC 23A	Use of Scientific Mark-Up Languages in NSDL
	CC 23B	Improving the NSDL Community Pages
	CC 23C	What's in the Metadata Repository?
	CC 24A	Collaborative Outreach
	CC 24B	Physical Artifacts and Their Representations
	CC 24C	Object Modeling for Educational Digital Libraries
11:30 am – 11:45 am	BREAK	
11:45 am – 1:00 pm	Regency A-B	Closing Session

What You Need to Know

Poster Room

The poster room, CC 10A-D, will be open for viewing posters and networking with colleagues throughout the meeting (see schedule inside back cover). Continental breakfast, small meeting tables, and Internet access will also be available in the Poster Room.

Poster Finder System

The poster finder system is designed to help NSDL meeting attendees locate posters of interest. Users can search through poster metadata (for example, state where the project is located, year the project was funded, or topic of the poster) and mark posters on the drawing included in their meeting packet. Each result has a poster number associated with it so that users can easily find all the posters from their list at the NSDL meeting. Go to **http://nsdl.comm.nsdl.org** to create your poster list.

Identifying Meeting Staff

Planning Committee members and meeting staff can be identified by the red-colored stripe on their name badges. Please feel free to call upon these colleagues to assist you with meeting related needs. Staff will also be available at the Meeting Registration/Help desk during meeting hours (see schedule inside back cover).

Extra Meeting Rooms

Venues for ad hoc or project discussions are available on a first-come, first-served basis throughout the meeting. If you are interested in scheduling a room, please contact meeting staff at the Meeting Registration/Help Desk.

Guide to NSDL Acronyms

DL	Digital Library
NVC	NSDL National Visiting Committee
PC	Policy Committee
SC	Standing Committee
CI	Core Integration
STEM	Science, Technology, Engineering, and Mathematics
MR	Metadata Repository
OAI	Open Archives Initiative
DC	Dublin Core

SUNDAY

3:00 pm – 6:30 pm   CC 11A-B
New Projects / New People Orientation (Pre-registration Required)

Investigators from newly funded projects, as well as new people involved with ongoing projects, will be welcomed into NSDL and introduced to the basics of our community structure, technical frameworks, and project support systems. The session will also provide an overview of the Annual Meeting with suggestions for maximizing the benefits of the meeting's sessions, networking opportunities, and poster session.

Notes

MONDAY

8:30 am – 10:30 am   **Regency A-B**
Opening Session

Welcome Remarks

Kimberly S. Lightle, 2004 Annual Meeting Planning Committee Chair

Opening Keynote
Mission, Sustainability, and Brand: Issues for Consideration by NSDL

Daniel Greenstein, University of California, California Digital Library

Daniel Greenstein works at the University of California's Office of the President as Associate Vice Provost for Scholarly Information and University Librarian for Systemwide Library Planning and the California Digital Library (CDL). Prior to joining UC, he was Director of the Digital Library Federation in the US and founding director of two networked information services (Arts and Humanities Data Services and the Resource Discovery Network), working on behalf of the UK's universities and colleges.

Greenstein has spoken and written widely on strategic issues involved in the creation, management, and use of networked scholarly information and on the economics of scholarly communication and their impacts on higher education. With reference to the substantial progress of NSDL to date, he will reflect on issues of sustainability, branding, and the life cycle (ups and downs) of extremely complex, highly innovative and collaborative initiatives.

NSF Update

Lee Zia, National Science Foundation

NSDL Core Integration Update

Kaye Howe, CI Principal Investigator
William Arms, CI Principal Investigator
Kate Wittenberg, CI Principal Investigator

The National Science Foundation and Core Integration will provide a briefing on the latest activities and accomplishments of NSDL and NSF. This status report will also include an overview of upcoming projects and strategies to facilitate future growth and sustainability.

10:30 am – 11:00 am   BREAK

11:00 am – 12:00 pm   CC 22C
SIG - Issues of Copyright and Clearances

This interest group will start with a short presentation outlining some issues and considerations for using materials in a digital library collection. The group will then identify rights issues for individual projects and for NSDL in general.

Karen Cariani, WGBH Educational Foundation

11:00 am – 12:00 pm   CC 23A
Panel - Engaging Users in Research and Evaluation

This session explores higher education faculty use of the web in teaching as a basis for designing NSDL portals. NSDL seeks not only to meet faculty needs but to change their work habits. We will discuss research results by three groups and their implications for site design that motivate changes in practice.

Cathryn A. Manduca, Carleton College
Flora McMartin, MERLOT
K. Ann Renninger, Swarthmore College
Ellen Iverson, Carleton College

11:00 am – 12:00 pm   CC 23B
Crit Lab - Understanding Accessibility

This Crit Lab will give participants a chance to have their web pages and sites reviewed using accessibility tools and standards. Use of screen reader software and online tools will both be demonstrated, and users will get to examine a variety of pages to help understand basic adherence to accessibility standards.

Andrew Kirkpatrick, CPB/WGBH National Center for Accessible Media
Rachael Bower, UW-Madison, Internet Scout Project

11:00 am – 12:00 pm   CC 23C
SIG - Exploring Annual Venues for NSDL Interaction

The NSDL Annual meeting provides an occasion for NSDL projects to describe their collections and services. However, there may be a need for an annual, hands-on, workshop where projects, teachers, and students can put NSDL to the test of actual use. This need will be explored.

Bruce Caron, The New Media Studio
Tamara Ledley, TERC
Howard Burrows, Autonomous Undersea Systems Institute
Ed Geary, DLESE Program Center

11:00 am – 12:00 pm   CC 24A
SIG - Metadata Stories: The Creation and Management of Metadata

Panelists will stimulate a group discussion by sharing their stories about the selection of a metadata schema, their use of descriptive metadata to richly describe the resources in their collections, and the storage and coding needed to facilitate metadata harvest and addition to the NSDL metadata repository.

Judy Ridgway, Eisenhower National Clearinghouse
Diane Hillmann, Cornell University

11:00 am – 12:00 pm   CC 24B
Panel - **Electronic News and Features Publishing Models**

In digital libraries, engaging visitors in the creation of a growing online body of dynamic information leverages each users' knowledge and experience to build better libraries for everyone. Matching the right publishing model to a specific knowledge community increases opportunities to expand the exchange between users and digital libraries.

Carol Minton Morris, Cornell University
Tracy Crow, Eisenhower National Clearinghouse

11:00 am – 12:00 pm   CC 24C
SIG - **A Conversation with Daniel Greenstein**

Daniel Greenstein will follow up on his morning keynote by discussing issues of sustainability, branding, and the life cycle (ups and downs) of extremely complex, highly innovative and collaborative initiatives. The conversation will focus on the progress of NSDL with respect to these issues and NSDL's mission. Join Daniel Greenstein for more conversation on these important topics.

12:00 pm – 1:30 pm   LUNCH ON YOUR OWN

12:30 pm – 1:30 pm   CC 22C
Brown Bag – **New Projects**

This informal session is a venue for conversation between and among the newest members of the community and NSDL veterans. Bring your lunch and learn more about the upcoming work of new pathways, selection services, services workshops, and targeted research projects.

Susan Jesuroga, University Corporation for Atmospheric Research
Susan Van Gundy, University Corporation for Atmospheric Research

12:30 pm – 1:30 pm   CC 24A
Brown Bag – Biological Sciences Education

Individuals involved in developing digital libraries of biological science teaching and learning resources are invited to discuss their goals, challenges, and successes with the BEN (BiosciEdNet.org) Collaborative in this SIG. BEN will facilitate a conversation among participants to identify common goals and potential collaborations and address issues of common concern.

Linda Akli, American Association for the Advancement of Science
Amy Chang, American Society for Microbiology
Susan Musante, American Institute of Biological Sciences
Kelly Gull, American Society for Microbiology

12:30 pm – 1:30 pm   CC 24C
Brown Bag – Building a Community of Users

Interested in creating/improving a virtual community for collaborative construction, sharing and use of your digital library collection? If so, this session will discuss critical factors for success and offer a hands-on tutorial on creating and running an online community of your own on OpenCourse.Org, the NSDL-funded collaboration service.

Robert Stephenson, Wayne State University

1:30 pm – 2:30 pm   Regency A-B
Assembly Meeting with the Policy Committee

The assembly is a brief interactive review of NSDL community activities that sets the stage for fuller discussions in the policy committee SIG and the standing committee and task force meetings. Organized around the theme of building the NSDL as a product and as an organization, we will highlight key outcomes for the policy committee and standing committees, present our plan for new activities that will support projects over the next year, and solicit questions and feedback from participants.

2:30 pm – 3:00 pm   BREAK

3:00 pm – 4:30 pm   CC 22C
Workshop - Getting a Leg Up on the Open Archives Initiative

What is required in order to include your project's items in NSDL search results or other NSDL user interfaces? Does your project's OAI interface follow best practices? Does it meet NSDL requirements? Is there an easy way for your project to become OAI-PMH compliant? These issues and more will be addressed.

Muriel Foulonneau, University of Illinois at Urbana-Champaign
Naomi Dushay, Cornell University

3:00 pm – 4:30 pm   CC 23A
Panel - Access to the Deep Web

Accessing what lies beneath the surface of the world wide web is of increasing interest to users and content aggregators. What happens to knowledge seekers when they are denied access to information and complex ideas on a deeper level? Panelists will present their strategies for allowing users to access the deep web and discuss issues around various approaches. What do these strategies have in common? How do they differ? Are there ways to share deep web resources with NSDL or interoperate on a federated level?

John M. Saylor, Cornell University
Walter Warnick, USDOE, Office of Scientific and Technical Information
A representative from Yahoo!

3:00 pm – 4:30 pm   CC 23B
Crit Lab (3:00 pm – 3:45 pm) - DLESE Teaching Boxes

Teachers! With luck, you've known that fellow teacher who always has some box in the garage where she's collected classroom activities she's used for years that get across the really hard Earth science concepts. She hands it to you along with tips, stories, and alternatives that you might use tomorrow! That's an example of a physical teaching box. Come critique a prototype digital version of a teaching box designed by teachers for teachers through a community project directed by the Digital Library for Earth System Education (DLESE).

Lynne Davis, DLESE Program Center

Crit Lab (3:45 pm – 4:30 pm) - First Impressions Count

This session will focus on critiquing the site architecture and navigation elements for the Starting Point site: serc.carleton.edu/introgeo. We seek feedback on the clarity of navigation choices and particularly the design features enabling linkage between pedagogic and geoscience topics.

Cathryn A. Manduca, Carleton College
Ellen Iverson, Carleton College
Sean Fox, Carleton College

3:00 pm – 4:30 pm   CC 23C
Panel - Sustainability Scenarios

Panel-audience discussion will involve participants from BioSciEdNet, Sustainability Standing Committee, Policy Committee, and Core Integration to evaluate two possible sustainability scenarios: (1) large computer company partnership with NSDL; and (2) e-commerce access to the collections or services of an individual project. Selected panelists will address each issue in brief initial presentations followed by discussion of each scenario. General discussion will follow.

Paul Berkman, University of California, Santa Barbara
Amy Chang, American Society for Microbiology
John Moore, Journal of Chemical Education

3:00 pm – 4:30 pm   CC 24A
SIG - Reference Functions in NSDL

AskNSDL and other projects providing online expertise to NSDL users will facilitate a lively conversation related to federated question/answering, policies, utilization of digital reference archives, starting or joining AskNSDL-like services, sustaining human-intermediated services, identifying issues in coordinating current and future reference functions in NSDL, rights, and technical standards.

Blythe Bennett, Syracuse University
Diane Hillmann, Cornell University

3:00 pm – 4:30 pm   **CC 24B**
Panel - **Which Data to Capture and How?**

Evaluation is critical to project success. 1. Which data should be captured? 2. What methods should we be using? And, do the methods selected change as a function of project age, research questions, and/or participant group? 3. How do we reduce these data? 4. What is the process of validating our findings? 5. When and how do we disseminate data? The proposed panel brings together participants who have been working to answer these questions in the context of their own projects. The goal for panel discussion is serious consideration of the decision-making that project evaluation requires.

Katherine Hanson, Education Development Center
Thomas Reeves, University of Georgia

3:00 pm – 4:30 pm   **CC 24C**
Workshop - **Organizing an Informal Science Learning Collection**

Based on practical experiences developing an informal science learning collection and pedagogical metadata for digital resources at the Exploratorium, we will conduct a workshop that allows participants to explore the special challenges faced when cataloging digital resources drawn from museum-based, and informal science learning communities and collections.

Sherry Hsi, The Exploratorium
Holly Fait, The Exploratorium

4:30 pm – 5:00 pm   **BREAK**

5:00 pm – 7:00 pm   **CC 10 A-D**
Poster Session and Reception

The NSDL community and its invited guests will gather to celebrate collaboration and share the achievements of the Library as told through posters and demonstrations. This event will include light hors d'oeuvres and a cash bar.

TUESDAY

8:30 am – 10:00 am   CC 23A
Content Standing Committee Meeting

8:30 am – 10:00 am   CC 23C
Educational Impact and Evaluation Standing Committee Meeting

10:00 am – 10:30 am   BREAK

10:30 am – 12:00 pm   CC 22C
Workshop - **The NSDL Strand Map Service**

Concept browsing interfaces, based on nationally recognized educational standards, can help educators and learners to locate, comprehend and use educational resources in digital libraries. The NSDL Strand Map Service enables digital library developers to quickly and easily create concept-browsing interfaces based on the Benchmarks for Science Literacy, developed for K-12 STEM education by the American Association for the Advancement of Science. This workshop will discuss how to create concept-browsing interfaces for your specific user audiences using the web services protocol provided by the Strand Map Service.

Tamara Sumner, University of Colorado
Sonal Bhushan, DLESE Program Center

10:30 am – 12:00 pm   CC 23A
Panel - **Using, Choosing, and Creating Vocabularies**

It has become increasingly clear that more intensive use of vocabularies will enhance the accessibility of NSDL resources and the value of the Library. This panel will discuss both work in process to develop useful vocabularies for NSDL and also consider how projects and collections can choose and use already existing vocabularies to enhance access to their materials.

Diane Hillman, Cornell University
Judy Ridgway, Eisenhower National Clearinghouse
Darin Burleigh, Journal of Chemical Education

10:30 am – 12:00 pm   CC 23B
Crit Lab (10:30 am – 11:15 am) - **Engaging Students in STEM Careers**

This session will present work from the Career Resources for Education Network project - a STEM career development digital library design for, and by, middle school students. To accomplish this, a group of middle school students is closely involved in the design, development, and deployment of the collection, such that the final site is the outcome of a user-driven and user-centered collection building project.

Sarita Nair, Education Development Center
Stella Ogunor, Education Development Center
Bethany Carlson, Education Development Center

Crit Lab (11:15 am - 12:00 pm) - **ePub Review**

One of the ways that middle school teachers will interact with the content in the MSP is through e-publications. This crit lab will include a review of these ePubs, the content of which covers math, science, and technology.

Kimberly S. Lightle, Eisenhower National Clearinghouse
Judy Spicer, Eisenhower National Clearinghouse
Carolee Barber, Eisenhower National Clearinghouse

10:30 am – 12:00 pm   CC 24A
Panel - NSDL Pathways Projects: Priorities and Plans

In the 2004 NSDL solicitation, NSF introduced a new funding track called Pathways. This panel includes presentations by ENC, the prototype Pathway partnership which is building a middle school portal, and presentations by each of the Pathway awardees. Emphasis will be on priorities and plans for the next year.

Susan Jesuroga, University Corporation for Atmospheric Research
Len Simutis, Eisenhower National Clearinghouse
Rachael Bower, UW-Madison, Internet Scout Project
Lang Moore, The Mathematical Association of America
Bob Panoff, The Shodor Education Foundation
Ted Sicker, WGBH Educational Foundation

10:30 am – 12:00 pm   CC 24B
Workshop - NSDL Membership Model

Session attendees will develop key components of an NSDL Membership Model, including statements of purpose, shared values, benefits and responsibilities, and classes of membership. Some classes may require members to pay dues or other fees. This session launches an effort to formally adopt an NSDL membership model by spring 2005.

Dave Fulker, University Corporation for Atmospheric Research

10:30 am – 12:00 pm   CC 24C
Panel - Web Metrics: How Do We Utilize Log Data?

The session will discuss the use of web metrics in evaluation and usability. Panelists will present 3 views: 1) integration of search logs and web logs in the Alsos project, 2) development of a log framework in CITIDEL and 3) NSDL pilot studies of metrics integration to seed discussion.

Mike Wright, DLESE Program Center
Elizabeth Blackmer, Washington and Lee University
Lillian Cassel, Villanova University
Casey Jones, University Corporation for Atmospheric Research

12:00 pm – 1:30 pm   **LUNCH ON YOUR OWN**

12:30 pm – 1:30 pm   **CC 22C**
Brown Bag – Community as the core of NSDL: Discussion with the Policy Committee

A community forum on how the Policy Committee can best support collaboration within and across the discipline communities in order to meet the needs of NSDL members and users. This is an opportunity to ask questions, provide feedback, and help identify challenges and direction for the next year.

Katherine Hanson, Education Development Center
Rachael Bower, UW-Madison, Internet Scout Project
Stephen Weimar, The Math Forum at Drexel
Howard Burrows, Autonomous Undersea Systems Institute

12:30 pm – 1:30 pm   **CC 23B**
Brown Bag – CWIS Users' Group

All current and potential users of the CWIS software are invited to share tips, innovations, and feature requests.

Darin Burleigh, Journal of Chemical Education

1:30 pm – 3:00 pm   **CC 22C**
Workshop - Resource Discovery Using Web Services

Web services are becoming an increasingly important tool in digital libraries for enabling the reuse of educational resources and the customization of resource discovery and display. This workshop will explore the use of a search and retrieval based Web service to support the development of contextualized applications for specific user audiences.

John Weatherley, DLESE Program Center
Shelley Olds, DLESE Program Center

1:30 pm – 3:00 pm   CC 23A
Panel - Collaborative Methods for Digital Library Design

Representatives from five NSDL projects will describe how they employed user-based methods in creating digital libraries. Panelists will describe various user groups, the phases of design in which they participated, methods used, and lessons learned. Audience members will be encouraged to contribute their experiences, comment and ask questions. A brief bibliography of the literature will be provided as a handout.

Joanne Silverstein, Syracuse University
Yan Han, University of Arizona
Chris Quintana, University of Michigan
Sarita Nair, Education Development Center
Mimi Recker, Utah State University

1:30 pm – 3:00 pm   CC 23B
Crit Lab (1:30 – 2:15 pm) - BioSciEdNet

The BioSciEdNet (BEN) Collaborative solicits critiques on its current practice to evaluate the impact of the BEN resources on faculties' professional development. Specifically, the survey tool developed for BEN's 4100+ registered users and the approach used to collect data are being submitted for discussion.

Amy Chang, American Society for Microbiology

Crit Lab (2:15 – 3:00 pm) - MatDL Transport Archive

Session attendees will be invited to comment on a prototype of Course Composer, a tool to facilitate flexible reuse of content. There will be a brief introduction of the Transport Archive within the Materials Digital Library and the use of metadata with Course Composer to provide a background and scenario for using Course Composer.

Laura Bartolo, Kent State University
Adam Powell, Massachusetts Institute of Technology
Javed Khan, Kent State University

1:30 pm – 3:00 pm   CC 23C
Panel - Information Visualization of Complex Data

Digital library user interfaces too often require the user to read a lot of text in order to find the text s/he wants to read, or leave out non-textual information (e.g. structure, relationships). To seed discussion on information visualization solutions, presenters will demonstrate information visualization applications designed for their projects.

Naomi Dushay, Cornell University
Susan Jesuroga, University Corporation for Atmospheric Research
Marianne Weingroff, DLESE Program Center
John Huffman, Indiana University

1:30 pm – 3:00 pm   CC 24A
SIG - Sinking or Swimming at the K-12 Level

Many NSDL collections and services, though not necessarily designed for K-12, contain potentially valuable classroom applications. We invite everyone who is interested in making NSDL an effective, accessible tool for classroom teachers, library media specialists, and other school community members to join the discussion. In your experience, what works for diverse K-12 audiences? What doesn't? And what's next?

Bethany Carlson, Education Development Center
Marcia Mardis, University of Michigan

1:30 pm – 3:00 pm   CC 24B
Workshop - Sustainability

This workshop is designed to capture the insights of participants who are interested in developing and implementing long-term sustainability strategies for NSDL (http://sustain. comm.nsdl.org/). The workshop format will involve a group discussion followed by four break-out sessions (Project, User-Community, Program and Technical Sustainability) and a concluding group synthesis with recommendations.

Paul Berkman, University of California, Santa Barbara
John Moore, Journal of Chemical Education

1:30 pm – 3:00 pm   CC 24C
Workshop - Fedora: Content, Metadata, and Relationships

This workshop describes current work by Core Integration based on Fedora – open source content management software that permits flexible integration of local and distributed information and the relationships among them. Workshop content should be of interest to technical people with interest in managing content and metadata in the NSDL context.

Carl Lagoze, Cornell University
Sandy Payette, Cornell University

3:00 pm – 3:30 pm   BREAK

3:30 pm – 5:30 pm   CC 10A-D
Poster Session and Reception

The NSDL community and its invited guests will gather to celebrate collaboration and share the achievements of the Library as told through posters and demonstrations. This event will include dessert and coffee.

WEDNESDAY

8:30 am – 10:00 am   CC 22C
Sustainability Standing Committee Meeting

8:30 am – 10:00 am   CC 23A
Technology Standing Committee Meeting

8:30 am – 10:00 am   CC 24B
Community Services Standing Committee Meeting

10:00 am – 10:30 am   BREAK

10:30 am – 11:30 am   CC 22C
Panel - Interactivity and Collaboration

This session will overview a number of the projects and services at The Math Forum where user interaction and collaboration are encouraged and sustained. The discussion of The Math Forum's experience with developing a dynamic and interactive digital library will be used as a springboard for a larger discussion of the issues faced by digital libraries that seek to create new environments that not only provide good resources but foster collaboration and online learning.

Wes Shumar, Drexel University
K. Ann Renninger, Swarthmore College
Gene Klotz, The Math Forum at Drexel
Steve Weimar, The Math Forum at Drexel

10:30 am – 11:30 am   CC 23A
Panel - **Use of Scientific Mark-Up Languages in NSDL**

This panel will explain the value of MLs for discovery and reusability, present illustrations of the use of MLs to enhance user interactions with science content, and promote discussion of strategies and tactics by NSDL for enhancing educational usefulness of MLs.

Timothy Cole, University of Illinois at Urbana-Champaign
Laura Bartolo, Kent State University
Mike Wright, DLESE Program Center

10:30 am – 11:30 am   CC 23B
Crit Lab - **Improving the NSDL Community Pages**

Core Integration is redesigning the existing Community Portal to better serve community needs and merge it into the overall NSDL.org framework. This Crit Lab is meant to gain specific feedback about the prototype with a goal to improve community access to NSDL information.

Susan Jesuroga, University Corporation for Atmospheric Research
Casey Jones, University Corporation for Atmospheric Research
Alex Chaux, University Corporation for Atmospheric Research

10:30 am – 11:30 am   CC 23C
SIG - **What's in the Metadata Repository?**

Technical, cataloging, and evaluation experts will identify methods to determine the breadth and depth of the metadata repository. After framing the context of the problem, attendees will develop a plan to characterize NSDL in terms of subject, audience, and type.

Judy Ridgway, Eisenhower National Clearinghouse
Mimi Recker, Utah State University

10:30 am – 11:30 am   CC 24A
SIG - **Collaborative Outreach**

How can NSDL better support collaboration in the diverse outreach efforts of its projects and partners? The intention of this SIG is to initiate an ongoing working group that will share tools, strategies, and opportunities for building awareness about digital libraries and creating meaningful points of engagement for existing users.

Susan Van Gundy, University Corporation for Atmospheric Research
Ed Geary, DLESE Program Center

10:30 am – 11:30 am   **CC 24B**

Panel - **Physical Artifacts and Their Representations**

Physical artifacts are powerful tools for education and research, but rare or ephemeral objects are often not available for study outside their host collections. Digital representations of these physical objects, particularly accurate 3D models, can be shared, accessed, and displayed and analyzed more easily than physical objects. Integrating these new data and techniques into digital libraries raises challenges including how to best acquire, represent, store, query, exchange and analyze the 3D data.

Bing Pan, Cornell University
Jeremy Rowe, Arizona State University

10:30 am – 11:30 am   **CC 24C**

SIG - **Object Modeling for Educational Digital Libraries**

This SIG will discuss complexities inherent in storing metadata for heterogeneous objects in DLs. Please be prepared to share your own experiences solving related problems with XML Tools, Relational Databases, and Object-Relational mapping tools.

Eric Fixler, smete.org

11:30 am – 11:45 am   **BREAK**

11:45 am – 1:00 pm   **Regency A-B**

Closing Session

Strategic partnerships, and an understanding of the environments of those partners, are a vital part of the success and continuity of NSDL as a major STEM educational resource. The federal government, corporations, and foundations are three significant partnership sectors. Panelists will provide NSDL with their sense of where digital libraries, STEM education, and overall STEM issues may fall in the priorities of these three major sectors and how these issues affect NSDL. Speakers will give brief overviews, leaving much of the time for questions.

Joel Widder, Lewis Burk Associates
Linda Roberts, Member of Apple Board of Directors

NSDL Leadership

National Science Foundation

NSDL is the National Science Foundation's science education digital library.

Lee Zia, Program Officer

National Visiting Committee (NVC)

The National Visiting Committee is appointed by NSF to advise the CI team on high-level strategic and operational issues and to raise the visibility of NSDL in the external community.

Diana Oblinger, Chair	William E. Kirwan	Bernard Rous
Martin Blume	Tom Moritz	Abby Smith
Wade Ellis	Alfred Moyé	Gerald Wheeler
Ira Fuchs	Thomas Reeves	
Sandra Glass	Linda Roberts	

Core Integration (CI)

The CI team provides day-to-day management of NSDL and is responsible for engaging the community, providing technology, and operating core services.

Principal Investigators:
Kaye Howe, University Corporation for Atmospheric Research, Director
Bill Arms, Cornell University
Kate Wittenberg, Columbia University

Policy Committee (PC)

The Policy Committee advises the CI team, other NSF grantees, and NSF on operational strategies and implementation priorities. The Policy Committee acts on behalf of the NSDL Assembly (which consists of all principal investigators for NSF NSDL grants) to work with NSF and the CI team in coordinating the activities of the standing committees, task forces and other aspects of the NSDL community. http://policy.comm.nsdl.org

Howard Burrows, Chair	Ellen Hoffman	Jeanne Narum
Katherine Hanson, Co- Chair	Yolanda Scott George	Len Simutis
Rachael Bower	Gerard Hanley	Stuart Sutton
Lillian (Boots) Cassel	Flora McMartin	Vivian Lee Ward
Edward Fox	William Mischo	Steven Weimar

Standing Committees

Community Services

The activities of this committee assist NSDL users and learners in defining services, processes and standards that NSDL can use to increase the impact, reach, and efficiency of the library. http://commserv.comm.nsdl.org

Marcia Mardis, Chair   Amy Chang, Co-Chair

Content

This committee recommends and implements policies to ensure that NSDL content is high quality, is appropriate and consistent, has technical integrity, and is accessible for use by global audiences of learners at all levels. http://content.comm.nsdl.org

Kimberly S. Lightle, Chair   Sarita Nair, Co-Chair

Educational Impact and Evaluation

This committee ensures that participatory and stakeholder evaluation principles are integrated into the design, development, and implementation of NSDL. http://eduimpact.comm.nsdl.org

Anita Coleman, Chair   Laura Bartolo, Co-Chair

Sustainability

This committee exists to facilitate the development of an NSDL entity that will continue to thrive in the long term through collective action and diversified funding streams. http://sustain.comm.nsdl.org

Paul Berkman, Chair   John Moore, Co-Chair

Technology

This committee identifies community technical needs and the means to translate those needs into deployable technology including recommendations for technical standards and the technical integration of resources and services into NSDL architecture. http://technology.comm.nsdl.org
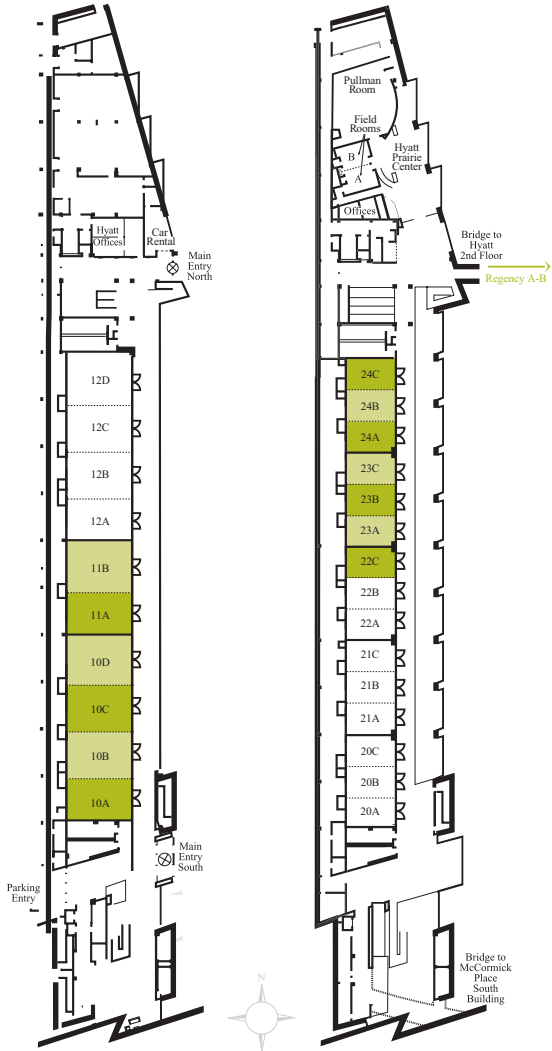
Timothy Cole, Chair   Mike Wright, Co-Chair

Notes

Notes

Hyatt Regency McCormick Place

Level One

Parking Entry

Hyatt Offices
Car Rental
Main Entry North

12D
12C
12B
12A
11B
11A
10D
10C
10B
10A

Main Entry South

Level Two

Pullman Room
Field Rooms
B
A
Hyatt Prairie Center
Offices
Bridge to Hyatt 2nd Floor
Regency A-B

24C
24B
24A
23C
23B
23A
22C
22B
22A
21C
21B
21A
20C
20B
20A

Bridge to McCormick Place South Building

Quick Reference

Hotel Front Desk   **312-528-6188**
Hotel Fax   **312-528-4189**

Meeting Registration/Help Desk Hours

Sunday	CC 11A-B	1:00 p.m. to 7:00 p.m.
Monday	CC 23A	7:30 a.m. to 5:00 p.m.
Tuesday	CC 23A	7:30 a.m. to 3:00 p.m.
Wednesday	CC 23A	7:30 a.m. to 10:00 a.m.

Poster Room Hours

Monday	7:30 a.m. to 7:00 p.m.
Tuesday	7:30 a.m. to 7:00 p.m.

Internet Access

Computer workstations are located in the Crit Lab Room (CC 23B) when not in session. Please limit your use to 15 minutes as a courtesy to others that may be waiting.

Extra Meeting Rooms

Schedule at Meeting Registration/Help Desk

Meeting URL

http://nsdl.comm.nsdl.org